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## 和解 Kienow <br> THE SEA:

## Its Stirring Story of Adventure, Peril, \& Heroism.

## BY

F. WHYMPER, AUTHOR OF "tRAVELS in ALASKA," etc.

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I L L U S T R A T E D
$$

Cassell Petter * Galpin: LONDON, PARTS \& NEW YORK.
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## THE SEA.

- and one of the greatest* has taken us back to those carly days of earth's history when God said-

> "' Let thero bo firmament Amid the waters, and let it divide Tho waters from the waters.' . . . So Ho tho world Built on cireumfluous waters calm, in wide Crystulline oeean."
" Water," said the great Greck lyric poet, $\dagger$ " is the chief of all." The ocean covers nearly three-fourths of the surface of our globe. Earth is its mere offspring. The centincnts and islands have been and still are being elaborated from its depths. All in all, it has not, however, been treated fairly at the hands of the poets, too many of whom could only see it in its sterner lights. Young speaks of it as merely a

> ". Dreadful and tumultuous home
> Of dangers, at eternal war with man, Wido opening and loud roaring still for more,"
ignoring the blessings and benefits it has bestowed so frecly, forgetting that man is daily becoming more and more its master, and that his own country in particular has most successfully conquered the seemingly unconquerable. Byron, again, says:-

> "Roll on, thou dark and deep blue ocean-roll!
> Ten thousand fleets sweep over theo in vain;
> Man marks the earth with ruin-his control
> Stops with the shore; upon the watery plain
> The wrecks are all thy decds."

And thongh this is but the exaggerated and not strictly accurate language of poetry, we may, with Pollok, fairly address the great sea as "strongest of creation's sons." The first impressions produced on most animals-not excluding altogether man-by the aspeet of the ocean, are of terror in greater or lesser degree. Livingstone tells us that he had intended to bring to England from Africa a friendly native, a man courageous as the lion he had often braved. He bad never voyaged upon nor even beheld the sea, and on board the ship which would have safely borne him to a friendly shore he beeame delirious and insane. Though assured of safety and carefully watched, he escaped one day, and blindly threw himself headlong into the waves. The sea terrified him, and yet held and drew him, fascinated as under a spell. "Even at ebb-tide," says Michelet, $\ddagger$ " when, placid and weary, the wave crawls softly on the sand, the horse does not recover his courage. He trembles, and frequently refuses to pass the languishing ripple. The dog barks and recoils, and, according to his manner, insults the billows which he fears. . . . We are told by a traveller that the dogs of Kamtschatka, though accustomed to the spectacle, are not the less terrified and irritated by it. In numerous troops, they howl through the protraeted night against the howling waves, and endeavour to outvie in fury the Ocean of the North."

$$
\text { Milton. } \quad+\text { Pindar }
$$

$\ddagger$ " Ia Mer." Thero is much truth in Michelet's charming work, but often, as above, presented in an exaggerated form. Auimals, in reality, soon bocome aceustomed to the sea. They show generally, however, a eonsiderable amount of indisposition to go on board a vessel,

The eivilised man's fear is founded, it must be admitted, on a reasonable knowledge of the ocean, so much his friend and yet so often his foe. Man is not independent of his fellow-man in distant countries, nor is it desirable that he should be. No land produces all the neeessaries, and the luxuries which have begun to be considered necessevies, sufficient for itself. Transportation by land is often impracticable, or too costly, and the ocean thas becomes the great highway of nations. Vessel after vossel, fleet after fleet, arrive safely and speedily. But as there is danger for man lurking everywhere on land, so also is there on the sea. The world's wreek-chart for one year must, as we shall see hereafter, be something appalling. That for the British Empire alone in one year has often exceeded 1,000 vessels, great and small! Averaging three years, we find that there was an annual loss during that period of 1,095 vessels and 1,952 lives.* Nor are the ravages of ocean confined to the engulfment of vessels, from rotten "coffin-ships" to splendid ironclads. The eoasts often bear witness of her fury.

The history of the sea virtually eomprises the history of adventure, eonquest, and commeree, in all times, and might almost be said to be that of the world itself. We . eamnot think of it without remembering the great voyagers and sea-captains, the brave naval commanders, the pirales, rovers, and buecaneers of bygone days. Great sea-fights and notable shipwreeks recur to our memory-the progress of naval supremaey, and the means by which millions of people and countless millions of wealth have been transferred from one part of the earth to another. We cannot help thinking, too, of "Poor Jack" and life before the mast, whether on the finest vessel of the Royal Navy, or in the worst form of trading ship. We recall the famous ships themselves, and their careers. We remember, too, the "toilers of the sea"-the fishermen, whalers, pearl-divers, and coral-gatherers; the noble men of the lighthouse, lifeboat, and coastguard serviees. The horrors of the sea -its storms, hurrieanes, whirlpools, waterspouts, impetuous and treacherous currents-rise vividly before our mental vision. Then there are the inhabitants of the sea to be considered -from the tiniest germ of life to the great leviathan, or even the donbtful sea-serpent. And even the lowest depths of ocean, with their mountains, valleys, plains, and luxurious marine vegetation, are full of interest; while at the same time we irresistibly think of the submerged treasure-ships of days gone by, and the submarine cables of to-day. Such are among the subjects we propose to lay before our readers. The Sea, as one great topie, must comprise descriptions of life on, around, and in the ocean-the perils, mysteries, phenomena, and poetry of the great deep. The subject is too vast for stiperfluous detail : it would require as many volumes as a grand eneyelopædia to do it justice; whilst a formal and chronologieal history would weary the reader. At all events, the present writer purposes to occasionally gossip and digress, and to arrange facts in groups, not always following the strict sequence of events. The voyage of to-day may recall that of long ago: the diseovery made long ago may be traced, by successive leaps, as it were, to its results in the present epoeh. We can hardly be wrong in believing that this grand subject has an especial interest for the English reader everywhere ; for the spirit of enterprise, enthusiasm, and daring which has carried our flag to the uttermost parts of the earth, and has made the proud words "Britannia rules the waves" no idle vaunt, is shared by a very large

[^0]proportion of her sons and daughters, at home and abroad. Britain's part in the exploration and settlement of the whole world has been so pre-eminent that there can be no wonder if, among the English-speaking races everywhere, a peeuliar fascination attaches to the sea and all concerning it. Countless thousands of books have been devoted to the land, not a tithe of the number to the ocean. Yet the subject is one of almost boundless interest, and has a special importance at the present time, when so much intelligent attention and humane effort is being vut forth to ameliorate the condition of our seafarers.

## CHAPTER I.

Men-of-War.
Our Wooden Walls-The Victory-Sicge of Toulon-Battle of St. Vincent-Nelson's Bridge-Trafalgar's giorious DayThe Day for such Battles gono-Iron v. Wood-Lessons of the Crimean War-Moral Effect of the Prcsenco of our Fleets-Bombardment of Sebastopol-Red-hot Shot and Gibraltar-The Ironclad Movement-The Warrior-Experiences with Ironclads-The Merrimac in Hampton Hoads-A speedily decided Action-The Cumberland sunk and Congress burned-The first Monitor-Engagement with the Merrimac-Notes on recent Actions-The Shah and Huascar-An Ironclad tackled by a Merchantman.


F the reader should at any time find himself a visitor to the first naval port of Great Britain-which he need not be told is Ports-mouth-he will find, lying placidly in the noble harbour, which is large enough to aceommodate a whole fleet, a vessel of modernantique appearance, and evidently very carefully preserved. Should he happen to be there on October 21 st, he would find the ship gaily decorated with wreaths of evergreen and flags, her appearance attracting to her side an unusual number of visitors in small boats from the shore. Nor will he be surprised at this when he learns that it is none other than the famous Victory, that carried Nelson's flag on the sad but glorious day of Trafalgar, and went bravely through so many a storm of war and weather. Very little of the oft-shattered hulk of the original vessel remains, it is true-she has been so often renewed and patched and painted; yet the lines and form of the old three-decker remain to show us what the flag-ship of Hood, and Jervis, and Nelson was in general appearance. She towers grandly out of the water, making the few sailors and loiterers on deck look like marionettesmere miniature men; and as our wherry approaches the entrance-port, we admire the really graceful lines of the planks, diminishing in perspective. The triple lattery of formidable guns, peeping from under the stout old ports which overshadowed them, the enormous cables and spare anchors, and the immensely thick masts, heavy shrouds and rigging, which she had in old times, must have given an impression of solidity in this good old "heart of oak" which is wanting even in
the exploration be no wonder ttaehes to the to the land, dless interest, attention and
's glorlous DayPresence of our Warrior-Expererland sunk and -The Shah and
to the first told is Portsour, which is 1 of modernved. Should he ship gaily appearance ${ }^{2}$ small boats en he learns that carried ; and went Very little ue-she has and form Hood, and adly out of arionettes-ce-port, we ctive. The ports which ssely thick given an $s$ even in
the strongest-built iron vessel. Many a brave tar bas lost his life on her, but yet she is no coffin-ship. On board, one notes the scrupulous order, the absolute perfection of cleanliness and trimness; the large guns and carriages alternating with the messtables of the crev. And we should not think much of the man who could stand emotionless and unmoved over the spots-still pointed out on the upper deck and cockpit below-where Nelson fell and Nelson died, on that memorable 21st, off Trafalgar Bay.


THE "VICTORY" AT PORTBMOUTH.
He had embarked, only five weeks before, from the present restir -place of his brave old ship, when enthusiastic crowds had pressed forward to bless and take one last look at England's preserver. "I had their hurrahs before," said the poor shattered hero; "now I have their hearts!" And when, three months later, his body was brought home, the sailors divided the leaden coffin into fragments, as relies of "Saint Nelson," as his gunner had termed him.

The Fictory was one of the largest ships of war of her day and generation. She was rated for 100 guns, but really carried 102 , and was elassed first-rate with such ships as the Royal Sorereign and Britanuia, both of 100, earrying only two in excess of the "brave old Téméraire "-made still more famous by Turner's great picture-and the Drealnonght, which
but a few years back was such a familiar feature of the reach of the Thames in front of Greenwich. She was of 2,164 tons burden, and, having been launehed in 1765 , is now a grood 11: years of age. Her complement was 811 men. From the first she deserved her name, and seemed destined to be associated with little else than success and triumph. Nelson frequently complains in his journals of the unseaworthiness of many of his vessels; but this, his last flag-ship, was a veritable "heart of oak," and endured all the tests that the warfare of" the elements or of man could bring against her.

The good ship of which we have spoken more particularly is now enjoying a well-earned repose, after passing nearly unscathal through the very thiek of battles inscribed on the most brilliant page of our national history. Her part was, in reality a very prominent one; and a glanee at a few of the engagements at which she was present may serve to show us what she and other ships like her were made of, and what they were able to effeet in naval warfare. The Tictory had been built nearly thirty years when, in 1793, she first came prominently to the front, at the oecupation and subsequent siege of Toulon, as the flag-ship of Lord Hool, then in command of a large fleet destincd for the Mediterranean.

Prance was at that moment in a very revolutionary condition, but in Toulon there was a strong feeling of loyalty for the Bourbons and monarchical institutions. In the harbour a large French fleet was assembled-some seventeen vessels of the line, besides many other smaller eraft-while several large ships of war weye refitting and building; the whole under the command of the Comte de Trogoff, an a:lent Royalist. On the appearance of the British fleet in the offing, two commissioners came out to the flag-ship, the Jictory, to treat for the conditional surrender of the port and shipping. The Governmeat had not miscalculated the disaffection existing, and the negotiations being completely suceessful, 1,700 of our solliers, sailors, and marines were landed, and shortly afterwards, when a Spanish fleet appeared, an English governor and a Spanish commandant were appointed, while Louis XVII. was proclaimed king. But it is needless to say that the French Republic strongly objected to all this, and soon assembled a foree numbering $+5,000$ men for the recapture of Toulon. The English and their Royalist allies numbered muler 13,000, and it became evident that the city must be eracuated, although not until it should be half destroyed. The important service of destroying the ships and magazines had been mainly entrusted to Captain Sir Siduey Smith, who performed his difficult task with wonderful precision and order, and without the loss of one man. Shots and shells were plunged into the very arsenal, and trains were laid up to the magazines and storehouses; a fire-ship was towed into the basin, and in a fer hours gave out flames and shot, aceompanied by terrible explosions. The Spanish admiral had undertaken the destruction of the shipping in the basin, and to scuttle two powder-vessels, but his men, in their flurry, managed to ignite one of them in place of sinking it, and the explosion which occurred can be better imagined than described. The explosion shook the Union gmuboat to pieces, killing the commander and three of the crew; and a second boat was blown into the air, but her crew were miraculously saved. Having completed the destruction of the arsenal, Sir Sidney proceeded towards the basin in front of the town, across which a boom had been laid, where he and his men were reecived with such volleys of musketry that they turnel their attention in another direction. In the inner road were lying two large 74 -gun
in front ont 5 , is now a leserved her ph. Nelson s; but this, o warfare of well-carned on the most ne; and a is what she al warfare. rominently p of Lord ulon there s. In the le, besides building;

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shyps-the Hérus and Themistocle-filled with French prisoners. Although the latter were greatly superior to the attacking foree, they were so territied that they agreed to be removed and landel in a place of safety, after which the ships were destroyed by fire. Having done all that man could do, they were preparing to return, when the second powder-vessel, which should only have been seuttled by the Spaniards, exploded. Wonderful to relate, although the little Swallow, Sir Sidney's tender, and three boats were in the midst of the falling timbers, and nearly swamped by the waves produced, they escaped in safety. Nowadays torpedoes would settle the business of blowing up vessels of the kind in a much safer and surer mamer. The evacuation was effected without loss, nearly $\mathbf{1 5 , 0 0 0}$ Toulonese refugees-men, women, and children-being taken on board for removal to England. Fifteen French ships of war were taken off as prizes, while the magazines, storehouses, and shipping were destroyed by fire. The total number of vessels taken or burned by the British was eighteen of the line, nine frigates, and eleven corvettes, and would have been much greater but for the blundering or treachery of the Spaniards, and the pusillanimous flight of the Neapolitans. Thus the Victoriy was the silent witness of an almost bloodless success, so far as our forees were concerned, in spite of the noise and smoke and flame by which it was accompanied. A little later, she was engaged in the siege of Bastia, Corsica, which was taken by a naval force numbering about one-fourth of their opponents; and again at Calvi, where Nelson lost an eye and helped to gain the day. In the spring of 1795 she was again in the Mediterranean, and for once was engaged in what has been described as a "miserable action," although the action, or want thereof, was all on the part of a viee-admiral who, as Nelson said, "took things too coolly." Twenty-three British line-of-battle ships, whilst engaging, off the Hyères Isles, only seventeen French, with the certainty of triumphant results, if not, indeed, of the complete annililation of the enemy, were signalled by Admiral Hotham to discontinue the fight. The disgust of the commanders in general and Nelson in particular can well be understood. The only prize taken, the Alcide, blew up, with the loss of half her crew, as if in very disgust at baving surrendered, and we can well believe that even the inanimate timbers of the Victory and her consorts groaned as they were drawn off from the scene of action. The fight off the Hyères must be inseribed in black, but happily the next to be recorded might well be written with letters of gold in the annals of our country, although its glory was soon afterwards partially eelipsed by others still greater.

When Sir John Jervis hoisted bis flag on board the Victory it marked an epoch not merely in our career of conquest, but also in the history of the navy as a navy. Jervis, though then over sixty years of age, was hale and hearty, and if sometimes stern and severs as a disciplinarian, should long be remembered as one who honestly and constantly strove to raise the character of the service to its highest condition of efficiency, and he was brave as a lion. As the Spanish fleet loomed through the morning fog, off Cape St. Vincent, it was found that Cordova's force consisted of twenty-nine large men-of-war, exclusive of a dozen 34 -gun frigates, seventy transports, and other vessels. Jervis was walking the quarter-deck as the successive reports were brought to him. "There are eighteen sail of the line, Sir John." "Very well, sir." "There are twenty sail, Sir John." "Very well, sir." "There are twenty-seven sail of the line, Sir John; nearly double our own." "Enougb, sir, no more of
that, sir; if there are fifty I'll go through them." "That's right, Sir John," said Halliwell, his flag-captain, "and a jolly good lieking we'll give them."

The grand fleet of Spain included six ships of 112 guis each, and the flag-ship Santissima Triniduda, a four-deeker, earrying 130. There were, besides, twenty-two vessels of eighty and seventy-four guns. To this large focee Tervis could only oppose fifteen vessels of the line, only two of which carried 100 guns, three of ninety-eight guns, one of ninety, and the remainder, with one exeeption, seventy-four each. Owing to gross mismanagement on the part of the Spamiards, their vessels were seattered about in all directions, and six* of the:n were separated wholly from the main boily, neither could they rejoin it. The English vessels advaneed in two lines, compaetly and steadily, and as they neared the Spaniards, were signalled from the Victory to tack in succession. Nelson, on the Captain, was i. we rear of the line, a: I ite perceived that the Spaniards were bearing up before the wind, either with the intention of trying to join their separated ships, or perhaps to avoid an engagement altogether. By disobeying the admiral's signal, he managed to run clear athwart the bows of the Spanish ships, and was soon engaged with the great Santissina Mrinidala, four other of the larger vessels, and two smaller ones. Trowbridge, in the Cullorlen, immediately camse to the support, and for nearly an hour the unequal contest continued, till the Blenlieim passed between them and the enemy, and gave them a little respite, pouring in her fire upon the Spaniards. One of the Spanish seventy-fours struci', and Nelson thought that the Salvalor, of 112 guns, struck also. "Collingwood," wrote Nelson, "disdaining the parade of taking possession of beaten enemies, most gallantly pushed up, with every sail set, to save his old friend and messmate, who was, to appearance, in a critical situation," for the Captain was being peppered by five vessels of the enemy's fleet, and shortly afterwards was rendered absolutely incapable-not a sail, shroud, or rope left, with a topmast and the steering-wheel shot away. As Dr. Bennett sings $\dagger$ -

> "Ringed round by five three-deckers, sho had fought through all tho fight, And now, a log upon tho waves, sho lay-a glorious sightAll crippled, but still full of fight, for still her broadsides roared, Still death and wounds, fear and dofeat, into the Don she poured."

Two of Nelson's antagonists were now nearly hors de combat, one of them, the San Nicolas, in trying to escape from Collingwood's fire, having got foul of the San Josef. Nelson resolved in an instant to board and capture both-an unparalleled feat, which, however, was accomplished, although
"To get at the Sa? Josef, it secmed beyond a hopo;
Out then our admiral spoke, and well his words our blood could stir-
'In, boarders, te their seventy-four! We'll make a bridge of her.'"
The "bridge" was soon taken; but a steady fire of musketry was poured upon them from the San Josef. Nelson directed his people to fire into the stern, and sending for more boarders, led the way up the main-chains, exclaiming, "Westminster Abbey or vietory!" In a few moments the officers and crew surrendered; and on the quarter-deck of a Spanish first-rate he received the swords of the vanquished, which he handed to William Fearney,

[^1]id Halliwell, p Santissima $f$ eighty and of the line, ty, and the ent on the $f$ the: $n$ were lish vessels re signalled of the line, e intention rether. $\mathrm{B}_{\mathrm{y}}$ the Spanish the larger the support, tween them ls. One of uns, struck - of beaten smate, who five vessels not a sail, r. Bemnett
one of his bargemen, who tuckel them, with the greatest samg-froil, in a perfect shenf under his arm. The Victory eame up at the moment, und saluted the conquerors with hearty cheers.

It will be hardly neeessary here to print out the altered cireumstances of naval warfare at the present day. $\Lambda$ wooden vessel of the old type, with large and numerons portholes, all alfording other opportunities for entering or climbing the sides, is a


HOCKN NEAR C.APE ST. VINCENT.
very different affair to the modern smooth-walled iron vessel, on which a fly would hardly get a foothold, with few openings or weak points, and where the grappling-iron would be uscless. Anart from this, with heavy guns carrying with great accuracy; and the facilities afforded by steam, we shall seldom hear, in the future, of a fight at elose quarters; skilful manouvring, impossible with a sailing vessel, will doubtless be more in voguc.

Me:ntime, the Tictory had not been idle. In conjunction with two of the fleet, she had succeeded in silencing the Salcador del Mundi, a first-rate of 112 guns. When, after the fight, Nelson went on board the Fictory, Sir John Jervis took him to his arms, and insisted that he should keep the sword taken from the Spanish rear-admiral. When it was hinted, during some private conversation, that Nelson's move was unauthorised, 2

Juris had to almit the fuct, lut promised to forgive uny such breach of orders, necompanied with the same measure of sucenss.

The battle had now lasted from noon, and at five p.m. four Spanish line-of-battle vessels haì lowered their colours. Even the great Suntissima Trinidula might then have beeome a prize but for the return of the vessels which had !… sut off from the fleet in the morning, and which alone saved her. Her colours had I. ot away, and she had hoisted linglisis colours in tokeu of submission, when the other ships came un, and Cordova reeonsidered his step. Jervis did not think that his fleet was quite equal to a fresh conflict; and the Spaniards showed no desiro to renew the fight. They had lost on the fonr prizes, alone, 261 killed, and $3!2$ wounded, and in all, probably, nearly double the above. The British loss was seventy-three killed, and 227 wounded.

Of Trafalgar and of Nelson, both day and man so intimately associated with our good ship, what ean yet be said or sung that has gone unsaid, unsung?-how when he left Portsmouth the crowds pressed forward to obtain one last look at their hero-Binghand's greatest hero-and "knelt down before him, and blessed him as he passed;"* that beautiful prayer, indited in his eabin, "May the great God whom I worship grant to my country, and for the benefit of Europe in general, a great and glorious victory, and may no misconduct in any one tarnish it, and may humanity after vietory be the predominant feature of the British flect," or the now historical signal which flew from the mizen topgallant mast of that noble old slip, and which has become one of the grand mottoes of our tongue, are facts as familiar to every reader as household words.

The part direetly played by the rictory herself in the battle of Trafalgar was sceond to none. From the very first she reeeived a raking fire from all sides, which must have been indeed severe, when we find the words extorted from Nelson, "This is too warm work to last long," addressed to Captain Hardy. At that moment fifty of his men were lying dead or wounded, while the Victory's mizen-mast and wheel were shot away, and her sails hanging in ribbons. To the terrible cannonading of the enemy, Nelson had not yet returned a shot. He had determined to be in the very thick of the fight, and was reserving his fire. Now it was that Captain Hardy represented to Nelson the impracticalility of passing through the enemy's line without running on board one of their ships; he was coolly told to take his choice. The Victory was accordingly turned on board the Relloubtable, the commander of which, Captain Lucas, in a resolute endeavour to block the passage, himself ran his bowsprit into the figurehead of the Bucentaure, and the two vessels became locked iogether. Not many minutes later, Captain Harvey, of the Te'méraire, seeing the position of the Victory with her two assailants, fell on board the Redoubtable, on the other side, so that these four ships formed as compact a tier as though moored together. The Fictory fired her middle and lower deck gans into the Relloultable, which returned the fire from her main-deck, employing also musketry and brass pieces of larger size with most destructive effects from the tops.
" Redoubtable they called her-a curso upon her name!
'Twas from her tops the bullet that killed our hero eame."

* Southey's "Life of Nelson."
ers, accompanied


## of-battle vessels

 havo become a in the morning, hoisted Jinglisi va reconsidered nflict ; and the - prizes, alone, The British iated with our how when he ero-Eughnd's that beantiful o my country, and may no : predominant he mizen topnd mottocs ofar was sceond ch must have is too warm his men were , and her sails had not yet pht, and was the impracone of their y turned on endeavour to cntaure, and Harvey, of 11 on board ct a tier as as into the isketry and

Within a few minutes of Lord Nelson's fall, several officers and about forty men were either killed or wounded from this sonree. But a few minutes afterwards the Redoubfuble fell on board the R'méraire, the French ship's bowsprit passing over the British ship. Now came one of the warmest episodes of the fight. The erew of the Téméroire hashed their vessel to their assailants' ship, and poured in a ruking fire. But the French eaptain, having discovered that-owing, perhaps, to the sympathy exhibited for the dying hero on board the rielory, and her excessive losses in men-her quarter-deck was quite deserted, now ordered an attempt at bourding the hatter. 'This eost our tlag-ship the lives of Captain Adair and eighteen men, but at the same moment the Timertuire opened fire on the Reclonbtuble with such effect that Cuptuin Lucas and 200 men were themselves placed hors de combat.

In the contest wo have been relating, the coohess of the rictory's men was signully evineed. "When the guns on the lower deck were run out, their muzzles came in contact with the sides of the Redoublable, and now was seen an astounding speetacle. Knowing that there was danger of the French ship taking fire, the fiteman of each gun on board the British ship stood ready with a bueketful of water to dash into the hole made by the shot of his gun-thus beautifully illustrating Nelson's prayer, 'that the British might be distinguished by humanity in victory.' Less considerate than her antagonist, the Retloultalle tirrew hand-grenades from her tops, which, falling on bourd herself, set fire to her, . . . and the flame communicated with the foresail of the l'iméraire, and caught some ropes and canvas on the booms of the lictory, risking the destruction of all; but by immense exertions the fire was subdued in the British ships, whose crews lent their assistance to extinguish the flames on board the Redoultalle, by throwing buckets of water upon her chaus; and forecastle."*

Setting aside, for the purpose of clearness, the episode of the taking of the Fougreen, which got foul of the Te'ricruire and speedily surrendered, we find, five minutes later, the main and mizen masts of the Redoubtable falling-the former in sueh a way aeross the Te'méraire that it formed a bridge, over which the boarding-party passed and took quiet possession. Captain Lueas had so stoutly defended his flag, that, out of a erew of 643, only 123 were in a condition to centinue the fight; $52: 2$ were lying killed or wounded. The Bucentaure soon met her fate, after being defended with nearly equal bravery. The French admiral, Vill menve, who was on board, said bitterly, just before surrendering, "Le Bucentuure a rempli sat tache; la miemne n'est pas encore achevée."

Let the reader remember that the above are but $a$ few episodes of the most complete and glorious victory ever obtained in naval warfare. Without the loss of one single vessel to the conqueror, more than half the ships of the enemy were captured or destroyed, while the remainder eseaped into harbour to rot in utter uselessness. Twentyone vessels were lost for ever to France and Spain. It is to be hoped and believed that no such contest will ever again be needed; but should it be needed, it will have to be fought by very different means. The instance of four great ships loeked together, dealing death and destruction to each other, has never been paralleled. Imagine that

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seething, fighting, dying mass of humanity, with all the horrible eoncomitants of deafening moise and blinding smoke and thashing fire! It is not likely ever to oecur in modern warfure. 'Ihe commanders of stean-vessels of all classes will be more likely to fight at out-mancurving and shelling each other than to come to close quarters, which would generully mean blowing up together. It would interesting to consider how Nelson would have acted with, and opposed to, stemn-frigates and ironclads. He would, mo doubt, havo been as courageous and fur-seeing and rapid in action as ever, but hardly as reekless, or even daring.

> "And still, though neventy ycura, boys, Have gone, who, withont pride,
> Names his nume-tells his fano Who nt Trufugar died!"

May we always have a Nelson in the hour of national need 1
The day for such battles as this is over; there may be others as glorionsly fought, but never again by the same means. Ships, armaments, and modes of attack and defence are, and will be, inerensingly different. Those who have read Nelson's private letters and journals will remember how ho gloried in the uppreciation of his subordinate officers just hefore 'Trafalgar's happy and yet fatal day, when he had explained to them his intention to attack the enemy with what was practically a wedge-formed Heet. He was determined to break their line, and, Nelson-like, he did. But that which he facetiously elristened the "Nelson touch" would itself nowadays be broken up in a few minutes and thrown into utter confusion by any powerfully-armed vessel hovering abont under steam. Or if the wedge of wooden vessels were allowed to form, as they approached the apex, n conple of ironelads would take them in hand coolly, one by one, and send them to the bottom, while their guns might as well shoot peas at the ironclads as the shot of former days.

Taking the Victory as a fuir type of the best war-ships of her day (a day when there was not that painful uneertainty with regard to maval construction and armament existing now, in spite of our vaunted progress), we still know that in the presence of a powerful steam-frigate with heavy grons, or an 11,000 -ton ironclad, she would be literally nowhere. She was one of the last specimens, and a very perfeet specimen, too, of the woollen age. This is the age of iron and steam. One of the largest vessels of her day, she is now excelled by hundreds employed in ordinary commerce. The Royal Navy to-day possesses frigates nearly three times her tonnage, while we have ironclads of five times the same. The monster Great Eustern, which has proved a monstrous mistake, is 22,500 tons.

But size is by no means the only consideration in constructing vessels of war, and, indeed, there are good reasons to believe that, in the end, vessels of moderate dimensions will be preferred for most purposes of actual warfarc. Of the advantages of steam-power there can, of course, be only one opiuion; but as regards iron versus oak, there are many points which may be urged in favour of either, with a preponderance in favour of the former. A strong iron ship, strange as it may appear, is not more than half the weight of a wooden vessel of the same size and class. It will, to the unthinking, seem absurd to say that an iron ship is more buoyant than one of oak, but the fact is that the proportion of actual weight in iron and wooden vessels of ordinary construction is about six to twenty. The iron
ship, therefore, stands high out of the water, and to sink it to the same line will require a greater weight on board. From this fact, and the aetual thinness of its walls, its carrying capacity and stowage are so much the greater. This, which is a great point in vessels destined for commerce, would be equally important in war. But these remarks do not apply to the modern armoured vessel. We have ironelads with plates eighteen inches and upwards in thickness. What is the consequence? Their actual weight, with that of the necessary engines and monster guns employed, is so great that a vast deal of room on board has to be unemployed. Day by day we hear of fresh experiments in gunnery, which keep pace with the increased strength of the vessels. The invulnerable of to-day is the vulnerable of to-morrow, and there are many leading authorities who believe in a return to a smaller and weaker elass of vessel-provided, however, with all the appliances for great speed and offensive warfare at a distance. Nelson's preference for small, easily-worked frigates over the great ships of the line is well known, and were he alive to-day we can well believe that he would prefer a medium-sized vessel of strong construction, to steam with great speed, and carrying heavy, lut, perhaps, not the heaviest guns, to one of those modern unwieldy masses of iron, which have had, so far, a most disastrous history. The former might, so to speak, aet while the latter was making up her mind. Even a Nelson might hesitate to risk a vessel representing six or seven hundred thousand pounds of the nation's moncy, in anything short of an assured success. We have, however, yet to learn the full value and power of our ironclad fleet. Of its cost there is not a doubt. Some time ago our leading newspaper estimated the expense of construction and maintenance of our existing ironclads at $£ 18,000,000$. Mr. Reed states that they have cost the country a million sterling per annum sinee the first organisation of the fleet. Warfare will soon become a luxury only for the richest nations, and, regarding it in this light, perhaps the very men who are racking their powers of invention to discover terible engines of war are the greatest peacemakers, after all. They may succeed in making it an impossibility.
"Hereafter, naval powers prepared with the necessary fleet will be able to transport the base of operations to any point on the enemy's coast, turn the strongest positions, and baflle the best-arranged combinations. Thanks to steam, the sea has become a means of communication more eertain and more simple than the land; and fleets will be able to act the part of movable bases of operations, rendering them very formidable to powers which, possessing coasts, will not have any navy sufficiently powerful to cause their being respected."* So far as navy to navy is concerneci, this is undoubtedly true; yet there is another side to the question. A fort is sometimes able to intliet far greater damage upon its naval assailants than the latter ean infliet upon it. A single shot may send a ship to the bottom, whilst the fire from the ship during action is more or less inaceurate. At Sebastopol, a whole Frenel fleet, firing at ranges of 1,600 to 1,800 yards, failed to make any great impression on a fort close to the water's edge ; while a wretched earthen battery, mounting oniy five guns, inflieted terrible losses and injury on four powerful English men-of-war, actually disabling two of them, without itself losing one man or having a gun dismounted; while, as has been often calculated, the cost of a single sloop of war with its equipment will construet a fine fort which will last almost for

[^3]ae will require a ralls, its carrying a vessels destined not apply to the and upwards in necessary engines oard has to be hich keep pace ; the vuluerable un to a smaller great speed and ed frigates over believe that he reat speed, and mwieldy masses so to speak, act o risk a vessel $y$ thing short of of our ironclad aper estinated : $\mathfrak{E l S}, 000,000$. since the first t nations, and, f invention to hay succeed in
transport the ns, and bafle communieathe part of h, possessing 1."* So far the question. an the latter om the ship $g$ at ranges rater's edge ; and injury losing one cost of a almost for
ever, while that of two or three line-of-battle ships would raise a considerable fortress. Whilst the monster ironelad with heavy guns would deal out death and destruction when surrounded by an enemy's fleet of lighter iron vessels or wooden ones as strong as was the Victory, she would herself run great risk in approaching closely-fortified harbours and coasts, where a single shot from a gun heavy enough to pierce her armour might sink her. Her safety would consist in firing at long ranges and in steaming backwards and forwards.

The lessons of the Crimean war, as regards the navy, were few, but of the gravest importance, and they have led to results of which we cannot yet determine the end. The war opened by a Russian attack on a Turkish squadron at Sinope, November 20th, 1853.* That determined the fact that a whole fleet might be anuihilated in an hour or so by the use of large shells. No more necessity for grappling and close quarters; the iron age was full in view, and wooden walls had outlived their usefulness, and must perish.

But the lesson had to be again impressed, and that upon a large English and French fleet. Yet, in fairness to our navy, it must be remembered that the Russians had spent every attention to rendering Sebastopol nearly impregnable on the sea-side, while a distinguished writer, $\dagger$ who was present thronghout the siege, assures us that until the preceding spring they hal been quite indifferent in regard to the strength of the fortifications on the land-side. And the presence of the aHied fleets was the undeniable cause of one Russian fleet being sunk in the harbour of Sebastopol, while another dared not venture out, season after season, from behind stone fortresses in the shallow waters of Cronstadt. $\ddagger$ A great naval authority thinks that, while England was, at the time, almost totally defieient in the class of vessels essential to attacking the fleets and fortifications of Russia, the fact that the former never darel "to aecept the challenge of any British squadron, however small, is one the record of which we certainly may read without shame." But of that period it would be more pleasant to write exultingly than apologetically.

When the Allies had decided to commence the bombardment of Sebastopol, on October 17th, 1854, it was understood that the fleet should co-operate, and that the attack should be made by the line-of-battle ships in a semicircle. They were ready at one p.m. to commence

[^4]the bombardment. Lyons brought the Agamemnon, followed by half a dozen other vessels, to within $\mathbf{7 0 0}$ yards of Fort Constantine, the others staying at the safer distances of 1,800 to 2,200 yards. The whole fleet opened with a tremendons roar of artillery, to which the Russians replied almost as heavily. Fort Constantine was several times silenced, and greatly damagel; but, on the other hand, the Russiams managed to kill forty-seven and wound 2:3) men in the English fleet, and a slightly smaller number in the French. They had an mpleasant knack of firing rel-hot shot in profusion, and of hitting the vessels even at the distance at which they lay. Several were set on fire, and two for a time had to retire from the action. These were practical shots at our wooden walls. This naval attack has heen characterised as "even a greater failure than that by land "-meaning, of course, the first attack.

Here we may for a moment be allowed to digress and remind the reader of the important part played ly red-hot shot at that greatest of all great sieges-Gibraltar. As each accession to the conem's foree arrived, General Elliott calmly built more furnaces and more grates for heating lis most effective means of defence. Just as one of their wooden batteries was on the point of completion, he gave it what was termed at the time a dose of "cayeme pepper;" in other worls, with rel-hot shot and shells he set it on fire. When the ordnance portable furnaces for heating shot proved insufficient to supply the demands of the artillery, he ordered large bonfires to be kindled, on which the camon-balls were thrown; and these supplies were termed by the soldiers "hot potatoes" for the enemy. But the great triumph of rel-hot shot was on that memorable 13th of September, 1752, when forty-six sail of the line, and a countless fleet of gun and mortar loats attacked the fortress. With all these appliances of warfare, the great confidence of the enemy-or rather, combined enemies-was in their floating batteries, planned by D'Areon, an eminent Freneh engineer, and which had cost a good half million sterling. They were supposed to be impervious to shells or red-hot shot. After persistently firing at the fleet, Elliott started the adminal's ship and one of the batteries commanded by the Prince of Nassan. This was but the commencement of the end. The nuwieldy leviathans could not be shifted from their moorings, and they lay helpless and immovable, and yet dangerous to their neighbours; for they were filled with the instruments of destruetion. Early the next morning eight of these vamuted batteries "indieated the efficacy of the red-hot defence. The light produced by the fiames was nearly equal to noonday, and greatly exposed the enemy to olservation, enabling the artillery to be pointed upon them with the ntmost precision. The roek and neighlouring objeets are stated to have been highly illuminated by the constant flashes of eamnon and the flames of the burning ships, forming a mingled seene of sublimity and terror."* "An indistinet clamour, with lamentable eries and groans, arose from all quarters." $\dagger$

When 400 pieces of artillery were playing on the rock at the same moment, Elliott returner the compliment with a shower of red-hot balls, bombs, and carcases, that filled the air, with little or no intermission. The Count d'Artois had lastened from Paris to

[^5]n other vessels, tanees of 1,800 illery, to which es silenced, and even and wound They had an vessels even at me had to retire is naval attack ig', of course, the
of the important As each aceession 1 more grates for batterics was on ose of "cayenne fire. When the demands of the vere thrown; and But the great , when forty-six zed the fortress. -or rather, comeminent French supposed to be t, Elliott started Nassau. This l not be shifted igerous to their larly the next red-hot defence. atly exposed the with the utmost ghly illuminated ming a mingled cries and groans,
moment, Elliott eases, that filled from Paris to

the siege of gibraltar.
witness a capitulation. He arrived in time to see the total destruction of the floating batteries and a large part of the combined fleet. Attempting a somewhat feeble joke, he wrote to France:-"La ballerie la plus efficctive étuil mu ballerie de cuisine." Elliott's cooking-apparatus and "roasted balls" beat it all to nothing. Red-hot shot has been entirely superseded in "civilised" warfare by shells. It was usually handled mueh in the same way that ordiuary shot and shell is to-day. Each ball was carried by two men, having between them a strong iron frame, with a ring in the middle to hold it. There were two heavy wads, one dry and the other slightly danped, between the powder and lall. At the siege of Cibraltar, however, matters were managed in a much more rough-andready style. The shot was heated at furnaces and wheeled off to the guns in wheelbarrows lined with sand.

The partial failure of the navy to co-operate successfully with the land-forces, so far as bombardment was concerned, during the Crimean war, has had much to do with the adoption of the costly ironclad floating fortresses, armed with enormously powerful guns, of the present day. The earliest form, indeed, was adopted during the above war, but not used to any great extent or adrautage. The late Emperor of the Freneh* saw that the coming neeessity or necessary evil would be some form of strongly-armoured and protected floating battery that could cope with fortresses ashore, and this was the germ of the ironelad movement. The first batterics of this kind, used successfully at Kinburn, were otherwise unseavorthy and unmanageable, and were little more than heavily-plated and more or less covered barges.

The two earliest European monelads were La Gloire in France and the Warrior in England - the latter launched in 1860. Nether of these vessels presented any great departure from the established types of build in large ships of war. The Warcior is an andeniably fine, handsome-looking frigate, masted and riggel as usual, but she and her sister-ship, the Black Prince, are about the only ironclads to which these remarks apply-every form and variety of construction having been adopted since. As regardel size, she was considerably larger than the largest frigate or ship of the line of our navy, although greatly exceeded by many ironelads subsequently built. She is 380 feet in length, and her displacement of more than 9,100 tons was 3,000 tons greater than that of the largest of the wooden men-of-war she was superseding. The $W_{\text {arrior }}$ is still among the fastest of the iron-armoured fleet. Considered as an ironclad, however, she is a weak example. Her armour, which protects only three-fifths of her sides, is but four and a half inches thick, with eighteen inches of (wood) lacking, and five-eighths of an ineh of what is technicaily called "skinplating," for protection inside. The remote pessibility of a red-hot shot or shell falling inside has to be considered. Her bow and stern, rudder-head and steering-gear, would, of conrse, be the vulnerable points.

From this small begiming-one armoured vessel-our ironclad fleet has grown with

[^6]of the floating t feeble joke, he isine." Elliott's t shot has been lled much in the ed by two men, hold it. There the powder and more rough-andin wheelbarrowa

11d-forees, so far to do with the y powerful guns, the above war, he French * saw trongly-armoured nd this was the d suceessfully at ittle more than
the Warrior in iented any great Varrior is an and her sister-ship, ply-every form ke, she was conalthough greatly th, and her dise largest of the e fastest of the le. Her armour, ck, with eighteen ly called "skinor shell falling p-gear, would, of
las grown with
nd armoured vessels. and lattering-rams. or was the published lways fully alive to
the greatest rapidity, till it now numbers over sixty of all denominations of vessels. The late Emperor of the Freneh gave a great impetus to the movement; and other foreign nations speedily following in lis wake, it clearly lbehoved England to be able to cope with them on their own ground, should oceasion demand. Then there was the "seare" of invasion which took some hold of the public mind, and was exaggeratel by certain portions of the press, at one period, till it assumed serious proportions. Leading journals eomplained that by the time the Admiralty would have one or two ironclads in commission, the Freneh would have ten or twelve. Thus urged, the Goverument of the day must be excused if they made some doubtful experiments and eostly failures.

But apart from the lessons of the Crimea, and the aetivity and rivalry of foreign powers, attention was seriously drawn to the ironclad question by the events of the day. It was easy to guess and theorise concerning this new feature in warfare, but early in 1802 practical proof was afforded of its porer. The naval engagement which took place in Hampton Roads, near the outset of the great American civil war, was the first time in which an ironelad ship was brought into collision with wooden vessels, and also the first time in whieh two distinct varieties of the species were brought into collisisy: with eael other.

The Southerners had, when the strife commenced, seized and partially burned the Mervimac, a steam-frigate belonging to the United States navy, then lying at the Norfolk Navy-yard. The hulk was regarded as nearly worthless,* until, looking about for ways and means to anncy their opponents, they hit on the idea of armouring her, in the best manner attainable at the moment; and for awhile at least, this condemued wreek, resuscitated, patched up, and covered with iron plates, $\dagger$ beeame the terror of the enemy. She was provided with an iron prow or ram capable of inflicting a severe blow under water. Her hull, cut down to within three feet of the water-line, was covered by a bomb-proof, sloping-roofed house, which extended over the serew and rudder. This was built of oak and pine, eovered with iron; the latter being fonr and a half inches thick, and the former aggregating twenty inches in thickness. While the hull was generally iron-plated, the bow and stern were covered with steel. There were no masts-nothing seen above but the "smoke-stack" (funnel), pilot-house, and flagstaff. She carried eight powerful guns, most of them eleven-inch. "As she came ploughing through the water," wrote one eyewitness of her movements, "she looked like a luge half-submerged croeodile." The Southerners re-christened her the Virginia, but her older name has clung to her. The smaller vessels with her contributed little to the issue of the fight, but those opposed to her were of no inconsiderable size. The Congress, Chemberland,

[^7]Mimesoli, and Roanoake were frigates carrying an aggregate of over 150 guns and nearly $2,000 \mathrm{men}$. They, however, were wooden vessels ; and although, in two cases in particular, defended with persistent heroism, had no chance against the ironclad, hastily as she had been prepared. There is little donbt that the officers of the two former vessels, in particular, knew something of the nature of the "forlorn hope" in which they were abont to engage, when she hove in sight on that memorable Sth of Mareh, 1562. It is said that the sailors, however, derided her till she was close upon them-so close that their laughter and remarks were hearl on board. "That Southern Bugaboo," "that old Secesh euriosity;" were anong the milder titles applied to her.

The engagement was fought in the Hampton loads, which is virtually an outlet of the James River, Virginia. The latter, like the Thames, has considerable breadth and many shallows near its month. The Merrimac left Norfolk Navy-yard (which holds to the James River somewhat the position that Sheerness does to the Thames) hurriedly on the morning of the Sth, and steamed steadily towards the enemy's fleet, accompanied by some smaller vessels of war and a few tag-boats.
> " Meanwhile, the shapcless iron mass
> Came moving o'cr the wave,
> As gloomy as a passing hearse,
> As silent as the grave."

The morning was still and calm as that of a Sabbath-day. That the Merrimae was not expected was evideneed by the loats at the booms, and the sailors' clothes still hanging in the rigging of the enemy's vessels. "Did they see the long, dark hull? Had they made it out? Was it ignoranee, apathy, or composure that made them so indifferent? or were they provided with torpedoes, whieh could sink even the Merrimuc in a minute?" were questions mooted on the Southern side by those watehing on board the boats and from the shore.

As soon, however, as she was plainly diseerned, the erews of the Cumberlant, Congress, and other vessels were leat to quarters, and preparations made for the fight. "The engrgacment," wrote the Confederate Seeretary of the Navy, "commenced at half-past three p.m., and at four p.m. Captain Buchanan had sunk the Comberlunul, capturel and burned the Congress, disabled and driven the Mimnesotu ashore, and defeated the St. Lanrence and Rornoake, which sought shelter under the guns of Fortress Monroe. Two of the enemy's small steamers were blown up, and the two transport steamers were captured." This, as will be seen, must, as regarls time, be taken cum grano sulis, but in its main points is correct.

The Mrrrimnte commenced the action by discharging a broadside at the Congress, one shell from which killed or disabled a number of men at the guns, and then kept on towards the Cumberlaurl, which she approaehed with full steam on, striking her on the port side near the bow, her stem knocking two of the ports into one, and her ram striking the vessel under the water-line. Almost instantaneonsly a large shell was diseharged from her forward gum, which raked the gun-deck of the doomed ship, and killed ten men. Five minutes later the sliip began to sink loy the head, a large hole having been made
by the point of th: ram, through which the water rushed in. As the Merrimac rounded and rapidly came up again, she once more raked the C'umberland, killing or wounding sixteen more men. Meantime the latter was endeavouring to defend herself, and poured broadside after broadside into the Merrimac ; but the balls, as one of the survivors tells us, bouned " upon her mailed sides like india-rubber, apparently making not the least impression exeept to ent off her Hagstaff, and thus bring down the Confederate colours. None of her crew ventured at that time on her ontside to replace them, and she fonght

thenceforward with only her pennant flying."* Shortly after this, the Merrimac again attacked the unfortunate ship, advaneing with her greatest speed, her ram making another hol: below the water-line. The Cumberland began to fill rapidly. The seene on board is hardly to be deseribed in words. It was one of horrible desperation and fruitless heroism. The deeks were slippery with hmman gore; sintels of human Hesh, and portions of the body, arms, legs, and headless trinks were seattered everywhere. Below, the coekpit was tilled with wounded, whom it would be impossible to snecour, for the ship was sinking fast. Meantime the men stuek to their posts, powder was still served out, and the fring kept up steadily, several of the erew lingering so long in the after shell-room,

[^8]in their eagerness to pass up shell, that they were drowned there. The water had now reached the main gom-deck, and it became evident that the eontest was nearly over. Still the men lingerel, anxions for one last shot, when their gums were nearly under water.

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"Shall wo give them a lroadside, my boys, as she goes?
    Shull we send yet another to tell,
    In iron-tongued words, to Columbia's foes,
        How huavely her sons say 'Furewellp'"
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The word was passel for each man to save himself. Even then, one man, an antive little fellow, named Matthew Tenney, whose conrage had been conspicuons during the action, determined to fire once more, the next gun to his own leing then under water, the vessel going down by the head. He suceeeded, but at the cost of his life, for immeliately afterwards, attempting to seramble out of the port-hole, the water suddenly rushed in with such foree that he was washed back and drowned. Seores of poor fellows were unable to reaeh the upper deek, and were carried down with the vessel. The Cumberland sauk in water up to the cross-trees, and went down will her flay still flying from the peak.: The whole number lost was not less than 120 souls. Her top-masts, with the pemnant flying far above the water, long marked the locality of one of the bravest and most desperate defences ever made
"By men who knew that all else was wrong But to die when a sailor ought."

The Cumberland being utterly demolished, the Merrimac turned her attention to the Congress. The Southerners showed their ehivalric instinets at this juncture by not firing on the boats, or on a small steamer, which were engaged in pieking up the survivors of the Cumberland's erew. The officers of the Congress, seeing the fate of the Cumberland, determined that the Merrimac should not, at least, sink their vessel. They therefore got all sail on the ship, and attempted to run ashore. The Merrinuac was soon close on them, and delivered a broadside, which was terribly destructive, a shell $1: 1 l i n g$, at one of the grums, every man engaged except one. Backing, and then returning several times, she delivered broadside after broadside at less than 100 yards' distance. The Congress replied manfully and obstinately, but with little effect. One shot is supposed to have entered one of the ironelad's port-holes, and dismounted a gun, as there was no further firing from that port, and a few splinters of iron were struck off her sloping mailed roof, but this was all. The guns of the Merrimac appeared to have been speeially trained on the after-magazine of the Congress, and shot after shot entered that part of the ship. Thus, slowly drifting down with the current, and again steaming up, the Merrimac continued for an hour to fire into her opponent. Several times the Congress was on fire, but the flames were kept under. At length the ship was on fire in so many places, and the flames gathering with such force, that it was hopeless and suicidal to keep up the defence any longer.

[^9] arly over. Still water.
nan, an antive as during the n under water, f his life, for water suddenly of poor fellows he Cumberland he peak.* The pennant flying nost desperate
tention to the by not firing survivors of e Camberland, They therefore lose on them, of the gums, she delivered lied manfully d one of the m that port, this was all. fter-magaraine prly drifting - an hour to es were kept es gathering any longer.

## , the Stars and

 , fifty-four feet Che litot of theThe national thag was sadly and sorrowfully hauled down, and a white thag hoisted at the peak. The Merrimac dill not for a few minutes see this token of surrender, and contimed to fire. At last, however, it was diseerned through the clouds of smoke, and the broadsides ceased. A tug that had followed the Merrimac out of Norfolk then came alongside the Conyress, and ordered the officers on board. This they refusel, hoping that, from the ncarness of the shore, they would be able to escape. Some of the men, to the number, it is believed, of about forty, thought the tug was one of the Northern (Federal) vessels, and rushed on board, and were, of conrse, soon carried off as prisoners. By the time that all the able men were off ashore and clsewhere, it was seven o'clock in the evening, and the Comgress was a bright sheet of flame fore and aft, her guns, which were loaded and trained, going off as the fire reached them. A shell from one struck a sloop at some distance, and blew her up. At miduight the fire reached her magazines, containing five tons of gunpowder, and, with a terrific explosion, her charred remains blew up. Thus had the Merrimete sunk one and burned a second of the largest of the vessels of the enemy.

Having settled the fate of these two ships, the Merrimac had, about as o'clock in the afternoon, started to tackle the Minnesota. Here, as was afterwards proved, the commander of the former had the intention of capturing the latter as a prize, and had no wish to destroy her. He, therefore, stood off about a mile distant, and with the Torkown and Jamestown, threw shot and shell at the frigate, doing it considerable damage, and killing six men. One shell entered near her waist, passed through the chief engineer's room, knocking two rooms into one, and wounded several men; a shot passed throngh the main-mast. At nightfall the Merrimue, satisfied with her aternoon's work of death and destruction, steamed in under Sewall's Point. "The day," said the Baltimore American," thas closed most dismally for our side, and with the most gloomy apprehensions of what would oecur the next day. The Minnesota was at the mercy of the Merrimut, and there appeared no reason why the iron monster might not clear the Roads of our fleet, destroy all the stores and warehouses on the beach, drive our troops into the fortress, and command Hampton Roads against any number of wooden vessels the Government might send there. Saturday was a terribly dismal night at Fortress Monroe."

But about mine o'elock that evening Eriesson's battery, the Monitor,* arrived in Hampton Roads, and hope revived in the breasts of the despondent Northerncrs. She was not a very formidable-looking craft, for, lying low on the water, with a plain structure amidships, a small pilot-honse forward, and a diminutive fumnel aft, she inight have been taken for a raift. It was only on board that her real strength might be discovered. She carried armour abont five inches thick over a large part of her, and had practically two hulls, the lower of which had sides inelining at an angle of $51^{\circ}$ from the vertical line. It was considered that no shot could hurt this lower hull, on aceount of the angle at whiel it must strike it. The revolving turret, an iron cylinder, nine feet high, and twenty feet in diameter, eight or nine inches thick everywhere, and about the portholes eleven inches, was moved romed by steam-power. When the two heavy Dahlgren guns were

[^10]run in for loading, a kind of pendulum port fell over the holes in the turret. The propeller, rudder, and even anchor, were all hidden.

This was a war of surpises and sudden changes. It is doubtful if the Southerners knew what to make of the strange-looking battery which steamed towards them next morning, or whether they despised it. The Merrimac and the Monitor kept on approathing each other, the former waiting until she would ehoose her distance, and the latter apparently not knowing what to make of her queer-looking antagonist. The first shot from the Monitor was lired when about one hundred yards distant liom the Merrimac, and this distance was subsequently reduced to lifty yards; and at no timo during the furious cammonading that, ensued were the vessels more than two hundred yards upart. 'The scene was in plain view from Fortress Monroc, and in the main facts all the spectators agree. At first the fight was very fintions, and the guns of the Momitor were fired rapidly. The latter carried only two gims, to its opponent's eight, and received two or three shots for every one she grove linding that she was much more formidable than she looked, the Merrimet attempted to rom her down; but her superior speed and fuicker handling enabled her to dolge and tum rapidly. "Onee the Merrimac struek her near midshus, but only to prove that the battery cond not be run down nor shot down. She spun round like a top; and as she got her bearing again, sent one of her formidable missiles into her huge opponent.
"The officers of the Monitor at this time had gained such confidence in the impregnability of their battery that they no longer fired at random nor hastily. The fight then assumed its most interesting aspeet. 'The Monitor went round the Merrimac repeatedly, probing her sides, seeking for weak points, and reserving her fire with coolness, matil she had the right spot and the right range, and made her experiments accordingly. In this way the $M$ Merrimac received three shots. . . . . Neither of these three shots rebounded at all, but appeared to eut their way dear through iron and wood into the ship."* Soon after receiving the third shot, the Merrimuce made off at full speed, and the contest was net renewed. Thus ended this particular episode of the American war.

Liestenant Worden was in the pilot-house of the Monitor when the Merrimat directed a whole broadside at her, and was, besides being thrown down and stamed by the coneussion, temporarily blinded by the minute fragments of shells and powder driven through the eye-boles-only an inch each in diameter-made throngh the iron to enable them to keep a look-out. He was carried away, but, on recovering consciousness, his first thoughts reverted to the action. "IFave I saved the Mianesola?" said he, cagerly. "Yes; and whipped the Merrimac!" was the answer. "Then," replied he, "I don't care what becomes of me." The concussion in the turret is deseribed as something terrible; and several of the men, though not otherwise hurt, were rendered insensible for the time. Fach side claimed that they had serionsly damaged the other, but there seems to have been no foundation for these assertions in facts.

But althongh this, the original Monitor, was efficient, if not omnipotent, in the ealm

[^11]turret. The

Sontherners them next on approachad the latter the first shot he Merrimat; during the 4 npurt. The he spectators $r$ were tired eived two or midable than or speed and rimuc struck Wn nor shot t one of her ence in the 8. The fight ce repeatedly, oolness, until brdingly. In ree shots repod into the full speed, he American
e Merrimac stunned by owder driven enable them ess, his first he, engerly. 1e, "I don't something asensible for there seems in the calm

waters ut the mouth of the James River, she wus, ns might be expeeted with her that, barge-like bottom, a lad sea-boat, and was afterwards lost. Her ports had to be dosed and eaulkel, being only five feet nbove the water, und she was therefore umble to work her gums at sen. Her construetor had negheted Sir Wilter Raleigh's adviee to Prince Henry tonching the model of a ship, "that her ports be so hid, as that she may curry out her guns ull weathers." She plunged heavily-completely submerging her pilot-honse at times, the sea washing over and into her turret. The heavy shocks mud jarts of the armonr, as it came down upon the waves, made her leaky, and she went to the bottom in spite of pmups capable of throwing 2,000 gallons a minute, which were in grood order :and working inceesantly.

Since the conchasion of the American war, the ironelad question has assumed serious aspeets, and many fuets could be cited to show that they have not by any means always confirmed the first impressions of their strength and invuluerability. Two recent cases will be fresh in the memories of our readers. The first is the recent engagement ofl Peru between the Peruvian ironclad tarret-ship IInuscar and the British unarmoured men-of-war Shath and Anethyst. With the politieal aspeet of the afthir we have nothung, of eourse, to do, in our present work. It was really a question between the guns quite as much as between the vessels. The IInuscur is only a moderately-strong urmoured vessel, her plates being the same thickness as those of the earliest Euglish ironclad, the Hinrior, and her armament is two 300 -pounders in her turret, and three shell-guns. On the other hand, the Shuth, the principal one of the two British vessels, is only a large iron vessel sheathed in wood, and not armoured at all; but she carries, besides smatler guns, a formidable armament in the shape of two 12 -ton and sixteen $6 \frac{1}{2}$-ton gums. An cyewitness of the engagement states* that, after three hours' firing, at a distance of from 400 to 3,000 yards, the only damage inflicted by the opposing vessels was a hole in the Ihunseur's side, made by a shell, the bursting of which killed one mau. "One !-in. shot (from a 12 -ton gun) also penetrated three inches into the turret without effecung any material damage. 'There were nearly 100 denta of various depths in the phates, but none of' suffieient depth to materially injure them. The upper works-boats, and everything destructible by shell-were, of course, destroyed. Her colours were also shot down." Aceording to theory, the Shall's two larger guns should have penetrated the IInnsen's sides when fired at upwards of 3,000 yards' distance. The facts are very different, doubtless becamse the shots struck the armour obliquely, at any angles but right ones. The IIn"xecur was admirably handled and mancurred, but her gumery was so indifferent that none of the shots even struek the Shul, except to cut away a couple of ropes, and the latter kept up so hot a fire of shells that the erew of the former were completely demoralised, and the officers had to train and fire the guns. She eventually eseaped to Iquique, under cover of a pitchy-dark night. The same correspondent admits, however, that the Shahl, although a magnifieent vessel, is not fitted for the South American station, since Peru has three ironclads, Chili two, and Brazil and the River Plate Republies several, against which no ordinary English man-of-war could eope, were the former properly bandled.
ith her llat, to be closed e mamble to i's advice to as that slie merging her shocks and she went to which were umed serious neans always recent cases engagenent unarmoured nve nothing, n the ginns ng armoured ironclad, the
shell-ginis. only a large sides smatler guns. An distance of is a hole in ne ! $)$-in. shot any material of' sullicent destructible ig to theory, 1 at upwards hots struck bly handled even struck (1) so hot a 1 , and the ler cover of h, although has three which no

The reeent story of the sancy Russian merchantman,* which mot merely dared the 'Turkinh ironclad, lunt fought her for tive hours, and indlicted quite as much damage as she reecived, will also be remembered, although it may be taken just for what it is werth. One Captain Barmoff, of the Imperial Rassian Navy, had, in an article publishied in the cinhas, of St. Petershurg, recommended his Government to abaudon ironchads, avoid naval battles, and comfine operations at sen to the letting loose of a mumber of cruisers against the enemy's merchantmen. Where a naval engagement was inevitable, he "preferred tighting with small craft, making up by agility and speed what they hocked in cuirnss, and if the worst came to the worst, casily replaced by other specimens of the same type." 'The article created much notice; and at the beginning of the present war, the author was given to moderstand by the Russian Admiralty that he should have ma opportunity of proving his theories by deels. The I'cosh, an ordinary iron stenmer of light build, was selected; she had been employed previonsly in no more warlike functions than the conveyance of corn and tallow from Rnssia to foreign ports. Sho was equipped immediately with a fee $0 \mathrm{i}-\mathrm{in}$. mortars, her decks being strengthened to receive them, but no other changes were male. On the morning of the 23 rd of July, cruising in the Black Sea, Captain Baranoff eneountered the Turkish ironelad Assari Trfeik; a formidable vessel armoured with twelve inches of iron, and earrying li-ton guns, and nothing daunted by the disproportion in size and strength, immediately engaged her. Both vessels were skilfully mancurred, the ironelad moving about with extraordinary alertness and speed. She was only hit three times with large balls; the second went through her deek, "kindling a fire which was quiekly extinguished;" the third was believed to have injured the turret. Meantime, the Fest/" was herself badly iujured, a grenade hitting her close to the powdermagazine, which would have soon blown up but for the rapid measures taken by her commander. Her rudder was strnek and partially disabled, but still she was not smik, as she should have been, aceording to all theoretieal considerations. She eventually steaned back again to Selastopol-after two other vessels had come to the ironclad's assistance-covered with glory, having for five hours worried, and somewhat injured, a giant vessel to which, in proportion, she was but a weak and miseralle dwarf.

It will be obvious that from neither of the above eases can any positive inferenees be safely drawn. In the former ease, the weaker vessel had the stronger guns, and so matters were partially balanced; in the second example, the ironelad ought to lave easily sunk the merehantman by means of her heavy gums, even from a great distanee-but she didn't. The ironelal question will engage our attention again, as it will, we fear, that of the nation, for a very long time to come.

[^12]
## CHAPTER II.

## Men of Peace.

Naval Life In Peace Thaes-A Grand Explorlng Voyage-The Crulse of the Challenger-Its Work--Deep-sea SoundingsFive Miles Jown-Apparutus Employed-Ocean 'Treasures-A Gigantic Sen-monster-Tristan d'Acunha-A Diseovery Interesting to the liscovered-The Two Crusoes-The Inaceessible Island-Solitary Llfe-The Sea-eart-Swlmming Pigs-Resened at Last-The Real Crusoe lsland to Let-Down South-The Land of Desolation-Kerguelen-The Sealers' Dreary Life-In the Antarclic-Among the leebergs.

No form of life presents greater contrasts than that of the sailor. Storm and calm alternate; to-day in the thick of the fight-battling man or the elements-to-morrow we find him tranquilly pursuing some peaceful scheme of discovery or exploration, or calmly eruising from one station to another, protecting by moral influence alone the interests of his country. His deeds may be none the less heroic because his conquests are peaceful, and because Neptune rather than Mars is challenged to cede his treasures. Anson, Cook, and Vancouver, Parry, Franklin, M'Clintock, and M'Clure, among a host of others, stand worthily by the side of our fighting sailors, because made of the same stuff. Let us also, then, for a time, leave behind the smoke and din, the glories and horrors of war, and cool our fevered imaginations by descending, in spirit at least, to the depths of the great sea. The records of the famous voyage of the Chullemger* will afford a capital opportunity of contrasting the deeds of the men of peace with those of men of war.

We may commence by saying that no such voyage has in truth ever been undertaken before. $\dagger$ Nearly 70,000 miles of the earth's watery surface were traversed, and the Atlantic and Pacific crossed and recrossed several times. It was a veritable royage en zigzag. Apart from ordinary soundings innmmerable, 374 deep-sea soundings, when the progress of the vessel had to be stopped, and which occupied an hour or two apiece, were made, and at least two-thurls as many suceessful dretgings and trawlings. The greatest depth of ocean reached was 4,575 fathoms ( 27,450 feet), or over fire miles. This was in the Pacific, about 1,400 miles S.E. of Japan. We all know that this ocean derives its name from its generally ealmer weather and less tempestuous seas; and the researches of the officers of the Challenger, and of the United States vessel T'usearorn, show that the bottom slopes to its greatest depths very evenly and gradually, little broken by submarine mountain ranges, exeept off voleanic islands and coasts like those of the Hawaiian (Sandwich) Islands. Off the latter there are mountains in the sea ranging to as high as 12,000 feet. The general evenness of the bottom helps to account for the long, sweeping waves of the Pacific, so distinguishable from the short,

* The full official account has not yet been issued. The brief narrative presented here is derived prineipally from the lively and interesting series of letters from the pen of Lord George Camphell; from "The Cruise of H.M.S. Challenger," by W. J. J. Spry, li.N., one of the engineers of the vessel; and the Natical and other scientific and technical nagazines.
$\dagger$ The Austrian frigate Norara made, in 1837-8-9, a voyage round "and about" the world of 51,686 miles. As it was a sitiling vessel, no reliable results could be expected from their deep-sea soundings, and, in fact, on the only two oecasions when they attempted anything very deep, their lines broke.
cut-up, and "choppy" waves of the Atlantic. In the Atlantic, on the voyage of the Challenger from Teneriffe to St. Thomas, a pretty level bottom off the African coast gradually deepened till it reached 3,125 fathoms (over three and a half miles), at about one-third of the way across to the West Indies. If the Alps, Mont Blane and all, were submerged at this spot, there would still be more than half a mile of water above them! Five hundred miles further west there is a comparatively shallow part-two miles or so deep-which afterwards decpens to three miles, and contimues at the same depth nearly as far as the West Indies.

A few words as to the work laid out for the Chullenger, and how she did it. She is a $2,000-$ ton corvette, of moderate steam-power, and was put into commission, with a reduced complement of officers and men, Captain (now Sir) George S. Nares, later the commander of the Arctic expedition, having complete charge and control. Her work was to include soundings, thermometrie and magnetic observations, dredgings and chemieal examinations of sea-water, the surveying of unsurveyed harbours and coasts, and the resurveying, where practicable, of partially surveyed coasts. The (eivil) scientific corps, under the charge of Professor Wyville Thomson, comprised three naturalists, a chemist and physicist, and a photographer. The naturalists had their special rooms, the chemist his laboratory, the photographer his "dark-mom," and the surveyors their chart-room, to make room for which all the guns were removed except two. On the upper deck was another analysing-room, "devoted to mud, fish, birds, and vertebrates generally;" a donkey-engine for hauling in the sounding, dredging, and other lines, and a broad bridge amidships, from which the officer for the day gave the necessary orders for the performance of the many duties conneeted with their scientific labours. Thousands of fathoms of rope of all sizes, for dredging. and sounding; tons of sounding-weights, from half to a whole hundredweight apicee; dozens of thermometers for deep-sea temperatures, and gallons of methylated spirits for preserving the specimens obtained, were carried on board.

Steam-power is always very essential to deep-sea somuding. No trustworthy results can be obtained from a ship under sail; a perpendicular sounding is the one thing required, and, of course, with steam the vessel can be kept head to the wind, regulating her speed so that she remains nearly stationary. The sounding apparatus used needs some little deseription. A block was fixed to the main-yard, from which depended the "accumulator," consisting of strong india-rubler bands, each three-fourths of an inch in diameter and three feet long, whieh ran throngh cirenlar dises of wood at either end. These are capable of stretching seventeen feet, and their objeet is to prevent sudden strain on the lead-line from the inevitable jerks and motion of the vessel. The sounding-rod used for great depths is, with its weights,* so arranged that on touching bottom a spring releases a wire sling, and the weights slip off and are left there. These rods were only employed when the depths were considered to be over 1,500 fathoms; for less depths a long, conical lead weight was used, with a "butterfly valve," or trap, at its basis for seeuring specimens from the ocean bed. There are several kinds of "slip" water-bottles for securing samples of sea-water (and marine objeets of small size floating in it) at great depths. One of the most ingenions is a brass tube, two and a half feet in length, fitted with easily-working stop-cocks at cach end, conneeted by means of a rod, on

[^13]which is a movable float. As the bottle descends the stop-cocks must remain open, but as it is hauled up again the flat float receives the opposing pressure of the water above it, and, acting by means of the connecting-rod, sluts both cocks simultancously, thus inelosing a specimen of the water at that particular depth. Self-registering thermometers were employed, sometimes attached at intervals of 100 fathoms to the sounding-line, so as to test the temperatures at various depths. For dredging, lages or nets from three to five feet in depth, and nine to fifteen inches in width, attached to iron frames, were employed, whilst at the bottom of the bags a number of "swabs," similar to those used in cleaning decks, were attached, so as to sweep along the bottom, and bring up small specimens of animal life-coral, sponges, \&e. These swabs were, however, always termed "hempen tangles"-so 1.uch does science dignify every olject it touches! The dredges were afterwarls set aside for the ordinary beam-trawls used in shallow water around our own coasts. Their open meshes allowed the mud and sand to filter through easily, and their adoption was a source of satisfaction to some of the officers who looked with horror on the state of their usually immaculate deeks, when the dredges were emptied of their contents.

Not so very long ago, our knowledge of anything leneath the ocean's surface was extremely indefinite ; for even of the coasts and shallows we knew little, marine zoology and botany being the last, and not the earliest, branches of natural history investigated by.men of science. It was asserted that the specific gravity of water at great depths would cause the heaviest weights to remain suspended in mid-sea, and that animal existence was impossible at the bottom. When, some sixteen years ago, a few star-fish were brought up by a line from a depth of 1,200 fathoms, it was seriously considered that they had attached themselves at some midway point, and not at the bottom. In 1868-9-70, the Royal Society borrowed from the Admiralty two of Her Majesty's vessels, the Lightning and Purcupine; and in one of the latter's trips, considerably to the south and west of Ireland, she somed to a depth of 2,400 fathoms,* and was very suceessful in many dredging operations. As a result, it was then suggested that a vessel should be specially fitted out for a more important oeean voyage round the world, to oceupy three or more years, and the aruise of the Challenger was then determined upon.

The story of that eruise is utterly unsensational ; it is one simply of calm and unremitting scientific work, almost unaccompanied by peril. To sume the treasures aequired will seem valneless. Among the earliest gains, obtained near Cape St. Vineent, with a common trawl, was a beautiful specimen of the Luplectella, "glass-rope sponge," or "Venus's flower-basket," alive. 'This object of beauty and interest, sometimes seen in working naturalists' and conchologists' windows in London, had always previously been oltained from the seas

* Most of the recorded examples of earlier deep-sea soundings have little scientifie value. Unless the soundingline sinks perpendicularly, and the vessel remains stationary-to do which she may have to steam against wind and tide or current-it must be evident that the data obtained aro not reliable. From a sailing vessel it is impossible to obtain absolutely reliable soundings except in, sity, a tideless lake, unruffled by wind. It is very evident that if the sounding lino drags after or in uny direction from the vossel, the depth indieated may be greatly in excoss of the true depth ; indeed, it may be donble or treble in some eases. There is one recorded example of a depth of 7,706 fathoms laving been obtained, which too evidently comes 'ndor this category. After several years' soundings on the part of tho Challenger and the United States vessel Tuscarora, it has become probablo that no part of the ocean has a depth much greater than 4,500 fathoms. But even this is upwards of fivo miles!
pen, but as it above it, and, inelosing a ere employed, to test the feet in depth, whilst at the ; decks, were as of animal tingles"-so urds set aside
Their open was a source their usually ; surface was e zoology and gated by.men ould cause the ras impossible up by a line ed themselves ciety borrowed ; and in one ed to a depth As a result, ore important the Challenger
d unremitting red will seem ommon trawl, lower-basket," turalists' and rom the seas ess the sounding. agninst wind and it is impossible to vident that if tho exeess of the true of 7,706 fathoms ngs on the part of ocean las a depth
of the Philippine Isliuds and Japan, to which it was thought to be confined, and its diseovery so much nearer home was hailed with delight. It has a most graceful form, consisting of a slightly curved conical tube, eight or ten inches in height, contracted beneath to a blunt point. The walls are of light tracery, resembling opaque spun glass, covered with a lace-work of delicate pattern. The lower end is surrounded by an upturned fringe of lustrous fibres, and the wider end is closed by a lid of open network. These beautiful objects of nature make most charming ornaments for a drawing-room, but have to be kept under a glass case, as they are somewhat frail. In their native element they lie buried in the mud. They were afterwards found to be " the most characteristic inhabitants of the great depths all over the world." Early in the voyage, no lack of living things were brought up-strange-looking fish, with their eyes blown nearly out of their heads by the expansion of the air in their air-bladders, whilst entangled anoug the meshes were many star-fish and delicate zoophytes, shining with a vivid phosphorescent light. A rare specimen of the clustered sea-polyp, twelve gigantic polyps, each with eight long fringed arms, terminating in a close cluster on a stalk or stem three feet high, was obtamed. "Two specimens of this fine species were brought from the coast of Greenland early in the last century; somehow these were lost, and for a century the animal was never seen." Two were brought home by one of the Swedish Arctic expeditions, and these are the only speeimens ever obtained. One of the lions of the expedition was not "a rare sea-fowl," but a transparent lobster, while a new crustacean, perfeetly blind, which feels its way with most beautifully delicate claws, was one of the greatest curiosities obtained. Of these wonders, and of some geological points determined, more anon. But they did not even sight the sea-serpent, much less attempt to catch it. Jules Verne's twenty miles of inexhaustible pearl-meadows were evidently missed, nor did they even catch a glimpse of his grgantic oyster, with the pearl as big as a cocoa-nut, and worth $10,000,000$ franes. They could not, with Captain Nemo, dive to the bottom and land amid submarine forests, where tigers and cobras have their counterparts in enormous sharks and vicious cephalopods. Victor Hugo's "devil-fish" did not attack a single sailor, nor did, indeed, any formidable cuttle-fish take even a passing peep at the Challenger, much less attempt to stop its progress. Dues the reader remember the story reeited both by Figuier and Moquin Taudon,* concerning one of these gigantic sea-monsters, which should have a strong basis of truth in it, as it was laid before the French Aeadémie des Seiences by a lieutenant of their navy and a French consul?

The steam-corvette Alecton, when between Teneriffe and Madeira, fell in mith a gigantic euttle-fish, fifty feet long in the body, withont counting its eight formidable arms covered with suckers. The head was of enormous size, out of all proportion to the body, and had eyes as large as plates. The other extremity terminated in two fleshy lobes or fins of great size. The estimated weight of the whole ereature was $4,000 \mathrm{lbs}$., and the flesh was soft, glutinous, and of a reddish-brick colour. "The commandant, wishing, in the interests of science, to secure the monster, aetually engaged it in battle. Numerous shots were aimed at it, but the balls traversed its flaceid and glutinons mass without eausing it any vital injury. But after one of these attacks, the waves were

[^14]observed to be covered with foam and blood, and-singular thing-a strong odour of musk was inhaled by the spectators. . . . The musket-shots not having produced the desired results, harpoons were employed, but they took no hold on the soft, impalpable flesh of the marine monster. When it escaped from the harpoon, it dived under the ship and came up again at the other side. They succeeded, at last, in getting the harpoon to bite, and in passing a bowling-hitch round the posterior part of the animal. But when they attempted to hoist it out of the water, the rope penetrated deeply into the


Fig. 1.-Shell of Guhigerina (lighly magnified). Fig. 2.-Ophioglypha bullata (six times the size in nature). Fig. 3.--Euplectella Suberea (popularly "Venus's Flower-basket"). Fig. 4.-Deidamia leptollectyla (a Blind Lobster).
fles'., and separated it into two parts, the head, with the arms and tentacles, dropping into the sea and making off, while the fins and posterior parts were brought on board; they weighed about forty pounds. The erew were eager to pursue, and would have launched a boat, but the commander refused, fearing that the amimal might eapsize it. The object was not, in his opinion, one in which he conld risk the lives of his erew." M. Moquin Tandon, commenting on M. Bertheotot's reeital, considers "that this colossal molluse was sick and exhausted at the time by some recent struggle with some other monster of the deep, which would acecunt for its having quitted its native rocks in the depths of the ovean. Otherwise it would have been more active in its movements, or it would have
our of musk roduced the , impalpable der the ship the harpoon nimal. But ply into the


Fig. 3.-Euplectella
ropping into board ; they ve launched The object M. Moquin molluse was nster of the epths of the would have

obscured the waves with the inky liquid whieh all the cephalopods have at command. Judging from its size, it would carry at lea.t a barrel of this black liquid."

The Challenger afterwards visited Juan Fernandez, the real Robinson Crusoe island where Alexander Selkirk passed his enforced residence of four years. Thanks to Defoe, he lived to find himself so famous, that he could hardly have grudged the time spent in his solitary sojourn with his dumb companions and man Friday. Alas! the romance which enveloped Juan Fernandez has somewhat dimmed. For a brief time it was a Chilian penal colony, and after sundry vieissitudes, was a few years ago leased to a merebant, who kept cattle to sell to whalers and passing ships, and also went seal-hunting on a neighbouring islet. Ho was "monarel of all he surveyed"-lord of an island over a dozen miles long and five c'six

broad, with cattle, and herds of wild goats, and capital fishing all round-all for two hundred a year! Fancy this, ye sportsmen, who pay as much or more for the privileges of a barren moor! Yet the merehant was not satisfied with his venture, and, at the time of the Challenger's visit, was on the point of abandoning it: by this time it is probably to let. Excepting the cattle douced about the foot of the hills and a eivilised house or two, the appearanee of the island must be precisely the same now as when the piratical buceaneers of olden time made it their rendezvous and haיnt wherefrom to dash out and harry the Spaniara's; the same to-day as when Alexander Selkirk lived in it as its involuntary monarch; the same to-day as when Commodore Anson arrived with his seurvy-strieken "crazy ship, a great scarcity of water, and a erew so universally diseased that there were not above ten foremast-men in a wateh capable of doing duty," and secruited them with fresh meat, vegetables, and wild fruits.
"The seenery," writes Lord George Campbell, "is grand : gloomy aud wild enough on the dull, stormy day on whieh we arrived, clouds driving past and enveloping the highest ridge of the mountain, a dark-eoloured sea pelting against the steep cliffs and shores, and 5
clouds of sea-birds swaying in great flocks to and fro over the water; but cheerful and beautiful on the bright sunny morning which followed-so beautiful that I thought, 'This beats Tahiti!'" The anchorage of the Challenger was in Cumberland Bay, a deep-water inlet from which rises a semi-circle of high land, with two bold headlands, "sweeping brokenly up thence to the highest ridge-a square-shaped, craggy, precipitous mass of rock, with trees clinging to its sides to near the summit. The spurs of these hills are covered with coarse grass or moss. . . . . Down the beds of the small ravines run burns, overgrown by dock-leaves of enormons size, and the banks are clothed with a rich vegetation of dark-leaved myrtle, bignonia, and winter-bark, tree-shrubs, with tall grass, ferns, and flowering plants. And as you lie there, humming-birds come darting and thrumming within reach of your stick, flitting from flower to flower, which dot blue and white the foliage of bignonias and myrtles. And on the steep grassy slopes above the seaclifis herds of wild goats are seen quietly browsing-quietly, that is, till they scent you, when they are off-as wild as chamois." This is indeed a deseription of a rugged paradise !

Near the ship they found splendid, but laborious, cod-fishing; laborious on account of sharks playing with the bait, and treating the stoutest lines as though made of single gut; also on account of the forty-fathom depth these cod-fish lived in. Cray-fish and conger-eels were hauled up in lobster-pots by dozens, while round the ship's sides flashed shoals of cavalli, fish that are caught by a hook with a piece of worsted tied roughly on, swished over the surface, giving splendid play with a rod. "And on shore, too, there was something to be seen and done. There was Selkirk's 'look-out' to clamber up the hill-side to-the spot where tradition says he watched day after day for a passing sail, and from whence he could look down on both sides of his island home, over the wooded slopes, down to the cliff-fringed shore, on to the deserted ocean's expanse."

The Challenger, in its cruise of over three years, naturally visited many oft-deseribed ports and settlements with which we shall have nought to do. After a visit to Kerguelen's Land-" the Land of Desolation," as Captain Cook called it-in the Southern Indian Ocean, for the purpose of selecting a spot for the erection of an observatory, from whence the transit of Venus should be later observed, they proceeded to Heard Island, the position of which required determining with more accuracy. They anchored, in the evening, in a bay of this most gloomy and utterly desolate place, where they found half-a-dozen wretched sealers living in two miserable huts near the beach, which were sunk into the ground for warmth and protection against the fierce winds. Their work is to kill and boil down sea-elephants. One of the men had been there for two years, and was going to stay another. They are left on the island every year by the schooners, which go sealing or whaling elsewhere. Some forty men were on the island, unable to communicate with each other by land, as the interior is entirely covered with glacier, like Greenland. They have barrels of salt pork, beef, and a small store of coals, and little else, and are wretchedly paid. "Books," says Lord Campbell, "tell us that these sea-elephants grow to the length of twenty-four feet; but the sealers did not confirm this at all. One of us tried hard to make the Scotch mate say he had seen one eighteen feet long; but 'waull, he couldn't say.' Sixteen feet? 'Waull, he couldn't say.' Fourteen feet? 'Waull, yes, yes-something more like that;' but thirteen feet would seem a fair average size. . . . . One of our fellows bought a
eerful and ght, ‘ This deep-water " sweeping
mass of hills are avines run ith a rich tall grass, rting and ; blue and re the seayou, when of single $y$-fish and des flashed oughly on, too, there eer up the ; sail, and he wooded t-described Kerguelen's ian Ocean, vhence the position of n a bay of hed sealers or warmth elephants. They are elsewhere. y land, as ls of salt "Books," venty-four he Scotch teen feet? ke that;' bought a
clever little clay model of two men killing a sea-elephant, giving for it-he being an extravagant man-one pound and a bottle of rum. This pound was instantly offered to the servants outside in exchange for another bottle."

Crossing the Antarctic Circle, they were soon among the icebergs, keeping a sharp look-out for Termination Land, which has been marked on charts as a good stretch of coast seen by Wilkes, of the American expedition, thirty years before. To make a long story short, Captain Nares, after a careful search, un-discoverel this discovery, finding no traces of the land. It was probably a long stretch of ice, or possibly a mirage, which phenomenon has deceived many a sailor before. John Ross once thought that he had discovered some grand mountains in the Arctic regions, which he named after the then First Lord of the Admiralty, Croker. Next year Parry sailed over the site of the supposed range; and the "Croker" Mountains became a standing joke against Ross.

Iccbergs of cnormous size were encountered; several of three miles in length and two hundred feet or more in height were seen one day, all close together. But bergs of this calibre were exceptional; they were, however, very often over half a mile in length. "There are few people now alive," says the author we have recently quoted, "who have seen such superb Antarctic iceberg scenery as we have. We are steaming towards the supposed position of land, only some thirty miles distant, over a glass-like sea, unruffled by a breath of wind; past great masses of ice, grouped so close together in some cases as to form an unbroken wall of cliff several miles in length. Then, as we pass within a few hundred yards, the chain breaks up iuto two or three separate bergs, and one sees-and beautifully from the mast-head-the blue sea and distant horizon between perpendicular walls of glistening alabaster white, against which the long swell dashes, rearing up in great blue-green heaps, falling back in a torrent of rainbow-flashing spray, or goes roaring into the azure caverns, followed immediately by a thundering thud, as the compressed air within buffets it back again in a torrent of seething white foam." Neither words adequately describe the beauty of many of the icebergs seen. One had three high arched caverns penetrating far to its interior; another had a large tunnel through which they could see the horizon. The delicate colouring of these bergs is most lovely-sweeps of azure blue and pale sea-green with dazzling white; glittering, sparkling crystal merging into depths of indigo blue; stalactite icicles hanging from the walls and roofs of cavernous openings. The reader will imagine the beauty of the scene at sunrise and sunset, when as many as eighty or ninety bergs were sometimes in sight. The sea was intensely green from the presence of minute algre, through belts of which the vessel passed, while the sun, sinking in a golden blaze, tipped and lighted up the ice and snuw, making them sparkle as with

[^15]
brightest gems. A large number of tabular ieebergs, with quantities of snow on their level tops, were met. They amused themselves by firing a 9 -pounder Armstrong at one, which brought the ice down with a rattling crash, the face of the berg cracking, splitting, and splashing down with a roar, makiug the water below white with foam and powdered ice. These icebergs were all stratified, at more or less regular distances, with blue lines, which before they capsized or canted from displacement of their centres of gravity, were always horizontal. Duriug a gale, the Challenger came into collision with a berg, and lost her jibboom, "dolphin-striker," and other head-gear. An iecberg in a fog or gale of wind is not a desirable olstruction to meet at sea.

The observations made for deep-sea temperatures gave some remarkable results. Here, among the icebergs, a buad or stratum of water was found, at a depth of eighty to 200


THE NATtRALIST'S ROOM ON BOARD THE "CHALLENGER."
fathoms, colder than the water either above or below it. Take one day as an example: on the 19th of February the surface temperature of the sea-water was $32^{\circ}$; at 100 fathoms it was $29 \cdot 2^{\circ}$; while at 300 fathoms it had risen to $33^{\circ}$. In the Atlantic, on the eastern side about the tropies, the bottom temperature was found to be very uniform at $35 \AA^{\circ}$, while it might be broiling hot on the surface. Further south, on ihe west side of the Atlantic below the equator, the bottom was found to be very nearly three degrees cooler. It is believed that the cold current enters the Atlantic from the Antarctic, and does not rise to within 1,700 fathoms of the surface. These, and many kindred points, belong more properly to another section of this work, to be hereafter discussed.

The Challenger had crossed, and sounded, and dredged the broad Atlantic from Madeirs to the West Indies-finding their deepest water off the Virgin Islands; thence to Halifax, Nova Scotia; recrossed it to the Azores, Canary, and Cape de Verde Islands; recrossed it once more in a great zig-zag from the African coast, through the equatorial regions to Bahia, Brazil; and thence, if the expression may be used, by a great angular
sweep through the Southern Ocean to Tristan d'Acunha en route to the Cape, where they made an interesting discovery, one that, unlike their other findings, wns most interesting to the discovered also. It was that of two modern Robinson Crusees, who had been living by themselves a couple of years on a desolate rocky island, the name of which, "Inaccessible," rightly describes its eharacter and position in mid occan. Juan Fernandez, the locale of Defoe's immortal story, is nothing to it now-a-days, and is constantly visited.

dredgina implements u'sed by the "challenger."
Fig 1, Sounding machines. Fig 2, Slip water-bottles. Fig. 3, Deep-sea thermometer. Fig. 4, The dredge. Fig. $\mathbf{6}$, Cup sounding lead.
On arrival at the island of Tristan d'Acunha, itself a miserable settlement of about a dozen cottages, the people, mostly from the Cape and St. Helena, some of them mulattoes, informed the officers of the Challenger that two Germans, brothers, had some time before settled, for the purpose of catching seals, on a small island about thirty miles off, and that, not having been over there or seen any signs of them for a long time, they feared that they had perished. It turned out afterwards that the Tristan d'Acunlia people had not taken any trouble in the matter, looking on them as interlopers on their fishing-grounds. They had promised to send them some animals-a bull, cow, and heifer-but, although they had stock and fowls of all kinds, had leit them to their fate. But first as to this
little-known Tristan d'Acunha, of which Lord George Campbell* furnishes the following account:-" It is a circular-shaped ishond, some nine miles in diameter, a peak rising in the centre 8,300 feet high-a fine sight, snow-covered as it is two-thirds of the way down. In the time of Napoleon a guard of our marines was sent there from the Cape; but the connection between Nap's being eaged at St. Helena and a guard of marines occupying this island is not very obvious, is it? Any way, that was the commencement of a settlement which has continued with varying numbers to this day, the marines laving long ago been withdrawn, and now eighty-six people-men, women, and childrenlive here. . . . A precipitous wall of cliff, rising abruptly from the sea, encircles the island, excepting where the settlement is, and there the cliff recedes and leaves a loag grass slope of considerable extent, covered with grey boulders. The cottages, in number about a dozen, look very Seotch from the ship, with their white walls, straw roofs, and stone dykes around them. Sheep, cattle, pigs, geese, ducks, and fowls they have in plenty, also potatoes and other vegetables, all of which they sell to whalers, who give them flour or money in exchange. The appearance of the place makes one shudder; it looks so thoroughly as though it were always blowing there-which, indeed, it is, heavy storms continually sweeping over, killing their cattle right and left before they have time to drive them under shelter. They say that they have lost 100 head of eattle lately by these storms, which kill the animals, particularly the calves, from sheer fatigue." The men of the place often go whaling or sealing eruises with the ships that touch there.

The Challenger steamed slowly over to Inaccessible Island during the night, and anchored next morning off its northern side, where rose a magniticent wall of black cliff, splashed green with moss and ferns, rising sheer 1,300 feet above the sea. Between two headlands a strip of stony beach, with a small hut on it, could be seen. This was the residence of our two Crusoes.

Their story, told when the first exuberance of joy at the prospect of being taken off the island had passed away, was as follows:-One of the brothers had been cast away on Tristan d'Acunha some years before, in consequence of the burning of his ship. There he and his companions of the crew had been kindly treated by the settlers, and told that at one of the neighbouring islands 1,700 seals had been captured in one season. Telling this to a brother when he at last reached home in the Fatherland, the two of them, fired with the ambition of acquiring money quiekly, determined to exile themselves for a while to the islands. By taking passage on an outward-bound steamer from Southampton, and later transferring themselves to a whaler, they reached their destination in safety on the 27th of November, 1871. They had purchased an old whale-boat-mast, sails, and oars complete-and landed with a fair supply of flour, biscuit, coffee, tea, sugar, salt, and tobaceo, sufficient for present nceas. They had blankets and some covers, which were easily filled with bird's feathers-a German could hardly forget his national luxury, his feather-bed. They had provided themselves with a wheelbarrow, sundry tools, pots and kettles; a short Enfield rifle, and an old fowling-piece, and a very limited supply

[^16]of powder, bullets, and shot. They had also sensibly provided themselves with some seed;, so that, all in all, they started life on the island under favourable circumstances.

The west side of the island, on which they landed, consisted of a beach some three miles in length, with a bank of earth, covered with the strong long tussock grass, rising to the cliff, whieh it was just possible to scale. The walls of rock by which the island is boundel afforded few opportunities for reaching the comparatively level plateau at the top. Without the aid of the grass it wer impossible, and in one place, which had to be climbed constantly, it tonk them an hour and a half of hard labour, holding on with hands and feet, and even teeth, to reach the summit. Meantime, they had found on the north side a suitable place for building their hut, near a waterfall that fell from the side of the mountain, and close to a wood, from which they could obtain all the firewood they required. Their humble dwelling was partly constructed of spars from the vessel that had brought them to the island, and was thatehed with grass. About this time (December) the seals were landing in the coast, it being the pupping season, and they killed nineteen. In hunting them their whale-boat, which was toc heavy for two men to handle, was seriously damaged in lauding through the surf; but yet, with constant bailing, could be kept afloat. A little later they cut it in halves, and construeted from the best parts a smaller boat, which was christened the Sea Cart. During the summer rains their house became so leaky that they pulled it down, and shifted their quarters to another spot. At the beginning of April the tussock grass, by which they had ascended the cliff, caught fire, and their means of reaching game, in the shape of wild pigs and goats, was cut off. Winter (about our summer-time, as in Australia, \&e.) was approaching, and it became imperative to think of layinc in provisions. By means of the Sea Cart they went round to the west side, and sacceederi in killing two goats and a pig, the latter of which furnished a bucket of fit for frying potatnes. The wild boars there were found to be almost uneatable; but the sows were good eating. The goats' flesh was said to be very delicate. An English ship passed then far out at sea, and they lighted a fire to attract attention, but in vain; while the surf was running too high, and their Cart too shaky to attempt to reach it.

Hitherto they had experienced no greater hardships than they had expected, and were prepared for. But in June [mid-winter] their boat was, during a storm, washed off the beach, and broken up. This was to them a terrible disaster; their old supplies were exhausted, and they were practically cut off from not merely the world in general, but even the rest of the island. They got weaker and weaker, and by August were little better than two skeletons.

The sea was too tempestuous, and the distance too great for them to attempt to swim round (as they afterwards did) to another part of the island. But succour was at hand; they were saved by the penguins, a very clumsy form of relief. The female birds came ashore in August to lay their eggs in the nests already prepared by their lords and masters, the male birds, who had landed some two or three weeks previously. Our good Germans bad divided their last potato, and were in a very weak and despondent condition when the pleasant fact stared them in the face that they might now fatten on eggs ad libitum. Their new diet soon put fresh heart and courage in them, and when,
th some me three ss, rising he island ou at the had to on with d on the the side firewcod he vessel this time and they two men constant ted from summer arters to ascended pigs and roaching, Sea Cart pig, the here were was said ighted a nd their and were off the ies were eral, but ere little
empt to was at female by their eviously. spondent atten on d when,
early in September, a Freneh bark sent a boat ashore, they determined still to remain on the island. They arranged with the eaptain for the sale of their seal-ssins, and bartered a quantity of eggs for some biscuit and a eouple of pounds of tobaceo. Late in October a schooner from the Cape of Good Hope called at the island, and on leaving, promised to return for them, as they had decided to quit the island, not having had any success in obtaining peltries or anything else that is valuable; but she did not re-appear, and in November their supplies were again at starvation-point. Seleeting a calm day, the two Crusoes determined to swim round the headland to the eastward, taking with them their rifles and blankets, and towing after them an empty oil-barrel containing their clothes, powler, matches, and kettle. This they repeated later on several occasions, and, climbing the cliffs by the tussoek grass, were able to kill or secure on the plateau a ferv of the wild pigs. Sometimes one of them only would mount, and after killing a pig would cut it up and lower the hams to his brother below. They eaught three little sucking-pigs, and towed them alive through the waves, round the point of their landingplace, where they arrived half drowned. They were put in an enclosure, and fed on green stuff and penguin's eggs-good feeding for a delicate little porker. Attempting on another occasion to tow a couple in the same way, the unfortunate pigs met a watery grave in the endeavour to weather the point, and one of the brothers barely eseaped, with some few injuries, through a terrible surf whieh was beating on their part of the coast. Part of their time was passed in a cave during the cold weather. When the Challenger arrived their only rifle had burst in two places, and was of little use, while their musket was completely burst in all directions, and was being used as a blow-pipe to freshen the fire when it got low. Their only knives had been made by themselves from an old saw. Their library consisted of eight books and an atlas, and these, affording their only literary recreation for two years, they knew almost literally by heart. When they first landed they had a dog and two pups, which they, doubtless, hoped would prove something like companions. The dogs aimusi immediately left, and made for the penguin rookeries, where they killed and worried the birds by hundreds. One of them became mad, and the brothers thought it best to shoot the three of them. Captain Nares gave the two Crusoes a passage to the Cape, where one of them obtained a grod situation ; the other returned to Germany, doubtless thinking that about a couple of dozen seal-skins-all they obtained-was hardly enough to reward them for their two years' dreary sojourn on Inaccessible Island.


## CHAPTER III.

Tife Men of the Sea.
The great Lexieographer on Sailors-The Dangers of tho Sea-How Boys become Sailors-Young Amyas Leigh-Tho Genuino Jack Tar-TraIning-Ships versus the old Guard-Ships-" Sea-goers and Waisters "-The Training UndergoneRoutine on Board-Never-ending Work-Silip like a Lady's Watch-Watehes and "Bells"-Old Grogram and GrogThe Sailor's Sheet Anchor-Shadows in the Seaman's Life-The Naval Cat-Testimony and Opinion of a Medical Offlcer-An Examplo-Boy Flogging in the Navy-Shakspeare and Herbert on Saiiors and the Sea.
Dr. Johnson, whose personal weight seems to have had something to do with that carried by his opinion, considered going to sea a species of insanity.* "No man," said he, " will be a sailor who has contrivance enough to get himself into a jail: for being in a ship is being in a jail, with the chance of being drowned." The great lexicographer knew Fleet Street better than be did the fleet, and his opinion, as expressed above, was hardly even decently patriotic or sensible. Had all men thought as he professed to do-probably for the pleasure of saying something ponderously brilliant for the moment-we should have had no naval or commercial superiority to-day-in short, no England.

The dangers of the sea are serious enough, but need not be exaggerated. One writer $\dagger$ indeed, in serio-comic vein, makes his sailors sing in a gale-

> "When you and I, Bill, on the deck
> Are comfortably lying,
> My eyes! what tiles and chimney-pots
> About their heads are flying!"
leading us to infer that the dangers of town-life are greater than those of the sea in a moderate gale. We might remind the reader that Mark Twain has conclusively shown, from statistics, that more people die in bed comfortably at home than are killed by all the railroad, stcamship, or other accidents in the world, the inference being that going to bed is a dangerous habit! But the fact is, that wherever there is danger there will be brave men found to face it-even when it takes the desperate form just indicatea! So that there is nothing surprising in the fact that in all times there have been men ready to go to sea.

Of those who have succeeded, the larger proportion have been carried thither by the spirit of adventure. It would be difficult to say whether it has been more strongly developed through actual "surroundings," as believed by one of England's most intelligent and friendly critics, $\ddagger$ who says, "The ocean draws them just as a pond attracts young ducks," or through the influence of literature bringing the knowledge of wonderful voyages and discoveries within the reach of all. The former are immensely strong influences. The boy who lives by, and loves the sea, and notes daily the ships of all

[^17]nations passing to and fro, or who, maybe, dwells in some naval ur commereial port, and sees constantly great vessels arriving and departing, and hears the tales of sailors boll, concerning new lands and curious things, is very apt to become imbued with the spirit of adventure. How charmingly has Charles Kingsley written on the latter point!* How young Amyas Leigh, gentle born, and a mere stripling schoolboy, edged his way under the ellows of the sailor men on Bideford Quay to listen to Captain John Oxenham tell his stories of heaps-"seventy foot long, ten foot broad, and twelve foot high"of silver bars, and Spanish treasure, and far-off lands and peoples, and easy victories over the coward Dons! How Oxenham, on a recruiting bent, sang out, with good broad Devon accent, " Who 'lists? who 'lists? who'll make his fortune?

> "'Oh, who will join, jolly mariners all? And who will join, says he, 0 ! To till his poekets with tho good red goold, By sailing on the sea, 0 !'"

And how young Leigh, fired with enthusiasm, made answer, boldly, "I want to go to sea; I want to see the Indies. I want to fight the Spaniards. Though I'm a gentleman's son, I'd a deal liever be a cabin-boy on board your ship." And how, although he did not go with swaggeriug John, he lived to first round the world with great Sir Francis Drake, and after fight against the "Invincible" Armada. The story had long before, and has many a time sinee, been enacted in various forms among all conditions of men. To some, however, the sea has been a last refuge, and many such have been converted into brave and hardy men, perforce themselves; while many others, in the good old days of press-gangs, appeared, as Marryat tells us, "to fight as hard not to be forced into the service as they did for the honour of the country after they ware fairly embarked in it." It may not generally be known that the law which concerns impressing has never been abolished, although there is no fear that it will ever again be resorted to in these days of naval reserves, training-ships, and naval volunteers.

The altered circumstances of the age, arising from the introduction of steam, and the greatly inereased inter-commercial relations of the whole world, have made the Jack Tar pure and simple comparatively rare in these days; not, we believe, so much from his disappearance off the scene as by the numbers of differently employed men on board by whom he is surrounded, and in a sense hidden. A few A.B.'s and ordinary seamen are required on any steamship; but the whole tribe of mechanicians, from the important rank of chief engineer downwards, from assistants to stokers and coal-passers, nced not know one rope from another. On the other hand, the rapid inerease of commerce has apparently outrun the natural increase of qualified seamen, and many a good ship nowadays, we are sorry to say, goes to sea with a very motley crew of "green" hands, landlubbers, and foreigners of all nationalities, including Lascars, Malays, and Kanakas, from the Sandwich Islands. A "confusion of tongues," not very desirable on board a vessel, reigns supreme, and renders the position of the officers by no means enviable. To obviate these difficulties, and furnish a supply of good material both to
the Royal Navy and Mercantile Marine, traming-ships have been organised, which have been, so far, highly successful. Let these embryo defenders of their country's interests have the first place.

Of course, at all periods the boys, and others who entered to serve before the mast, received some training, and picked up the rest if they were reasomably clever. The brochure of "an old salt,"* which has recently appeared, gives a fair account of his own treatment and reception. Running away from London, as many another boy has done, with a few coppers in his pocket, he tramped to Sheerness, taking by the way a hearty supper of turnips with a family of sheep in a field. Arrived at his. destination, he found a handsome flag-ship, surrounded by a number of large and nall vesseis. Selecting the very smallest-as best adapted to his own size-he went on board, and asked the first officer he met-one who wore but a single epaulet-whether his ship was manned with boys?" He was answered, "No, I want men; and pray what may ynu want?" "I want to go to sea, sir, please." "You had better go home to your mother," was the answer. With the next officer-" a real captain, wearing grey hair, and as straight as a line"-he fared better, and was eventually entered as a third-class boy, and sent on board a guard-ship. Here he was rather fortunate in being taken in charge by a petty officer, who lad, as was ofter the case then, his wife living on board. The lady ruled suprume in the mess. She served out the grog, too, and, to prevent intoxication among the men, used to keep one finger inside the measure! This enabled her to the better take care of her husband. She is deseribed as the best "man" in tha mess, and irresistibly reminds us of Mrs. Trotter in "Peter Simple," who had such a horror of rum that she could not lee induced to take it except when the water was bad. The water, however, always was bad! But the former lady took good care of the new-comer, while, as we know, Mrs. Trotter fleeced poor Peter out of three pounds sterling and twelve pairs of stockings before he had been an hour on hoard. Mr. Mindry tells the usual stories of the practieal jokes he had to endure-about being sent to the doctor's mate for mustard, for which he received a peppering ; of the constant thrashings he receivedin one case, with a number of others, receiving two dozen for losing his dinner. He was cook of the mess for the time, and having mixed his dough, had taken it to the galley-oven, from the door of which a sudden lurch of the ship had ejected it on the main deck, "the contents making a very good representation of the White Sea." The crime for which he and his companions suffered was for endeavouring to scrape it up again! But the gradual steps by which he was educated upwards, till he became a gunner of the first class, prove that, all in all, he had cheerily taken the bull by the horns, determined to rise as far and fast as he might in an honourable profession. He was after a year or so transferred to a vessel fitting for the West Indies, and soon got a taste of active life. This was in 1837. Forty or fifty years before, the guard-ships were generally little better than floating paademoniums. They were used partly for breaking in raw hands, and were also the intermediate stopping-places for men waiting to join other ships. In a guard-ship of the period described, a most heterogeneous mass of humanity

[^18]hich have ; interests the mast, rer. The of his boy has te way a estination, 1 vesseis. ard, and ship was may ynu mother," , and as boy, and rge by a The lady oxication er to the ness, and horror of he water, r, while, 1 twelve he usual 's mate eeiveddinner. in it to d it on " The e it up became by the n. He oon got ps were fing in $n$ other manity
was assembled Human invention could not scheme work for the whole, while skulking, impraetieable in other vessels of the Royal Navy, was deemed highly meritorious there. A great body of men were thus very often assembled together, who resolved themselves into hostile elasses, separated as any two castes of the Hindoos. A clever writer in Blackwool's Maguzine, more than fifty years ago, deseribes them first as "sea-goers,"i.e., sailors separated from their vessels by illness, or temporary causes, or ordered to other vessels, who looked on the guard-ship as a floating hotel, and, having what they were

the " chichestre" thaning-ship.
pleased to call ships of their own, were the aristocrats of the oeeasion, who would do no more work than they were obliged. The second, and by far the most numerous class, were termed "waisters," and were the simple, the unfortunate, or the utierly abandoned, a body held on board in the utmost contempt, and most of whom, in regard to elothing, were viretched in the extreme. The "waister" had to do everything on board that was menial-swabbing, sweeping, and drudging generally. At night, in defiance of his hard and unceasing labour, he too often beeame a bandit, prowling about seeking what he might devour or appropriate. What a contrast to the clean orderly training-ships of to-day! Some little information on this subject, but imperfectly understood by the publie, may perhaps be permitted here.

It is not generally known that our supply of seamen for the Royal Navy is nowadays almost entirely derived from the training-ships - first estallished about fourteen years ago. In a late blue-book it was stated that during a period of five years only 107 men had been entered from other sourees, who had not previously served. Training-ships, accommodating about 3,000, are stationed at Devonport, Falmouth, Portsmouth, and Portle where the lads remain for about a year previous to being sent on sea-going ships. The age of entry has varied at different periods; it is now fifteen to sixteen and a half years. The reeruiting statisties show whence a large proportion come-from the men of Devon, who contribute, as they did in the days of Drake and Hawkins, Gilbert and Raleigh, the largest quota of men willing to make their "heritage the sea."

Dr. Peter Comrie, R.N., a gentlenan who has made this matter a study, informs the writer that on board these ships, as regards cleanliness, few gentlemen's sons are ietter attended to, while their edueation is not negleeted, as they have a good schoolmaster on all ships of any size. He says that boys brought up in the service not merely make the best seamen, but generally like the navy, and stiek to it. The order, cleanliness, and tidy ways obligatory on board a man-of-war, make, in many cases, the ill-regulated fo'castle of most merchant ships very distasteful to them. Their drilling is just sufficient to keep them in healthy condition. No one can well imagine the difference wrougbt in the appearance of the street arab, or the Irish peasant boy, by a short residence on board one of these ships. He fills out, becomes plump, loses his gaunt, haggard, hunted look; is natty in his appearance, and assumes that jaunty, rolling gait that a person gifted with what is called "sea-legs" is supposed to exhibit. Still, "we," writes the doetor, "have known Irish boys, who had very rarely even perlaps seen animal food, when first put upon the liberal dictary of the servicc, complain that they were being starved, their stomachs having been so used to be distended with large quantities of vegetables, that it took some time before the organ accommodated itself to a more nutritious but less filling dietary."

You have only got to watch the boy from the training-ship on leave to judge that the navy has yet some popularity. Neatly dressed, clean and natty, surrounded by his quondam playmates, he is "the observed of all observers," and is gazed at with admiring respect by the street arab from a respeetful distance. He has, perhaps, learned to "spin a few yarns," and give the approved hitch to his trousers, and, while giving a favourable aceount of his life on board ship, with its foreeastle jollity and "four bitter," is the hest reeruiting-officer the service can have. The great point to be attended to, in order to make him a sailor, is that "you must eateh him young."* That a good number have been so .caught is proved by the navy estimates, which now provide for over 7,000. boys, 4,000 of the number in sea-going ships.

[^19]Governments, as governments, may be paternal, but are rarely very benevolent, and the above excellent institutions are only organised for the safety and strength of the navy. There is another class of training-ships, which owe their existence to benevolence, and deserve every encouragement-those for rescuing our street waifs from the treadmill and prison. The larger part of these do not enter the navy, but are passed into the Mcrehant Marine, their training being very similar. The Government simply lends the ship. Thus the Chichester, at Greenhithe, a vessel which had been in 1868 a quarter of a century lying useless-never having seen service-was turned over to a society, a mere shell or carcase, her masts, rigging, and other fittings having to be provided by private subscriptions. Her case irresistibly reminds the writer of a vessel, imaginary only in name, deseribed by James Hannay: "-" H.M.S. Patagonian was built as a three-decker, at a cost of $£ 120,000$, when it was discovered that she could not sail. She was then cut down into a frigate, at a cost of $£ 50,000$, when it was found out that she would not tack. She was next bnilt up into a two-decker, at a cost of another $£ 50,000$, and then it was discovered she could be made useful, so the Admiralty kept her unemployed for ten years!" A good use was, however, found at last for the Chichester, thanks to benevolent people, the quality of whose mercy is twice blessed, for they both help the wretched youngsters, and turn them into good boys for our ships. Some of these street arabs previously have bardly been under a roof at night for years together. Hear M. Esquiros:-"To these little ones London is a desert, and, though lost in the drifting sands of the crowd, they never fail to find their way. The greater part of them contract a singular taste for this hard and almost savage kind of life. They love the open sky, and at night all they dread is the eye of the policeman; their young minds become fertile in resources, and glory in their independence in the 'battle of life;' but if no helping hand is stretched out to arrest them in this fatal and down-hill path, they surely gravitate to the treadmill and the prison. How could it be otherwise? . . . The question is, what are these lads good for?" That problem, M. Esquiros, as you with others predicted, has been solved satisfactorily. The poor lads form excellent raw material for our everincreasing sea-service.

The training of a naval cadet-i.e., an embryo midshipman, or "midshipmite" (as poor Peter Simple was irreverently called-before, however, the days of naval cadets)-is very similar in many respects to that of an embryo seaman, but includes many other acquirements. After obtaining his nomination from the Admiralty, and undergoing a simple preliminary examination at the Royal Naval College in ordinary branches of knowledge, he is passed to a training-ship, which to-day is the Britannia at Dartmouth. Here he is taught all the ordinary acquirements in rigging, seamanship, and gunnery; and, to fit him to be an officer, he is instructed in taking observations for latitude and longitude, in geometry, trigenometry, and algebra. He also goes through a course of drawing-lessons and modern languages. He is occasionally sent off on a brig for a short cruise, and after a year on the training-ship, during which he undergoes a quarterly examination, he is passed to a sea-going ship. His position on leaving depends entirely on his certificate-if he obtains one of the First Class, he

[^20]is immediately rated midshipman; while if he only obtains a Third Class certificate, he will have to serve twelve months more on the sea-going ship, and pass another examination before be can claim that rank.*

The actual experiences of intelligent sailors, or voyagers, written by themselves, have, of course, a greater practical value than the sea-stories of clever novelists, while the latter, as a class, confine themselves very much to the quarter-deck. Dana's "Two Years Before the Mast" is so well known that few of our readers need to be told that it is the story of an American student, who had undermined his health by over-application, and who took a voyage, viia Cape Horn, to California in order to recover it. But the old brig Pilgrim, bound to the northern Pacific coast for a cargo of hides, was hardly a fair example, in some respeets, of an ordinary merchant-vessel, to say nothing of a fine clipper or modern steam-ship. Dana's experiences were of the roughest type, and may be read by boys, anxious to go to sea, with advantage, if taken in conjunction with those of others; many of them are common to all grades of sea service. A little work by a "Sailor-boy," $\dagger$ published some years ago, gives a very fair idea of a seaman's lot in the Royal Navy, and the two stories in conjunction present a fair average view of sea-life and its duties.

Passing over the young sailor-boy's admission to the training-ship-the "Guardho," as he terms it-we find his first days on board devoted to the mysteries of knots and hitchmaking, in learning to lash hammocks, and in rowing, and in acquiring the arts of "feathering" and "tossing" an oar. Incidentally he gives us some information on the etiquette observed in boats passing with an officer on board. "For a lieutenant, the coxswain only gets up and takes his cap off; for a captain, the boat's crew lay on their oars, and the coxswain takes his cap off; and, for an admiral the oars are tossed (i.e., raised perpendicularly, not thrown in the air !), and all caps go off." Who would not be an admiral ? While in this "instruction" he received his sailor's clothes-a pair of blue cloth trousers, two pairs of white duck ditto, two blue serge and two white frocks, two pairs of white "jumpers," two caps, two pairs of stockings, a knife, and a marking-type. As soon as he is "made a sailor" by these means, he was ordered to the mast-head, and tells with glee how he was able to go up outside by the futtock shrouds, and not through " lubber's hole." The reader doubtless knows that the lubber's hole is an open space between the head of the lower mast and the edge of the top; it is so named from the supposition that a " land-lubber" would prefer that route. The French call it the tron du chat-the hole through which the cat would climb. Next he commenced cutlass-drill, followed by rifle-drill, big-gun practice, instruction in splicing, and all useful knots, and in using the compass and lead-line. He was afterwards sent on a brig for a short sea cruise. "Having," says he, "to run aloft without shoes was a henvy trial to me, and my feet often were so sore and blistered that I have sat down in the 'tops' and cried with the pain ; yet up I had to go, and furl and loose my sails; and up I did go, blisters and all. Sometimes the pain was so bad I could not move smartly, and then the unmerited rebuke from a thoughtless officer was as gall and wormwood to me."

Dana, in speaking of the incessant work on board any vessel, says, "A ship is like a lady's

* Vide "The Qucen's Regulations and the Admiralty Instruetions for the Government of Her Majesty's Naval Service;" also Glascock's " Naval Officer's Manual."
t "A Sailor-Boy's Log-Book from Portsmouth to the Peiho," edited by Walter White.
e, he will on before res, have, he latter, rs Before ory of an a voyage, id to the ts, of an
Dana's sea, with all grades very fair at a fair rdho," as ad hitcharts of a on the cosswain oars, and b, raised pdmiral ? e cloth of white as be is lee how ." The he lower " would t would tructio: erwards pess was in the p I did nen the
lady's
s Naval
watch-always out of repair." When, for example, in a calm, the sails hanging loosely, the hot sun pouring down on deck, and no way on the vessel, which lies
"As idle as a painted ship
Upon a painted ocean,"
there is always sufficient work for the men, in "setting up" the rigging, which constantly requires lightening and repairing, in picking oakum for caulking, in brightening up the metal-

instruction on hoard a man-of-war.
work, and in holystoning the deck. The holystone is a large piece of porous stone,* which is dragged in alternate ways by two sailors over the deck, sand being used to increase its effect. It obtains its name from the fact that Sunday morning is a very common time on many merchant-vessels for cleaning up generally.

The daily routine of our young sailor on the experimental cruises gave him plenty of employment. In his own words it was as follows:-Commencing at five a.m.-"Turn bauds up; holystonc or scrub upper deck; coil down ropes. Half-past six-breakfast, half an

[^21]hour: call the watch, watch belew, clean the upper deck; watch on deck, clean wood and brass-work; put the upper deeks to rights. Eight a.m.-hands to quarters; clean guns and arms ; division for inspection ; prayers; make sail, reef topsails, furl top-sails, top-gallant saile, royals ; reef courses, down top-gallant and royal yards. This continued till eight bells, twelve o'clock, dinner one hour. 'All hands again ; cutlass, rifle, and big-gun drill till four o'clock; clear up decks, coil up ropes ;' and then our day's work is done." Then they would make little trips to sea, many of them to experience the woes of sea-sickness for the first time.

But the boys on the clean and well-kept training-brig were better off in all respects than poor Dana. When first ordered aloft, he tells us, "I had not got my 'sea-legs' on, was dreadfully sea-sick, with hardly strength to hold on to anything, and it was 'pitel-dark' * * * How I got aleng I cannot now remember. I 'laid out' on the yards, and held on with all ray strength. I could not have been of much service; for I remember having been sick several times before I left the top-sail yard. Soon all was snug aloft, and we were again allowed to go below. This I did not consider much of a favour; for the confusion of everything below, and that inexpressibly sickening smell, caused by the shaking up of bilge-water in the hold, made the steerage but an indifferent refuge to the cold, wet decks. I had often read of the nautical experiences of others, but I felt as though there could be none worse than mine; for, in addition to every other evil, I could not but remember that this was only the first night of a two years' voyage. When we were all on deek, wo were not much better off, for we were continually ordered about by the officer, who said that it was good for us to be in motion. Yet anything was better than the horrible state of things below. I remember very well going to the hatchway aud putting my head down, when I was oppressed by nausea, and felt like being relieved immediately. We can fully recommend the example of Dana, who, acting on the advice of the black cook on board, munched away at a good half-pound of salt beef and hard biscuit, which, washed down with cold water, soon, he says, made a man of him.

Some little explanation of the mode of dividing time on board ship may be here found useful. A "watch" is a term both for a division of the crew and of their time: a full watch is four hours. At the expiration of each four hours, commencing from twelve o'clock noon, the men below are called in these or similar terms-"All the starboard (or port) watch ahoy! Eight bells!" The watch from four p.m. to cight p.m. is divided, on a well-regulated ship, into two "dog-watches;" the object of this is to make an uneven number of periods -seven, instead of six, so that the men change the order of their watches daily. Otherwise, it will be seen that a man, who, on leaving port, stood in a particular watch-from awelve noon to four p.m.-would stand in the same watch throughout the voyage; and he who had two night-watches at first would always have them. The periods of the "dogwatches" are usually devoted to smoking and recreation for those off duty.

As the terms involved must occur frequently in this work, it is necessary also to explain for some readers the division of time itself by "bells." The limit is "eight bells," whieh are struck at twelve, four, and eight o'elock a.m. or p.m. The ship's bell is sounded each half-hour. Half-past any of the above hours is "one bell" struck sharply by itself. At the hour, two strokes are made sharply following each other. Expressing the strokes by signs, half-past twelve would be I (representing oue stroke); one o'clock would be II (two strokes
wood and guns and llant sails, lls, twelve or o'clock ; ould make me. peets than ' on, was rk' * * * a with all ring been and we for the by the refuge to ut I felt evil, I ' voyage. y ordered anything ig to the like being ag on the and hard
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sharply struck, one after the other) ; half-past one, II I; two o'eloek, II II; half-past two, II II I; three o'cloek, II II II; half-past three, II II II I; and four o'elock, II II II II, or "eight bells." The proeess is then repeated in the next watch, and the only disturbing element comes from the elements, which occasionally, when the vessel rolls or pitches greatly, cause the bell to strike without leave.

Seamen before the mast are divided into three classes-able, ordinary, and boys. In the merehant service a "green hand" of forty may be rated as a boy; a landsman must ship for boy's wages on the first voyage. Merchant seamen rate themselves-in other words, they cause themselves to be entered on the ship's books according to their qualifications and experience. There are few instances of abuse in this matter, and for good reason. Apart from the disgrace and reduction of wages and rating which would follow, woe to the man who sets himself up for an A.B. when he should enter as a boy; for the rest of the crew consider it a fraud on themselves. The vessel would be short-handed of a man of the class required, and their work would be proportionately increased. No mercy would be shown to such an impostor, and his life on board would be that of a dog, but anything rather than that of a "jolly sea-dog."*

There are lights in the sailor's chequered life. Seamen are, Shakespeare tells us, "but men"-aud, if we aro to believe Dibdin, grog is a decided element in their happier hours. "Grog" is now a generic term; but it was not always. One Admiral Vernonwho persisted in wearing a grogram $\dagger$ tunic so much that he was known among his subordinates as "Old Grog"-carned immortality of a disagreeable nature by watering the rum-ration of the navy to its present standard. At 11.30 a.m., on all ships of the Royal Navy nowadays, half a gill of watered rum-two parts of water to one of the stronger drink-is served out to each of the crew, unless they have forfeited it by some aet of insubordination. The officers, including the petty offieers, draw half a gill of pure rum; the former put it into the general mess, and many never taste it. "Sixwater" grog. is a mild form of punishment. "Splicing the main-brace" infers extra grog served out for extraordinary scrvice. Formerly, and, indeed, as late as forty odd years ago, the daily ration was a full gill; but, as sailors traded and bartered their drinks among themselves, it would happen once in awhile that one would get too much "on board." It has happened oceasionally in consequence that a seaman has tumbled overboard, or fallen from the yards or rigging, and has met an inglorious death. Boys are not allowed grog in the Royal Navy, and there is no absolute rule among merehant-vessels. In the American navy there is a coin allowance in lieu of rum, and every nation has its own peculiarities in this matter. In the French navy, wine, very ordinaire, and a little brandy is issued.

There are shadows, too, in the sailor's life-as a rule, he brings them on himself, but by no means always. If sailors are "but men," officers rank in the same category, and oceasionally act like brutes. So much has been written on the subject of the naval "cat"-a punishment once dealt out for most trifling offences, and not abolished yet, that the writer has some diffidence in approaching the subject. A volume might be

[^22]written on the theme; let the testimony of Dr. Stables,* a surgeon of the Royal Navy, suffice. It shall be told in his own words:-
"One item of duty there is, which occasionally devolves on the medical officer, and for the most part goes greatly against the feeling of the young surgeon; I refer to his compulsory attendance at floggings. It is only fair to state that the majority of captaius and commanders use the eat as seldom as possible, and that, too, only sparingly. In some ships, however, flogging is nearly as frequent as prayors of a morning. Again, it is more common on foreign stations than at loome, and boys of the first or seeond class, marines, and ordinary seamen, are for the most part the victims. . . . We were at anchor in Simon's Bay. All the minutio of the seene I remember as though it were but yesterday. The morning was cool and clear, the hills clad in lilae und green, sea-birds floating high in air, and the waters of the bay reflecting the blue of the sky, and the lofty mountain-sides forming a picture almost dream-like in its quietude and serenity. The men were standing about in groups, dressed in their whitest of pantaloons, bluest of smocks, and neatest of black-silk neekereliefs. By-and-by the culprit was led in by a file of marines, and I went below with him to make the preliminary examination, in order to report whether or not he might be fit for the punishment.
"Ho was as good a specimen of the British mariner as one eould wish to look upon-hardy, bold, and wiry. His crime had been smuggling spirits on board.
"' Needn't examine me, doctor,' suid he; 'I aint afeared of their four dozen; they can't hurt me, sir-leastways my baek, you know-my breast, though; hum-m!' and he shook his head, rather sadly I thought, as he bent down his eyes.
"' What,' said I, 'have you anything the matter with your chest?'
"'Nay, doctor, nay; it's my feelings they'll hurt. I've a little girl at home that loves me, and, bless you, sir, I won't look her in the face again nohow.'
"I felt his pulse. No lack of strength there, no nervousness; the artery had the firm beat of health, the tendons felt like rods of iron beneath the finger, and his biceps stood out hard and round as the mainstay of an old seventy-four. . . . All hands had already assembled-the men and boys on one side, and the officers, in coeked hats and swords, on the other. A grating had been lashed against the bulwark, and another placed on deck beside it. The culprit's shonlders and back were bared, and a strong belt fastened around the lower part of the loins for protection; he was then firmly tied by the hands to the upper, and by the feet to the lower grating; a little basin of cold water was plaeed at his feet, and all was now prepared. The sentenee was read, and orders given to proceed with the punishment. The eat is a terrible instrument of torture; I would not use it on a bull unless in self-defence; the shaft is about a foot and a half long, and covered with green or red baize, according to taste; the thongs are nine, about twenty-eight inches in length, of the thickness of a goose-quill, and with two knots tied on each. Men describe the first blow as like a shower of molten lead.
"Combing out the thongs with his five fingers before each blow, firmly and determinedly was the first dozen delivered by the bo'swain's mate, and as unflinehingly received.

[^23]"'Then, 'One dozen, sir, please,' he reported, saluting the commander.
"'Contimue the punishment,' was the calm reply.
"A new man, and a new cat. Another dozen reported; again the same reply. Three dozen. The flesh, like burning steel, had changed from red to purple, and blue, and white; and between the third and fourth dozen, the suffering wreteh, pale enough now, and in $\mathfrak{p}!1$ probability siek, begged $n$ comrale to give him a monthful of water.
"There was "t tear in the eye of the hardy sailor who obeyed him, whispering ns he did so, 'Keep up, Bill; it'll soon be over now.'
"' Five, six,' the corporal slowly counted; 'seven, eight.' It is the last dozen, and how aente must be the torture! 'Nine, ten.' The blood comes now fast enough, and yes, gentle reader, I will spare your feelings. The man was cast loose at last, and put on the sick-list; he had borne his punishnent without a groan, and without moving a muscle. A large pet monkey sat crunehing nuts in the rigging, and grimning all tho time; I have no doult the enjoyed the spectacle immensely, for he weas only "un ape."

Dr. Stables gives his opinion on the use of the eat in honest and outspoken terms. He considers "eorporal punishment, as applied to men, covarilly, cruel, and debasing to hnman nalure; and as applied to boys, brutal, and sometimes even fiendish."

The writer has statisties before him which prove that 450 cases of flogging boys took place in 1875, and that only seven men were punished during that year. There is every probalility that the use of the naval eat will ere long be abolishecl, and important as is good diseipline on board ship, there are many leading authorities who believe that it ean be maintained without it. The captain of a vessel is its king, reigning in a little world of his own, and separated for weeks or months from the possibility of reprimand. If he is a tyrannical man, ho can make his ship a floating hell for all on board. A system of fines for small offenees has been proposed, and the idea has this advantage, that in case they prove on investigation to have been unjustly imposed, the money can be returnel. The disgraee of a flogging sticks to a boy or man, and, besides, as a punishment is infinitely too severe for most of the offences for which it is inflieted. It would be a cruel punishment were the judge infallible, but with an erring human being for an irresponsible judge, the matter is far worse. And that good seamen are deterred from entering the Royal Navy, knowing that the commission of a peceadillo or two may bring down the eat on their walueky shoulders, is a matter of fact.

We shall meet the sailor on the sea many a time and again during the progress of this work, and see how hardly he earns his scanty reward in the midst of the awful dangers peeuliar to the elements he dares. Shakespeare says that he is-

> "A man whom both the waters and the wind,
> In that vast tennis-court, hath made the ball
> For them to play on"-
that the men of all others who have made England what she is, have not altogether a bed of roses even on a well-conducted vessel, whilst they may lose their lives at any moment by shipwreck and sudden death. George Herbert says-

[^24]And while the present writer would be sorry to prevent any healthy, capmhle, adventurons boy from entering a nohle profession, ho recommends him to tirst stuly the literature of the sen to the best and fullest of his ability. Onr succeeding ehapter will exhibit some of the speeial prerils which surround the sailor's life, whilst it will exemplify to some extent the qualities speciully required and expected from him.

## CLAMIVER IV.

## Perias of tare Sahon's Lapr.





 -All Sured-'Ihe C'ourl Marting.
Divgand, and inded all durope, long prior to 1 s7t had heen busily constructing ironelads, and the daily jowrals teemed with deseriptions of new forms and varieties of ships, armour, amd armament, as well as of new and chormons gins, which, rightly direeted, might sink them to the bothon. Among the more carions of the ironclals of that period, mul the construction of which had led to any quantity of disenssion, sometimes of a very angry kind, was the turret-ship-practieally the set-going " monitor"-Caprtin, which Captain Cowper lhipps Coles had at length heen permittel to construet. Coles, who was an enthusiast of great seientitie attainmonts, as well as a practical seamm, which too many of our experimentalists in this direetion have mot heen, had distinguished himself in the Crimea, and had later made many improvements in rendering vessels shot-proof. His revolving turrets are, however, the inventions with which his name are more intimately comneted, although he had much to da with the general constraction of the Captain, and ot:ere iromelauls of the perioul.

The Citptain was a large donhle-serew armomerphted vessel, of 4,272 tous. Her armour in the mosi exposel parts was eight iuches in thickness, ranging elsewhere downards from seven to as low as three inches. She had two revolving turrets, the strongest and haenvist, yet, built, and carried six powerfal gums. Among the peenliarities of her ronstruction were, that she hal ouly nime feet of "frec-lomerl"-i.e., that was the height of her silles out of water. 'The foreastle and atter-part of the vessel were raisel above this, and they were comeneted with a light hurricane-denck. This, ns we shall see, phayed an impertant part in the sad disaster we have to relate.

On the morning of the sioh of Scptemher, 1870, English readers, at their brenkfusttables, in railway carriuges, and everywhere, were startled with the news that the Captain had fomudered, with all hamds, in the Bay of Biseng. Six humdred meri had heen swept into
oternity without a moment's warning. She hud been in compmey with the squadron the night bofore, nud, indeed, hul heen visited by the mdminal, for purposes of inspeetion, the previous afternom. Tho early part of the evening had heen fine; later it had become what sailors eall "dirty weather;" at midnight the wind rose finst, mal soon culminated in a furious gale. At 2.15 in the morning of the 7 th a heavy bank of elouds passed off, and the stars came out elenr and bright, the moon then setting; but no vessel could be discerned where the Cimplain lad been last observed. At daybreak the squadron was all in sight, but seattered. "On!y ten shipss instrad of cleven conld be disecrued, the 'Captain' being the missing one." Later, it appearend that seventeen of the men and the gunner had esmpud, and hauded at Corlucion, north of Cupe Finisterre, on the afternoon of the 7 th. All the men who were sared betonged to the startoured wratch; or, in other words, none escuped except those on deek duty. Bvery man below, whether somdly sleeping alter his day's work, or tossing sleqphessly in his herth, thinking of home and friends and present peril, or watching the engines, or feeding the furmees, went down, without the fuintest possihility of escerping his down.

Think of this eatistrophe, and what it involvedl the families mad friends of 600 men phanged into mourning, and the scores on scores of wives and children into poverty! In one street of Porisent, thinty wives were mate widows hy the oceurrenere.* The shock of the news killed one poo: woman, thon in wenk health. Nor were the sad effeets eonifined to the cottages of the poors. 'The mohe-hearted captain of the vessel was a son of Piedd-Marshal Burgoyne; Captain Coles, her inventor; a son of Mr. Childers, the then First Lord of the Admiralty; the younger son of Lord Northbrook; the third son of Lord Herthert of Leat; and Lorl Lewis Gordon, brother of the Marpuis of Hantley, were among the victims of that terrible morning. 'lhe intelligence arrived during the excitement cansed hy the defeat and empitulation of Scdan, whieh, involving, as it did, the depmition of the Lamperor and the fate of Franee, was maturally the great topie of diselassion, but, for the time it overshadowed even those great events, for it was a matiomal calamity.

From the statements of survivors we now know that the wateh had been ealled a fow minutes past midnight; and as the men were going on devk to master, the ship gave a terrible lurch to starlmard, soon, however, righting herself on that occasion. Robert llises, a :a aman, who afterwards gave some valable testimeny, was on the forecastle. There was a very strong wind, mal tin ship was then only carrying her three top-sails, double reefs in eneh, and the in et p-mast stay-sail. The gards were braced sharp up, and the ship had little waly npon hero $\dagger$ As the wateh was mustered, he heard Captain Burgoyne give the order, "Iat go the foretop-sail hatyurds!" followed hy, "hot go fore nad maintop-sail sheets!" By the time the men grot to the top-sail sheets the ship was heeling over to starthord so moch that others were being washed of the deek,

[^25]
the ship lying down on her side, as she was gradually turning over and trembling ṭhrough her whole frame with every blow which the short, jumping, vicious seas, now white with the squall, gave her.* The roar of the steam from her boilers was territic, "outscreaming the noise of the storm," but not drowning the shrieks of the porr engineers and stokers which were heard by some of the survivors. The horrors of their situation can be imagined. The sea, breaking down the funnel, would soon, no doubt, extinguish the iurnaces, but not until some of thei: contents had been dashed into the engine-room, with oceans of scalding water; the boilers themselves may, likely enough, have given way and burst also. Mercifully, it was not for long. Hirst, with two other men, rushed to the weather-forecastle netting and jumped overboard. It was hardly more than a few moments before they found themselves washed on to the bilge of the ship's bottom, for in that brief space of time the ship had turned completely over, and almost immediately went down. Hirst and his companions went down with the ship, but the next feeling of consciousness by the former was coming into contact with a floating spar, to which he tied himself with his black silk handkerchief. He was soon, however, washed from the spar, but got hold of the stern of the second launch, which was covered with canvas, and floating as it was stowed on board the ship. Other men were there, on the top of the canvas covering. Immediately after, they fell in with the steam-lifeboat pinnace, bottom-up. with Captain Burgoyne and several men clinging to it. Four men, of whom Mr. May, $\dagger$ the gunncr, was one, jumped from off the bottom of the steam-pinnace to the launch. One account says that Captain Burgoyne incited them, by calling out, " Jump, men, jump!" but did not do it himself. The canvas was immediately cut away, and with the oars free, they attempted to pull up to the steam-pimace to rescue the captain and others remaining there. This they found impossible to accomplish. As soon as they endeavoured to get the boat's head up to the sea to row her to windward to where the capsized boat was floating, their boat was swamped almost level to her

[^26]thwarts, and two of the men were washed clean out of her. The pump was set going, and the boat bailed out with their caps, \&c., as far as possible. They then made a second attempt to row the boat against the sea, which was as unsuccessful as before. Meantime, poor Burgoyne was still clinging to the pinnace, in "a storm of broken waters." When the launch was swept towards him once, one of the men on board offered to throw him an oar, which he declined, saying, nobly, "For God's sake, men, keep your oars : you will want them." This piece of self-abnegation probably cost him his life, for he went down shortly after, following "the six hundred" of his devoted crow into "the valley of death." The launch was beaten hither and thither; and a quarter of an hour after the Captain had capsized, sightel the lights of one of their own ships, which was driven by in the gale, its officers bnowing nothing $\bumpeq$ the fate of these unfortunates, or their still more hapless companions. Mr. May, the gunner, took charge of the launch, and at daybreak they sighted Cape Finisterre, inside which they landed after twelve hours' hard work at the oars.

One man, when he found the vessel capsizing, awled over the weather-netting on the port side, and performed an almost incredible feat. It is well told in his own laconic style:-"Felt ship heel over, and felt she would not right. Made for weatherhammock netting. She was then on her beam-ends. Got along her botlom by degrees, as she kept turning over, until I was where her keel would have been if she had one. The seas then washed me off. I saw a piece of -wood about twenty yards off, and swam to it." In other words, he got over her side, and walked $u p$ to the bottom! While in the water, two poor drowning wretches caught hold of him, and literally tore off the legs of his trousers. He could not help them, and they sank for the last time.

Many and varied were the explanations given of the causes of this disaster. There had evidently been some uneasiness in regard to her stability in the water at one time, but she had sailed so well on previous trips, in the same stormy waters, that confidence had been restored in her. The belief, afterwards, among many authorities, was that she ought not to have carried sail at all.* This was the primary cause of the disaster, no doubt; and then, in all probability, when the force of the wind had heeled her over, $a$ heavy sea struck her and completely capsized her-the water on and over her depressed side assisting by weighting her downwards. The side of the hurricane-deck acted, when the vessel was heeled over, as one vast sail, and, no doubt, had much to do with putting her on her beam-ends. The general impression of the survivors appeared to be that, with the ship heeling over, the pressure of a strong wind upon the under part of the hurricane-deck had a greater effect or leverage upon the hull, than the pressure of the wind on her top-sails. They were also nearly unanimous in their opinion that when the Captain's starboard side was well down in the water, with the weight of water on the turret-deck, and the pressure of the wind blowing from the jort hand on the under suriace of the hurricane-deck, and thus pushing the ship right over, slic had no chance of righting herself again.

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 one time, confidence that she saster, no r over, $\approx$ depressed ed, when putting be that, $t$ of the e of the at when $r$ on the r suriace hance ofIt is to be remarked that long after the Captain had sunk, the admiral of the squadron thought that he saw her, although it was very evident afterwards that it must have been some other vessel. In his despatch to the Admiralty,* which very plainly indieated that he had some anxiety in regard to her stability in bad weather, he deseribed her appearance and behaviour up till 1.30 a.m.-more than an hour after her final exit to the depths below. In the days of superstitious belief, so common among sailors, a thrilling story of her image haunting the spot would surely have been built on this foundation.

In the old fighting-days of the Royal Navy, when success followed success, and prize after prize rewarded the daring and enterprise of its commanders, they did not think very much of the loss of a vessel more or less, but took the lesser evils with the greater goods. The seamanship was wonderful, but it was very often utterly reckless. A captain trained in the school of Nelson and Cochrane would stop at nothing. The country, accustomed to great naval battles, enriched by the spoils of the enemy-who furnished some of the finest vessels in our fleet-was not much affected by the loss of a ship, and the Admiralty was inclined to deal leniently with a spirited commander who had met with an accident. But then an accident in those days did not mean the loss of half a million pounds or so. The cost of a large ironelad of to-day would have built a small wooden fleet of those days.

The loss of the Captain irresistibly brings to memory another great loss to the Royal Navy, which occurred nearly ninety years before, and by which 900 lives were in a moment swept into eternity. It proved too plainly that "wooden walls" might capsize as readily as the "crankiest" ironclad. The reader will immediately guess that we refer to the loss of the Royal George, which took place at Spithead, on the 28th of August, 1782, in calm weather, but still under circumstances which, to a very great extent, explain how the Captain-at the best, a vessel of doubtful stability-capsized in the stormy waters of Biseay. Tue Royal George was, at the time, the oldest first-rate in the serviee, having been put into commission in 1755 . She carried 108 guns, and was considered a staunch ship, and a good sailer. Anson, Boseawen, Rodney, Howe, and Hawke had all repeatedly commanded in her.

From what small causes may great and lamentable disasters arise! "During the washing of her decks, on the 28th, the carpenter discovered that the pipe which admitted the water to cleanse and sweeten the ship, and which was about three feet under the water, was out of repair-that it was neeessary to replace it with a new one, and to heel her on one side for that purpose." The guns on the port side of the ship were run out of the port-holes as far as they would go, and those from the starboard sile were drawn in and secured amidships. This brought her porthole-sills on the lower side nearly siven

[^28]with the water. "At about 9 o'clock a.m., or rather before," stated one of the survivors,* "we had just finished our breakfast, and the last lighter, with rum on board, had come alongside; this vessel was a sloop of about fifty tons, and belonged to three brothers, who used her to carr: things on board the men-of-war. She was lashed to the larboard side of the dioyal cur and we were piped to clear the lighter and get the rum out of her, and stow it in the hold. . . . At first, no danger was apprehended from the ship being on one side, although the water kept dashing in at the portholes at every wave; and there being mice in the lower part of the ship, which were disturbed by the water which dashed in, they were hunted in the water by the men, and there had been a rare game going on." Their play was soon to be rudely stopped. The carpenter, perceiving that the skip was in great danger, went twice on the deck to ask the lieutenant of the watch to order the ship to be righted; the first time the latter barely answered him, and the second replied, savagely, "If you can manage the ship better than I can, you had better take the command." In a very short time, he began himself to see the danger, and ordered the drummer to beat to right ship. It was too late-the ship was beginning to sink; a sudden breeze springing upheeled her still more; the guns, shot, and heavy articles generally, and a large part of the men on board, fell irresistibly to the lower side; and the water, forcing itself in at every port, weighed the vessel down still more. She fell on her broadside, with her masts nearly flat on the water, and sank to the bottom immediately. "The officers, in their confusion, made no signal of distress, nor, indeed, could any assistance have availed if they had, after her lower-deck ports were in the water, which forced itself in at every port with fearful velocity." In going down, the main-yard of the Royal George caught the boom of the rum-lighter and sank her, drowning some of those on board.

At this terrible moment there were nearly 1,200 persons $\dagger$ on board. Deducting the larger proportion of the watch on deck, about 230, who were mostly saved by running up the rigging, and afterwards taken off by the boats sent for their rescue, and, perhaps, seventy others who managed to scramble out of the ports, \&c., the whole of the remainder perished. Admiral Kempenfelt, whose flag-ship it was, and who was then writing in his calin, and had just before been shaved by the barber, went down with her. The firstcaptain tried to acquaint him that the ship was sinking, but the heeling over of the ship had so jammed the doors of the cabin that they could not be opened. One young man was saved, as tr 3 vessel filled, by the force of the water rushing upwards, and sweeping him bodily before it through a hatchway. In a few seconds, he found himself floating on the surface of the sea, where he was, later, picked up by a boat. A little child was almost miraculously preserved by a sheep, which stwam some time, and with which he had doultless been playing on deck. He held by the fleece till rescued by a gentleman in a wherry. His father and mother were both drowned, and the poor little fellow did not

[^29]even know their names; all that he knew was that his own name was Jack. His preserver provided for him.

One of the survivors,* who got through a porthole, looked back and saw the opening "as full of heads as it eould cram, all trying to get out. I eaught," said he,

the wreck of the " noyal oeorge.".
"hold of the best bower-anchor, whieh was just above me, to prevent falling baek again into the porthole, and seizing hold of a woman who was trying to get out of the same porthole, I dragged her out." The same writer says that he saw "all the heads drop baek again in at the porthole, for the ship had got so mueh on her larboard side that the starboard portholes were as upright as if the men had tried to get out of the top of a

[^30]chimney, with nothing for their legs and feet to act upon." The sinking of the vessel drew him down to the bottom, but he was enabled afterwards to rise to the surface and swim to one of the great blocks of the whip which had floated off. At the time the ship was sinking, an open barrel of tar stood on deck. When he rose, it was floating on the water like fat, and he got into the middle of it, coming out as black as a negro minstrel!

When this man had got onithe block he observed the admiral's baker in the shrouds of the mizentop-mast, which were above water not far off; and directly after, tho poor woman whom he had pulled out of the porthole came rolling by. He called out to the baker to reach out his arm and catch her, which was done. She hung, quite insensible, for some time by her chin over one of the ratines of the shrouds, but a surf soon washed her off again. She was again rescued :rthe after, and life was not extinct; she recovered her senses when taken on boaru ar clà friend the Victory, then lying with other large ships near the Royal George. The captain is the latter was saved, but the poor carpenter, who did his best to save the ship, was drowned.

In a few days after the Royal George sank, bodies would come up, thirty or forty at a time. A corpse would rise "so suddenly as to frighten any one." The watermen, there is no doubt, made a good thing of it; they took from the bodies of the men their buckles, money, and watches, and then made fast a rope to their heels and towed them to land." The writer of the narrative from which this account is mainly derived says that he "saw them towed into Portsmouth Harbour, in their mutilated condition, in the same manner as rafts of floating timber, and promiscuously (for particularity was scarcely possible) put into carts, which conveyed them to their final sleeping-place, in an excavation prepared for them in Kingstown churchyard, the burial-place belonging to the parish of Portsea." Many bodies were washed ashore on the Isle of Wight.

Futile attempts were made the following year to raise the wreek, but it was not till 1839-40 that Colonel Pasley proposed, and successfully carried out, the operations for its removal. Wrought-iron cylinders, some of the larger of which contained over a ton each of gunpowder, were lowered and fired by electricity, and the vessel was, by degrees, blown up. Many of the guns, the capstans, and other valuable parts of the wreck were recovered by the divers, and the timbers formed then, and since, a perfect godsend to some of the inhabitants of Portsmouth, who manufactured them into various forms of "relics" of the Royal George. It is said that the sale of these has been so enormous that if they could be collected and stuck together they would form several vessels of the size of the fine old first-rate, large as she was! But something similar has been said of the "wood of the true cross," and, no doubit, is more than equally libellous.

It is said, by those who descended to the wreck, that its appearance was most, beautiful, when seen from about a fathom above the deck. It was covered with seaweeds, shells, starfish, and anemones, while from and around its ports and openings the fish, large and small, swam and played-darting, flashing, and sparkling in the clear green water.

There is probably no reasonable being in or out of the navy who does not believe ihat the ironelad is the war-vessel of the immediate future. But that a weeful amount of
uncertainty, as thick as the fog in which the Vanguarl went down, envelops the subject in many ways, is most certain. The circumstances connected with that great disaster are still in the memory of the public, und were simple and distinct enough. During the last week of August, 1875, the resurve squadron of the Channel Fleet, c prising the Warrior, Achilles, Hector, Iron Duke, and Vanguarl, with Vice-Admir? Sir W. Tarleton's yacht Hawk, had been stationed at Kingstown. At half-past ten on the morning of the lst of September they got into line for the purpose of proceeding to Queenstown, Cork. Off the Irish lightship, which floats at sea, six miles off Kingstown, the Achilles hoisted her ensign to say farewell-her destination being Liverpool. The sea was moderate, but a fog came on and increased in density every moment. Half an hour after noon, the "look-out" could not distinguish fifty yards ahead, and the officers on the bridge could not see the bowsprit. The ships had been proceeding at the rate of twelve or fourteen knots, but their speed had been reduced when the for came on, and they were running at not more than half the former speed. The Vangi rel watch reported a sail ahead, and the helm was put hard aport to prevent running it don. The Iron Duke was then following close in the wake of the Vanguard, and the cution of the latter simply brought them closer, and presented a broadside to the former, which, unaware of any change, had continued her course. The commander of the Iron Dine, Captain Hickley, who was on the bridge at the time, saw the spectre form c the Vanguarl through the fog, and ordered his engines to be reversed, but it was two late. The ram of the Iron Duke struck the Vanguard below the armour-plates, on the port side, abreast of the engineroom. The rent made was very large-amounting, as the divers afterwards found, to four feet in width-and the water poured into the hold in torrents. It might be only a matter of minutes before she should go down.*

The vessel was doomed; a very brief examination proved that: nothing remained but to save the lives of those on board. Captain Dawkins gave the necessary orders with a coolness which did not represent, doubtless, the conflicting feelings within his breast. The officers ably seconded him, and the crew behaved magnificently. One of the mechanics went below in the engine-room to let off the steam, and so prevent an explosion, at the im:minent risk of his life. The water rose quickly in the after-part, and rushed into the engine and boiler rooms, eventually finding its way into the provisionroom flat, through imperfectly fastened (so-calied) "water-tight" doors, and gradually over the whole ship. There was no time to be lost. Captain Dawkins called out to his men

[^31]

THE LOSS OF THE "KENT."

that if they preserved order all would be saved. The men stood as at an inspeetionnot one moved until ordered to do so. The boats of hoth ships were lowered. While the lamehing was going on, the swell of the tide cansed a lifeloat to surge against the hall, and one of the crew hand his finger crushed. This was absolntely the only casualty. In twenty minutes the whole of the men were transferred to the Iron Dukie, no single breach of discipline oecenring beyond the mulerstandable request of a sailor once in awhile to be allowed to make one effort to seeure some keepsake or article of speeial value to himself. But the order was stern: "Boys, come instantly." As "four


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hells" (2 p.m.) was striking, the last man having been reeeivel on the Iron Duke, the doomed vessel whirled round two or three times, and then sank in deep water.*

It is obvious, then, that the discipline and courage of the service had not deterioratel from that always expected in the good old days. Captain Dawkins was the last man to leave his sinking ship, and his officers one and all behaved in the same spirit. They endeavoured to quiet and reassure the men-pointing out to them the fatal consequeneer of confusion. Captain Dawkins may or may not have been rightly censurel for his seamanship; there ean be no doubt that he performed his duty nobly in the systematic efforts to save his erew. However much was lost to the nation, no mother wad to mourn the loss of her sailor-boy; no wife had been made a widow, no cliid an orphan: five hundred men had been saved to their country.

* Nineteen fathoms, or 114 feet. Her main-topmast-head was afterwards trenty-four feet out of water.

One of the officers of the Tunguarl, in a letter to a friend, graphically described the scene at and after the eollision. After having lunched, he entered the ward-room, where he encountered the surgeon, Dr. Fisher, who was reading a newspaper. "After remarking on the thickness of the fog, Fisher went to look out of one of the ports, and inmediately eried out, 'God help us! here is a ship right into us!' We rushed on deek, and at that moment the Iron Duke struck us with fearful force, spars and blocks falling alout, and causing great danger to us on deek. The Irou Duke then dropped astern, and was lost sight of in the fog. The water eame into the engine-room in tons, stopping the engines, putting the fires out, and nearly drowning the engineers and stokers. . . . The ship was now reporied sinking fast, although all the watertight compartments had been elosed. But in consequence of the shoek, some of the water-tight doors leaked fearfully, letting water into the other parts of the ship. Minute-guns were being fired, and the boats were got out. . . . At this moment the Iron Duke appeared, lowering her boats and sending them as fast as possible. The sight of her eheered us up, as we had been frightencd that she would not find us in the fog, in spite of the guns. The scene on deek can only be realised by those who have witnessed a sinilar calamity. The booming of the minute-guns, the noise of the immense volume of steam rushing out of the escape-funnel, and the orders of the captain, were strangely mingled, while a voice from a boat reported how fast she was sinking."

When the vessel went down, the deek of the Irou Duke was crowded with men watching the finale of the catastrophe. When she was about to sink, she heeled gradually over until the whole of her enormous size to the keel was above water. Then she gradually sank, righting herself as she went down, stern first, the water being blown from havse-holes in huge spouts by the force of the air rushing out of the ship. She then disappeared from view. The men were much saddened to see their home go down, carrying everything they possessed. They had been paid that morning, and a large number of them lost their little accumulated earnings. These were, of course, afterwards allowed them by the Admiralty.

The Vaugurrl and the Iron Duke were two of a class of broadside ironclads, built with a view to general and not special utility in warfare. Their thickest armour was eight inches, a mere strip, 100 feet long by three high, and much of the visible part of them was unarmoured altogether, while below it varied from six inches to as low as three-eighths of an inch. It was only the latter thiçkness where the point of the I'on Duke's ram entered. Their advoeates hoasted that they could pass through the Suez Canal, and go anywhere.

Every reader will remember the stormy discussion which ensned, in which not merely the ironclad question, but the court-martial whieh followeci-and the Admiralty deeision which followed that-were severely handled. Nor could there be mueh wonder at all this, for a vessel which had cost the nation over a quarter of a million of pounds sterling, with equipment and property on board which had cost as much more,* was lost for ever.

- The total estimated loss was $£ \check{500,000}$.

It was in vain that the then First Lord if the Admiralty* told us, in somewhat flippant tones, that we ought to be rather satisfied than otherwise with the occurrence. It was not altogether satisfactory to learn from Mr. Reed, the principal designer of both ships, that ironclads were in more danger in times of peace than in times of war. $\dagger$ In the former they were residences for several humdred sailors, and many of the water-tight doors could not be kept elosed without inconvenience; in the latter they were fortresses, when the doors would be elosed for safety. The court-martial, constituted of leading naval authorities and officers, imputed blame for the high rate of speed sustained in a fog; the public naturally inquired why a high rate of speed was neeessary at all at the time, but their lordships deelined to consider this as in any way contributing to the disaster. The Court expressed its opinion pretty strongly upon the conduct of the officers of the Iron Duke, which did the mischief, and also indireetly blamed the admiral in command of the squadron, but the Admiralty could find nothing wrong in either ease, simply visiting their wrath on the unfortunate lieutenant on deck at the time. So, to make a long and very unpleasant story short, the loss of the Fanguarl brought about a considerable loss of faith in some of our legally constituted naval authorities. $\ddagger$

## CHAPTER V.

Perles of the Sailon's Life (coulinuel).

The Value of Diseipline-The Loss of the Kent-Fire on Board-The Ship Waterlogged-Death in Two Forms-A Sail in Sight-Transference of Six Hundred Passengers to a small Brig-Splendd Diseipline of the Soldiers-Imperturbable Coolness of the Captain-Loss of the Birkenhead-Literally Broken in Two-Noblo Conduct of the MilltaryA contrary Example-Wreck of the Medusa-Itun on a Sand-bank-Panic on Board-Raft eonstructed-Insubordination and Seffishness-One Hundred and Fifty Souls Abandoned-Drunkenness and Mutins on the Raft-Riots and Murders-Reduced to Thlrty Persons-The stronger part Massacre the others-Fifteen Left-Resened at LastAnother Contrast-Wreek of the Alceste-Admirable Conduct of the Crew-The lronelad Movement-The Bnttle of the Guis.
Ir is impossible to read the account of any great disaster at sea, without being strongly impressed with the enormous value of maintaining in the hour of peril the same strict discipline which, under ordinary circumstances, is the rule of a vessel. Few more striking

[^32]examples of this are to be found, than in the story of the loss of the Kert, which we are now about to relate. The disaster of the Mellusa, which we shall record later, in which complete anarchy and disregard of discipline, aggravated a hundredfold the horrors of the situation, only teaches the same lesson from the opposite point of view. Thongh the most independent people on the earth, all Englishmen worthy of the name appreciate the value of proper subordination and obedience to those who have rightful authority to command. This was almost the only gratifying feature comnected with the loss of the Fanguarll, and the safe and rapid transference of the crew to the Iron Dukr was due to it. But the circumstances of the case were as nought to some that have preceded it, where the difficulties and risks were infinitely greater and the reward much less certain. The Kent was a fine troop-ship, of 1,530 tons, bound from England for Bengal and China. She had on board 344 soldiers, forty-three women, and sixty-six children. The officers, private passengers, and crew brought the total number on hoard to 640. After leaving the Downs, on the 19 th of February, 1825 , she encountered terrible weather, culminating in a gale on the lst of March, which obliged them almost to sail under bare poles. The narrative * by Sir Duncan MaeGregor, one of the passengers, created an immense sensation at its first appearance, and was translated into almost every language of the eivilised world. He states that the rolling of the ship, which was vastly increased by a dead weight of some hundred tons of shot and shells that formed a part of its lading, beeame so great about half-past eleven or welve o'clock at night, that the main-chains were thrown by every lurch considerably under water; and the best cleated articles of furniture in the cabin and the cuddy were dashed about in all directions.

It was a little hefore this period that one of the offieers of the ship, with the well-meant intention of ascertaining that all was fast below, deseended with a lantern. He discovered one of the spirit-easks adrift, and sent two or three sailors for some billets of wood to secure it. While they were absent, he unfortunately dropped the lamp, and letting go his hold of the cask in his eagerness to recover it, the former suddenly stove, and the spirits communicating with the light, the whole deek at that part was speedily in a blaze. The fire spread rapidly, and all their efforts at extinguishing it were vain, although bucket after bucket of water, wet sails and hammocks, were immediately applied. The smoke began to ascend the hatehway, and although every effort was made to keep the passengers in ignorance, the terrible news soon spread that the ship was on fire. As long as the devouring element appeared to be confined to the spot where the fire originated, and which they were assured was surrounded on all sides with water-casks, there was some hope that it might be subdued; lunt soon the light-blue vapour that at first arose was sueceeded by volumes of thiek, dingy smoke, which ascended through all the hatehways and rolled over the ship. A thorough panie took possession of most on board.

The deck was covered with six hundred men, women, and children, many almost frantic with excitement-wives seeking their hushands, children their mothers; strong men appearing as though their reason was overthrown, weak men maudlin and weeping; many good people on their knees in earnest prayer. Some of the older and more stout-hearted soldiers and

[^33]sailors sullenly took their seats directly over the powder-magazine, expeeting momentarily that it would explode and put them out of their misery. A strong pitehy smell suddenly wafted over the ship. "The flames have reached the cable-tier!" exclaimed one; and it was found to be too true. The fire had now extended so far, that there was but one course to pursue: the lower deeks must be swamped. Captain Cobb, the commander of the Kent, was a man of action, and, with an ability and decision that seemed only to increase with the imminence of the danger, ordered the lower deeks to be senttled, the coverings of the hatehes removed, and the lower ports opened to the free admission of the waves. His instruetions were speedily obeyed, the soldiers aiding the erew. The fury of the flames was, of course, checked; but several sick soldiers and children, and one woman, umable io gain the upper deek, were drowned, and others suffocated. As the risk of explosion somewhat diminished, a new herror arose. The ship beeame water-logged, and presented indieations of settling down. Death in two furms stared them in the face.

No sail had been seen for many days, the vessel being somewhat out of the regular course. But, although it seemed hopeless, a man was sent up to the foretop to sean the horizon. How many anxious eyes were turned up to him, how many anxious hearts beat at that moment, can well be understood. The sailor threw his eyes rapidly over the waste of howling waters, and instantly waved his hat, exelaiming, in a voiee hoarse with emotion, "A sail on the lee bow!" Flags of distress were soon hoisted, minute-guns fired, and an attempt made to bear down on the weleone stranger, which for some time did not notice them. But at last it seemed probable, by her slackening sail and altering her course, that the Kent had been seen. Hope revived on board; but there were still three painful preblems to be solved. The vessel in the distance was but a small brig: could she take over six hundred persons on board? Could they be transferred during a terrible gale and heavy sea, likely enough to swamp all the boats? Might not the Kent either blow up or speedily founder, before even one soul were saved?

The ves:el proved to be the Cambriu, a brig bound to Vera Cruz, with a number of miners on board. For fifteen mmutes it lad been very doubtful to all on the Kent whether their signals of distress-and the smoke issuing from the hatchways formed no small item among them-were seen, or the minute-guns heard. But at length it beeame obvious that the brig was making for them, and preparations were hade to clear and lower the boats of the East Indiaman. "Although," says Sir Duncan MacGregor, "it was impossible, and would have been improper, to repress the rising hopes that were pretty generally diffused amongst us by the unexpeeted sight of the Cambriu, yet I confess, that when 1 reflected on the long period our ship had been alremity burning-on the tremendous sea that was rumning-on the extreme smallness of the brig, and the immense number of human beings to be saved-I could only venture to hope that a few might be spared." When the military officers were consulting together, as the brig was approaehing, on the requisite preparations for getting out the hoats, and other necessary courses of action, one of the officers asked Major MacGregor in what order it was intended the officers should move off, to which he replied, "Of eourse, in runerai order," which injunction was instantly confirmed by Colonel Fearon, who said, "Most undoubtedly-the juniors first; but see that any man is eut down who presumes
to enter the boats before the moras of escape are presented to the women and chiduen." To prevent any insh of troups or sailors to the boats, the officers were stationct near them with deann swords. But, to do the soldiers and seamen justice, it was little needed; the fommen partienlarly keeping perfest order, and assisting to save the ladies and chikdren and private passengers genemally. Some of the women and children were placed in the first boat, which was immediately lowered into a sea so tempestuons that there was great danger that it wonld be swamped, while the lowering-tackle not being properly disengaged at the stern, there was a great prospect for a few moments that its living freight wouhl be upset in the water. I sailor, however, sueceeded in entting the ropes with an axe, and the first boat got off safely.

The Cambria had been intentionally lain at some distance from the Kent, lest she should be involved in her explosion, or exposed to the fire from the gruns, whieh, being all shotted, went off as the flames reached them. The men had a considerable distance to row, and the suecess of the tirst experiment was naturally lonked uron as the measure of their future hopes. The movements of this boat were watehed with intense anxiety by all on board. "The better to balance the boat in the raging sea through whieh it had to pass, and to enable the seamen to ply their oars, the women and children were stowed promiscuonsly under the seats, and consequently exposed to the risk of being drowned by the continual dashing of the spray over their heads, which so filled the boat during the passage that before their arrival at the brig the poor females were sitting up to their waists in water, and their children kept with the greatest diffienlty above it." Hippily, at the expiration of twenty minutes, the cutter was seen alongside their ark of refuge. The next difficulty was to get the ladies and ehildren on board the Cambria, for the sea was rumning high, and there was danger of the boat being swariped or stove against the side of the brig. The children were almost thrown on board, while the women had to spring towards the many friendly arms extended from the vessel, when the waves lifted the boat momentarily in the right posit: However, all were safely transferred to the brig wihout serious mishap.

It beenme impossible for the boats, after the first trip, to come alongside the Kent, and a plan was adopted for lowering the women and ehildren from the stern by tying them two and two together. The heaving of the vessel, and the heavy sea raising the boat one instant and dropping it the next, rendered this somewhat perilous. Many of the poor women were plunged several times in the water before they snceeded in landing safely in the boat, and many young children died from the effects--" the same violent means which only reduced the parents to a state of exhanstion or insensibility," having entirely quenched the vital spark in their feeble frames. One fine fellow, a soldier, who had neither wife nor child of his own, but who showed great solicitude for the safety of others, insistat in having three children lashed to him, with whom he plunged into the water to reach the boat mor quickly. He swam well, but could not get near the boat; and when he was eventally drawn on board again, two of the children were dead. One man fell down he hatchay into the flames; another had his back broken, and was chserved, quite donbly, filling overboard; a third fell between the boat and brig, and his head was literally armated to pieces; whers were lost in their attempts to aseend the
: chithren." tioned near tle weeded; ladies and vere placed $t$ there was g properly its living ; the ropes nieh, being de distance he measure se anxicty 1 which it idren were of being d the boat re siting ulty above rside their board the : swasiped ard, while ssel, when ere safely the Keut, by tying ising the Many of landing violent having lier, who safety of into the he boat; dd. One and was rig, and cend the
sides of the Combriu: and othors, again, were drowned in their hurry to get on bourd the boats.

Oue of the sailors, who had, with many others, taken his post over the marane, at last cried out, almost in ill-humour, "Well! if she won't blow up, I'll see if ? cata't get away from her." He was saved-and must have felt quite disappointed. One whe three boats, swamped or stove during the day, had on board a uurber of men who had been robbing the cabins during the confusion on board. "It is suspected that one or two of those who went down, must have sunk beneath the weight of their spoils."

As there was so much doubt as to how soon the vessel would explode or go down, while the proeess of transference between the vessels ocenpied three-quarters of an hour each trip, and other delays were caused by timid passengers and ladies who were naturally loath to be separated from their husbands, they determined on a quicker mode of placing them in the boat. A rope was suspended from the end of the spanker-boom, along the slippery top of which the passengers had either to walk, crawl, or be carried. The reader need not be told that this great boom or spar stretches out from the mizen-mast far over the stern in a vessel the size of the Kent. On ordinary oceasions, in quiet weather, it would be fifteen or twenty feet above the water, but with the vessel pitching and tossing during the continuous storm, it was raised often as much as forty feet in the air. It will be seen that, under these circumstanees, with the boat at the stern now swept to some distance in the hollow of a wave, and now raised high on its erest, the lowering of oneself by the rope, to drop at the right moment, was a perilous operation. It was a common thing for strong men to reach the boat in a state of citter exhaustion, Inving been several times immersed in the waves and half drowned. But there were many strong and willing hands among the soldiers and sailors ready to help the wenk and fearful ones, and the transference went on with fair rapidity, though with ceery num and again some sad casualty to record. The coolness and determination if the fficers, military and marine, the good order and subordination of most of the roops, and the bravery of many in risking their lives for others, seems at this time to have restored some little confidence among the timid and shrinking on board. A little later, and the deelining rays and fiery glow on the waves indicated that the sun was setting. One can weil understand the feeling of many on board as they witnessed its disappearance and the approach of darkness. Were their lives also to set in outer gloom-the ocean to be that night their grave?

Late at night Major MaeGregor went down to his cabin in seareh of a blanket to shelter him from the increasing cold. "The seene of desolation that there presented itself was melancholy in the extreme. The place which, only a few short hours before, had been the scene of kindly intercourse and of social gaiety, was now entirely deserted, save ly a few miserable wretehes who were either stretehed in irrecoverable intoxication on the floor, or prowling about, like beasts of prey, in search of plunder. The sofas, drawers, and other articles of furniture, the due arraugement of which had cost so much thought and pains, were now broken into a thousand pieces, and seattered in confusion around. . . . Some of the geese and other poultry, escaped from their confinement, were cackling in the cuddy; while a solitary pig, wandering from its sty in the forecastle, was rangiug at large in undisturbed possession of the Brussels carpet."

It is highly to the eredit of the officers, more especially to those who had deekcabins, fromi which it would be casy to remove many portable articles, and even trunks and boxes, that they entirely devoted their time and evergies to saving life. They left the ship simply with the elothes they stood in, and were the last to leave it, except, of course, where subordinate officers were detailed to look after portions of the troops. Captain Cobb, in his resolution to be the last to leave the ship, tried all he conld to urge the few remaining persons on board to drop on the ropes and save themselves. But finding all


FALMOUTH HARBOLR.
his entreaties fruitless, and bearing the guns successively explode in the hold, into which they had fallen, he at length, after dning all in his power to save them, got himself into the boat by "laying hold of the topping-lift, or rope that comects the driver-boom with the mizen-top, thereby getting over the heads of the infatnated men who occupied the boom, unable to go either backward or forward, and nltimately dropping himself into the water." One of the boats persevered in keeping its station under the Kent's stern, until the flames were bursting sut of the cabin windows. The larger part of the poor wretehes left on board were saved when the vessel exploded, they sought shelter in the chains, where they stood till the masts fell overboard, to which they then clung for some hours. Ulimately, they were rescued by Captain Bibbey, of the Caroline, a vessel bound from Egypt to Liverpool,
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who happened to see the explosion at a great distance, and instantly made all sail in the direction whence it proceeded, afterwards cruising about for some time to pick up any survivors.

After the arrival of the last boat at the Cumbria," the flames, which had spread along the upper deek and poop, ascended with the rapidity of lightning to the masts and rigging, forming one general conllagration, that illumined the heavens to an immense distance, and was strongly refleeted on several objects on boand the brig. The flags of distress, hoisted in the morning, were seen for a considerable time waving amid the flames, until the masts to which they were suspended successively fell, like stately steeples, over the ship's side." At last, about half-past one o'clock in the morning, the devouring element having communicated to the magazine, the explosion was seen, and the blazing fragments of the once magnifient Kent were instantly hurled, like so many rockets, high into the air; leaving, in the comparative darkness that suceeded, "the deathful seene of that disastrous day floating before the mind like some feverish dream."

The seene on board the brig beggared deseription. The eaptain, who bore the honoured name of Cook, and his crew of eight, did all that was in their power to alleviate the miseries of the six hundred persons addel to their number; while they carried sail, even to the extent of danger, in order to make nine or ten knots to the nearest port. The Cornish miners and Yorkshire smelters on board gave up their beds and elothes and stores to the passengers ; and it was extremely fortunate that the brig was on her outward voyage, for, haul she been returning, she would not, in all probability, have had provisions enough to feed six hundred persons for a single day. But at the best their condition was miserable. In the cabin, intended for eight or ten, eighty were packed, many nearly in a nude condition, and many of the poor women not having space to lie down.

The gale inereased; but still they crowded all sail-even at the risk of carrying away the masts-and at length the welcome ery of "Land ahead!" was reported from mouth to mouth. They were off tike Seilly lights, and speedily afterwards reached Falmouth, where the inhabitants vied with each other in providing clothing and food and money for all who needed them.

The total loss from the Kent was eighty-one souls; namely, fifty-four soldiers, one woman, twenty children, one seaman, and five boys of the crew. How much greater might it not have been but for the imperturbable coolness, the commanding abilities, and the persevering and prompt action of Captain Cobb, and the ac mirable discipline and subordination of the troops !

Another remarkable instanee of the same thing is to $\imath_{2}$ found in the case of the Birkenhead, where there were desperate odds against any one surviving. The ship was a war-steamer, conveying troops from St. Simon's Bay to Algoa Bay, Cape Colony, and had, with erew, a total complement of 638 souls on board. She struck on a reef, when steaming at the rate of eight and a half knots, and almost immediately became a total wreck. The rock penetrated her bottom, just aft of the fore-mast, and the rush of water was so great that most of the men on the lower troop-deck were drowned in their hammocks. The commanding officer, Major Seton, called his subordinate officers about him, and impressed upon them the necessity of preserving order and perfect discipline among the men, and of assisting the commander of the ship ick up any ind riggring, listance, and ress, hoisted il the masts ship's side." laving comof the once ir; leaving, astrous day
he honoured the miserics even to the We Cornish ores to the voyage, for, enough to miserable. e condition, fom mouth buth, where rey for all
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## Birken-

 -steamer, w, a total 2 of eight rated her e men on or Seton, reserving the shipin everything possible. Sixty soldiers were immediately detailed for the pumps, in three reliefs; sixty more to hold on the tackles of the paddle-box boats, and the remander were brought on the poop, so as to ease the fore-part of the ship, which was rolling heavily. The commander of the ship ordered the horses to be pitched out of the first-gingwny, and the eutter to be got ready for the women and children, who were safely put on board. Just after they were out of the ship, the entire bow broke off at the fore-mast, and the timnet went over the side, carrying away the starboard paddle-box and boat. The other paddle-box boat capsized when being lowered, and their lergest boat, in the centre of the ship, could not be got at, so encumbered was it. Five minutes later, the vessel actually " broke in two," literally realising Faleoner's lines:-

> "Ah, Iteaven! Behold, her 'rashing ribs divide!
> She lousens, parts, and spretds in ruin o'er the tide."
"She parted just abaft the engine-room, and the stern part immediately filled and went down. A few men jumped off just before she did so; but the greater number remained to the last, and so did every officer belonging to the troops." $\Lambda$ number of the soldiers were erushed to death when the funnel fell, and few of those at the pumps could reach the deck before the vessel broke up. The survivors elung, some to the rigging of the main-mast, part of which was out of water, and others to floating pieees of wood. When the Birkenheall divided into two pieces, the commander of the ship called out, "All those who can swim, jump overboard and make for the boats!" Two of the military oflicers earnestly besought their men not to do so, as, in that case, the boats with the women must be swamped; and, to the honour of the soldiers, only three made the attempt.

The striggles of a part of them to reach the shore, the weary tramp through a country covered with thick thorny bushes, before they could reach any farm or settlement; the sufferings of thirty or mote poor fellows who were clinging, in a state of ntter exhaustion, cold, and wretchedness, to the main-topmast and topsail-yard of the submerged vessel, before they were reseued by a passing schooner, have often been told. The eonduct of the troops was perfect; and it is questionable whether there is any other instance of such thorough discipline at a time of almost utter hopelessness. The loss of life was enormous, only 192 out of $6: 38$ being saved. Had there been any panic, or mutiny, not even that small remnant would have escaped.

Turn we now to another and a sadder ease, where the opposite qualities were most unhappily displayed, and the consepuences of which were proportionately terrible.

On the 17 th of June, 1816, the Meilusa, a fine French frigate, sailed from Aix, with troops and colonists on board, destined for the west coast of Africa. Several settlements whieh had previously belonged io Franee, but which fell into the hands of the English during the war, were, on the peace of 1515 , restored to their original owners; and it was to take re-possession that the French Government dispatched the expedition, which consisted of two vessels, one of which was the Merlusa. Besides infantry and artillery, oflicers and men, there was a governor, with priests, schoolmasters, notaries, surgeons, apothecaries, mining and other engineers, naturalists, practical agriculturists, bakers, workmen, and thirtyeight women, the whole expedition numbering 365 persons, exelusive of the ship's officers and company. Of these the Merlusa took : 40 , making, with her crew and passengers, a total of 400 on board.

After making Cupe Blanco, the expedition had been ordered to steer due westward to sea for some sixty miles, in order to clear a well-known sand-bank, that of Arguin. The captain, however, seems to have been an ill-advised, footharly man, and he took a sonthward course. The vessel shortened sail every two hours to somd, and every half-hour the lead was east, without slackening sail. For some little time the soundings indicated deep water, but shortly after the course had been altered to S.S.E., the colour of the water changed, senweeds tloated round the ship, and fish were canght from its sides; all indications of shallowing. But the captain heeded not these obvious signs, and the vessel suddenly grounded on a bank. The weather being moderate, there was no reason for alarm, and she would

have been got off safely had the captain been even an average sailor. For the time, the Merlusa stuck fast on the sand-bank, and as a large part of those on board were landsmen, consternation and disorder reigned supreme, and reproaches and curses were liberally bestowed on the captain. The erew was set to work with anchors and cables to endeavour to work the vessel off. During the day, the topmasts, yards, and booms were unshipped and thrown overboard, which lightened her, but were not sufficient to make her float. Meantime, a council was called, and the governor of the colonies exhibited the plan of a raft, whieh was considered large enough to carry two hundred persons, with all the necessary stores and provisions. It was to be towed by the boats, while their crews were to come to it at regular meal-times for their rations. The whole party was to land in a body on the sandy shore of the coast--known to be at no great distance-and proceed to the nearest settlements. All this was, theoretically speaking, most admirable, and had there been any leading spirit in
restward to guin. The south ward ar the lead deep water, or changed, lications of y grounded she would
time, the landsmen, bestowed r to work ad thrown antime, a which was tores and at regular shore of ints. All spirit in
command, the plan would have been, as was afterwaràs proved, quite practicable. The raft was immediately constructed, prineipally from the spars removed from tho vessel as before mentioned.

Various efforts were made to get the Medusa off the sandhank, and at one tims she swung entirely, and turned her head to sea. She was, in faet, almost afloat, and a tow-line applied in the ussal way would have taken her into deep water; but this familiar expedient was never even proposed. Or, even had she been lightened by throwing overboard a part of her stores temporarily-which could have been done without serious harm to many articles -she might have been saved. Half-measures were tried, and even these were not acted on with perseverance. During the next night there was a strong gale and heavy swell, and the Medusa heeled over with much violenee; the keel broke in two, the rudder was unshipped, and, still holding to the stern-post by the chains, dashed against the vessel and beat a hole into the eaptain's cabin, through which the waves entered. It was at this time that the first indications of that unruly spirit which afterwards produced so many horrors appeared among the soldiers, who assembled tumultuously on deek, and could hardly be quieted. Next morning there were seven feet of water in the hold, and the pumps could not be worked, so that it wes resolvel to quit the vessel without delay. Some bags of biseuit were taken from the bread-room, and some easks of wine got ready to put on the boats and raft. But there was an utter want of management, and several of the boats only received twenty-five pounds of biseciit and no wine, while the ralt had a quantity of wine and no biscnit. 'To avoil confusion, a list had been made the evening before, assigning to each his place. No one paid the slightest attention to it, and no one of those in authority tried to enforee obedience to it. It was a case of "Suure qui peut!" with a vengeance: a disorderly and disgraceful seramble for the best places and an utter and total disregard for the wants of others.

It is, and always has been, a point of honour for the offieers to be among the very last to leave (exeept, of course, where their presence might be needed in the boats), and the captain to be the very last. Here, the captain was among the first to seramble over the side; and his twelve-oared large only took off twenty-eight persons, when it would have easily carried many more. A large barge took the colonial governor and his family, and the governor's trunks. His boat wanted for nothing, and would have aceommodated ten or more persons than it took. When several of the unfortunate crew swam off and begged to be taken in, they were kept off with drawn swords. The raft* took the larger part of the soldiers, and had in all on board one hundred and fifty persons. The captain coolly proposed to desert some sixty of the people still on hoard, and leave them to shift for themselves; but an officer who threatened to shoot him was the means of making him change his mind,

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## IMAGE EVALUATION



Photographic Sciences
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and over forty were taken off in the long-loat. Seventeen men, meny of whom were helplessly intoxicated, were, however, left to their fate.

On the morning of the 5th of July the signal was given to put to sea, and at first some of the boats towed the raft, which had no one to command it but a midshipman named Coudin, who, having a painful wound on his leg, was utterly useless. The other officers zonsulted their own personal safety only, and, with a few exreptions, this was the case with every one else. When the lieutenant of the long-boat, fearing that he could not keep the sea with eighty-eight men on board, and no oars, entreated three of the other boats, one after the other, to relieve him of a part of his living cargo, they refused utterly; and the officer of the third, in his hurry to run away, loosed from the raft. This was the signal for a general desertion. The word was passed from one boat to another to leave them to their fate, and the captain had not the manliness to protest. The purser of the Medusa, with a few others, opposed such a dastardly proceeding, but in vain; and the raft, without means of propulsion, was abandoned. As it proved after vards, the boats, which all reached the land safely, sighted tho coast the same evening ; and the raft could have been towed to it in a day or two, or at all events suffieiently near for the purpose. The people on it could not at first believe in this treacherous desertion, and once and again buoyed themselves up with the hope that the boats would return or send relief. The lieutenant on the long-boat seems to lave been one of the few officers possessing any spark of humanity and manliness. He kept his own boat near the raft for a time, in the hope that the others might be induced to return, but at length had to yield to the clamour of some eighty men on board with him, who insisted on his proceeding in seareh of land.

The consternation and despair of those on the raft beggars deseription. The water was, even while the sea was calm, up to the knees of the larger part on board, while the horrors of a slow death from starvation and thirst, and the prospect of being washed off by the waves, should a storm arise, stared them in the face. Several barrels of flour had been placed on the raft at first, along with six barrels of wine and two small casks of water. When only fifty persons had got on it, their weight sunk it so low in the water that the flour was thrown into the sea, and lost. When the raft quitted the ship, with a hundred and fifty souls on her, she was a ioct to a foot and a half under water, and the only food on board was a twenty-five-pound bag of biseuit, in a semi-pulpy condition, which just afforded them one meagre ration.

Some on board, to keep up the courage of the remainder, promulgated the idea that the boats had merely made sail for the island of Arguin, and that, having landed their erews, they would return. This for the moment appeased the indiguation of the soldiers and others who had, with frautic gesticulations, been wringing their hands and tearing their hair. Night came on, and the wind freshened, the waves rolling over them, and throwing many down with violence. The cries of the people were mingled with the roar of the waves, whilst heavy seas constantly lifted them off their legs and threatened to wash them away. Thus, elinging desperately to the ropes, they struggled with death the whole night through.

About seven the next morning, the sea was again calm, when they found that twelve or more unfortunate men had, during the night, slipped leetween the interstices of tha raft
at first 1 named : officers the case ould not he other utterly ; was the to leave : of the the raft, ; which ld have ie. The d again f. The ay spark he hope mour of te water d, while washed of tlour casks of le water with a and the , which
ea that d their soldiers tearing $m$, and
whole
and perished. The effects of starvation were beginning to tell upon them:* all their faculties were strangely impaired. Some fancied that they saw lighted siguals in the distance, and answered them by firing off their pistols, or by setting fire to small heaps of gunpowder; others thought they saw ships or land, when there was nothing in sight. The next day strong symptoms of mutiny broke out, the officers being utterly disregarded by the soldiers. The evening again brought bad weather. "The people were now dashed about by the fury of the waves; there was no safety but in the centre of the raft," where they packed themselves so close that many were nearly suffocated. "The soldiers and sailors, now considering their destruction inevitable, resolved to drown the sense of their situation by drinking till they should lose their reason;" nor could they be persuaded to forego their mad scheme. They rushed upon a cask of wine which was near the centre, and making a hole in it, drank so much, that the fumes soon mounted to their heads, in the empty sondition in which they were; and "they then resolved to rid themselves of their officers, and afterwards to destroy the raft by cutting the lashings which kept it together." One of them commenced hacking away at the ropes with a boarding-hatchet. The civil and military officers rushed on this ringleader, and though he made a desperate resistance, soon dispatehed him. The peoplo on the raft were now divided into two antagonistic partiesabout twenty civil officers and the better class of passengers on one side, and a hundred or more soldiers and workmen on the other. "The mutineers," says the narrative, "drew their swords, and were going to make a general attack, when the fall of another of their number struck such a seasonable terror into them that they retreated; but it was only to make another attempt at cutting the ropes. One of ihem, pretending to rest on the side-rail of the raft, began to work;" when he was discovered, and a few moments afterwards, with a soldier who attempted to defend him, was sent to his last account. This was followed by a general fight. An infantry captain was thrown into the sea by the soldiers, but rescued by his friends. He was then seized a second time, and the revolters attempted to put out his eyes. A charge was made upon them, and many put to death. The wretehes threw overboard the only woman on the raft, together with her husband. They were, however, saved, only to die miserably soon afterwards.

A seeond repulse brought many of the mutineers to their senses, and temporarily awed the rest, some asking pardon on their knees. But at midnight the revolt again broke out, the soldiers attacking the party in the centre of the raft with the fury of madmen, even biting their adversaries. They seized upon one of the lieutenants, mistaking him for one of the ship's offieers who had descrted the raft, and he was reseued and protected afterwards

[^35]with the greatest difficulty. They threw overboard M. Condin, an elderly nan, who was covered with wounds received in opposing them, and a young boy of the party, in whom he took an interest. M. Coudin had the presence of mind both to support the ehild and to take hold of the raft; and his friends kept off the brutal soldiery with drawn swords, until they were lifted on board again. The combat was so fieree, and the weather at night so bad, that on the return of day it was found that over sixty had perished off the raft. It is stated that the mutineers had thrown over the remaining water and two casks of wine. The indieations in the narrative would not point to the latter conclusion, as the soldiers and workmen were constantly intoxieated, and many, no doubt, were washed off by the waves in that condition. A powerful temperance tract might be written on the loss of the Medusa. On the morning of the fourth day after their departure from the frigate, the dead bodies of twelve of the company, who had expired during the night, were lying on the raft. This day a shoal of flying-fish played round the raft, and a number of them got on board,* and were entangled in the spaces between the timbers. A small fire, lighted with tlint and steel and gunpowder, was made inside a barrel, and the fish, half-cooked, was greedily devoured. They did not stop here; the account lriefly indicates that they ate parts of the flesh of their dead companions. Horror followed horror: a massaere succeeded their savage feast. Some Spaniards, Italians, and negroes anong them, who had hitherto taken no part with the mutineers, now formed a plot to throw their superiors into the sea. A bag of money, which had been colleeted as a common fund, and was hangiag from a rude mast hastily extemporised, probably tempted them. The officers' party threw their ringleader overboard, while another of the conspirators, finding his villainy discovered, weighted himself with a heavy boarding-axe, and rushing to the fore part of the raft, plunged headlong into the sea and was drowned. A desperate combat ensued, and the fatal raft was quickly piled with dead bodies.

On the fifth morning, there were only thirty alive. The remnant suffered severely, and one-third of the number were unable to stand up or move about. The salt water and intense heat of the sun blistered their feet and legs, and gave intense pain. In the course of the seventh day, two soldiers were discovered stealing the wine, and they were immediately pushed overboard. This day also, Leon, the poor little boy mentioned before, died from sheer starvation.

The story has been so far nothing but a record of insubordination, murderous brutality, and utter selfishness. But the worst has yet to come. Let the survivors tell their own shameful and horrible story. There were now but twenty-seven left, and "of these twelve, amongst them the woman, were so ill that there was no hope of their surviving, even a few days ; they were covered with wounds, and had almost entirely lost their reasou.
They might have lived long enough to reduce-our stock to a very low ebb; but there was no hope that they could last more than a few dayc. To put them on short allowance was only hastening their death; while giving them a full ration, was uselessly diminishing

[^36]who was whom he ild and to ords, until t night so raft. It of wine. se soldiers ff by the he loss of rigate, the lying on of them re, lighted ulf-cooked, that they massacre hem, who superiors and was offieers' s villainy e part of t ensued, severely, vater and he course mediately ied from

## brutality,

 heir own e twelve, , even a ut there Hlowance inishing aw fyingucomplish steumship,a quantity already too low. After an anxious consultation, we came to the resolution of throwing them into the sea, and thus terminating at once their sufferiugs. This was a horrible and unjustifiable expedient, but who amongst us would have the eruelty to put it into execution? Three sailors and a soldier took it on themselves. We turned away our eyes from the shocking sight, trusting that, in thus endeavouring to prolong our own lives, we were shortening theirs but a few hours. This gave us the means of subsistence

on tiee raft of the " medisa"-a sail in sigitt.
(Afitr the eclebretcd Puinting by Gicricault.)
for six additional days. After this dreadful sacrifice, we cast our swords into the sea, reserving but one sabre for cutting wood or cordage, as might be necessary." Was there ever sueh an example of demoniacal hypoerisy, mingled with pretended humanity!

One can hardly interest himself in the fate of the remaining fifteen, who, if they were not all human devils, must have carried to their dying days the brand of Cain indelibly impressed on their memories. A few days passed, and the indieations of a close approach to land beeame frequent. Meantime, they were suffering from the intense heat, and from excessive thirst. One more example of petty selfishness was afforded by an officer who
had found a lemon, which he resolved to keep entirely for himself, until the ominous threats of the rest obliged him to share it. The wine, which should have warmed their bodies and gladdened their hearts, produced on their weakened frames the worst effeets of intoxication. Five of the number resolved, and were barely persuaded not to commit suicide, so maddened were they by their potations. Perhaps the sight of the sharks, which now came boldly up to the elges of the raft, had something to do with sobering them, for they decided to live.

Three days now passed in intolerable tornents. They lad become so eareless of life, that they bathed even in sight of the sharks; others were not afraid to place themselves naked upon the fore part of the raft, which was then entirely under water; and, though it was exceedingly dangerous, it had the effect of taking away their thirst. They now attempted to construct a boat of planks and spars. When completed, a sailor went upon it, when it immediately upset, and the design of reaching land by this means was abandoned. On the morning of the lith of July, the sun shone brightly and the sky was cloudless. Just as they were receiving their ration of wine, one of the infantry officers discerned the topmasts of a vessel near the horizon. Uniting their efforts, they raisel a man to the top of the mast, who waved constantly a number of handkerehiefs tied together. After two hours of painful suspense, the vessel, a brig, disappeared, and they once more resigned themselves to despair. Deeiding that they must leave some record of their fate, they agreed to carve their names, with some account of their disaster, on a plank, in the hope that it might eventually reach their Government and families. But they were to be saved: the brig reappeared, and bore down for them. She proved to be a vessel whielr had been dispatched by the Governor of Senegal for the purpose of rescuing any survivors; though, considering the raft had now been seventeen days afloat, there was little expectation that any of its hundred and fifty passangers still lived. The wounded and blistered limbs, sunken eyes, and emaciated frames of the remnant told its own tale on board. And yet, with due order and discipline, presence of mind, and united helpfulness, the ship, with every soul who had sailed on her, might have been saved; and a fearful story of cruelty, murder, and cannibalism spared to us. The modern Medusa has been branded with a name of infamy worse than that of the famons classical monster after which she was named. The celebrated picture by Géricault in the Lourre, at Paris, vividly depiets the horrors of the scene.

The wreck of the Mellusa has very comnonly been compared and contrasted with that of the Alceste, an English frigate, which was wrecked the same year. Lord Amherst was returning from China in this vessel, after fulfilling his mission to the Court of Pekin, instituted at the instance of the East India Company, who had complained to Government of the impediments thrown in the way of their tralde by the Chinese. His secretary and suite were with him; and so there was some resemblance to the case of the Mellusa, which had a colonial governor and his staff on board. The commander of the Alceste was Captain (afterwards Sir) Murray Maxwell, a true gentleman and a bluff, hearty sailor. Having touched at Manilla, they were passing through the Straits of Gaspar, when the ship suddenly struck on a reef of sunken roeks, and it became evident that she must inevitably and speedily break up. The most perfeet discipline prevailed; and the first efforts of the captain were naturally directed to saving the ambassador and his subordinates. Th: island of Palo Leat

## ous threats

 heir bodies effects of to commit he sharks, h sobering themselves dd, though They now ailor went neans was e sky was ry officers raised a together. once more heir fate, k , in the were to ssel whieh survivors ; pectation ed limbs, And yet, hip, with cruelty, 1 a name ed. The he scene. vith that erst was Pekin, ernment ary and $a$, which Captain Having uddenly speedily in were lo Leatwas a few miles off; and, although its coast at this part was a salt-marsh, with mangrovetrees growing ont in the water so thick and entangled that it almost preventel them landing, every sonl was got off safely. Good feeling and sensible councils prevailed. At ifrst there was no fresh water to be obtained. It was

> " Water, water everywhere,
> let not a drup to drink."

In a short time, however, they dug a deep well, and soon reached plenty. Then the Malays attacked and surrounded them; at first a few seore, at last six or seven hundred strong. Things looked black; but they ereeted a stockade, made rude pikes by sticking their knives, dirks, and small swords on the end of poles; and, although they inal landel with just seventyfive ball-eartridges, their stock soon grew to fifteen hundred. How? Why, the sailors set to with a will, and made their own, the balls being represented by their jacket-buttons and pieees of the glass of broken bottles! Of loose powder they had, fortunately, a sufficient quantity. The Malays set the wreek on fire. The men waited till it had burned low, and then drove them off, and went and seeured stich of the stores as could be now reached, or which had floated off. The natives were gathering thick. Murray made his sailors a speech in true hearty style, and their wild huzzas were taken by the Malays for war-whoops: the latter soon "weakened," as they say in America. From the highest officer to the merest boy, all behaved like calm, resolute, and sensible Britons, and every soul was saved. Lord Amherst, who had gone on to Batavia, sent a vessel for them, on board which Maxwell was the last to embark. At the time of the wreck their condition was infinitely worse than that of the Medusa; but how eompletely different the sequel! The story is really a pleasant one, displaying, as it does, the happy results of both good discipline and mutual good feeling in the midst of danger. Nil desy)erandum was evidently the motto of that crew; and their philosophy was rewarded. The lessons of the past and present, in regard to our great ships, have taught us that disaster is not confined to ironclads, nor vietory to wooden walls; neither is good diseipline dead, nor the race of true-hearted tars extinct. "Men of iron" will soon be the worthy successors of " hearts of oak."

Having glaneed at the causes which led to the ironelad movement, and noted certain salient points in its history, let us now for a while discuss the ironelad herself. It has been remarked, as a matter of reproach to the administrators and builders of the British irunclad navy, that the vessels composing it are not sufficiently uniform in design, power; and speed. Mr. Reed, however, tells us that lu muriue moderne cuirassée of France is still more distinguished by the different types and forms of the vessels; and that ours by comparison wears "quite a tiresome appearance of sameness;" while, again, Russia has ironclads even more diversified than those of France. The objection is, perhaps, hardly a fair one, as the exigencies of the navy are many and varied. We might have to fight a first-elass power, or several first-class powers, where all our stiength would have to be put forth; some second-class power might require chastising, where vessels of a secondary class might suffice; while almost any vessel of the navy would be efficient in the case of wars with native tribes, 1s, for example, the Maories of New Zealand, or the Indians of the coasts of North-west America. In a great naval conflict, provided the vessels of our fleet steamed pretty evenly as regards speed, there would be an advantage in variety; for it might rather puzzle and
worry the enemy, who would not know what next would appear, or what new furm turn up. Mr. Reed puts the matter in a nutshell; although it must be seen that, among first-class powers with first-elass fleets, the argument euts both ways. "In the old days," says he, "when actions had t" be fought under sail, and when ships of a elass were in the main alike, the limits within which the arts, the resources, and the audaeities of the navy were restricted were really very narrow; and yet how brilliant were its achievements! I cannot but believe that, if the English ironclad fleet were now to be engaged in a general aetion with an enemy's fleet, the very vuriety of our ships-those very improvements which have occasioned that variety-would be at once the cause of the greatest possible embarrassment to the eramy, and the means of the most vigorous and diversified attack upon the hostile fleet. This is peculiarly true of all those varieties which result from increase in handiness, in bow fire, in height of port, and so forth; and unless I have mis-real

section of a first-class man-of-war.
our naval histrry, and misappreciate the character of our naval officers of the present day, the nation wiil, in the day of trial, obtain the full benefit of these advantages."

It needs no argument to convince the reader that the aim of a naval arehitect should be to combine in the best manner available, strength and lightness. The dimensions and outside form of the ship in great part determine her displacement; and her eapacity to carry weights depends largely on the actual weight of her own hull; while the room within partly depends on the thiuness or thiekness of her walls. Now, we bave seen that in wooden ships the hull weighs more than in iron ships of equal size; and it will be apparent that what is gained in the latter case can be applied to carrying so much the more iron armour. Hence, distinguished authorities do not helieve in the wood-built ship carrying heavy armour, nearly so much as in the ironclad, iron-built ship.* The durability

[^37]form turn at, among old days," ss were in ties of the ievements! a general provements st possible fied attack esult from e mis-real sent day, ct should fions end pacity to m within een that will be huch the nilt ship urability hat if the the water 0 persans,
and strength are greater. The authority of such a man as Mr. J. Scott Russell, the eminents shipbuilder, will be conclusive. In n pamphlet,* published in 1862, he noted the following ten points: 1, That iron stea' 1 ships-of-war may be built as strong as wooden ships of greater weight, and stronger tian wooden ships of equal woight. 2, That iron ships of equal strength can go on less draught of water than wooden ships, 3, 'That iron ships can carry much heavier weights than wooden ships [hence they can carry heavier armour].


THE "WAMMOH."
4, That they are nore durable. 5, $6,7,8,9$, That they are safer against the sea, against fire, explosive shots, red-hot shots, molten metal; and 10, That they can be made impregnable even against solid shot.

The last point, alas! is one which Mr. \&cott Russell himself would hardly insist upon to-day. When he wrote his pamphlet, five or six inches of armour, with a wood backing, withstood anything that could be fired against it. When the armour of the Warrior, our

[^38]first real ironelad, had to be tested, a target, twenty feet ly ten feet surfaee, composed of fenr and a half inch iron and eighteen inches of teak backing-the exact comuterpurt of a slice out of the ship's side-was employed. The shot from ifs-pounders-the same ns compused her original armament-fired at 200 yards, only made small dents in the target and rebounded. 200 -pounders had no more effect; the shot llew off in ragged splinters, tho iron plates became almost red-hot under the tremendous strokes, and rung like a huge gong; but that was all. Now we have 61 -ton guns that would pieree her side at 500 yards; 12-ton guns that would put a hole through her armour at over a mile, and 25 -ton guns that would probably penetrate the armour of any ironclad whatever. Why, some of the ships themselves aro now carrying 30 -ton guns! It is neelless to go on and speak of monster 81 and 100 -ton guns after recording these facts. But their consideration explaius why the thickness of armour has kept on inereasing, albeit it could not possibly do so in an equal ratio.

Mr. Reed tells us: "This strange contest between attack and defence, however wasteful, however melancholy, must still go on."* Sir W. G. Armstrong (inventor of the famous guns), on the other hand, says, "In my opinion, armour should be wholly abandoned for the defence of the guns, and, except to a very limited extent, I doubt the expediency of using it even for the security of the ship. Where armour can be applied for deflecting projectiles, as at the bow of a ship, it would afford great protection, without requiring to be very heavy." $\dagger$ Sir William recommends very swift iron vessels, divided into numerous compartments, with boilers and machinery below the water-line, and only very partially protected by armour; considering that victory in the contest as regards strength is entirely on the side of the artillery. Sir Joseph Whitworth (also an inventor of great guns) offered practically to make guns to penetrate any thickness of armour. The bewildered Parliamentary committee says mournfully in its report: "A perfect ship of war is a desideratum which has never yet been attained, and is now farther than eve: removed from our reach;" $\ddagger$ while Mr . Reed § again cuts the gordian knot by professing his belief that in the end, "guns will themselves be superseded as a means of attack, and the ship itself, viewed as a steam projectile-possessing all the force of the most powerful shot, combined with the power of striking in various directions-will be deemed the most formidable weapon of attack that man's ingenuity has devised." The contest between professed ship and gun makers would be amusing but for the serious side-the immense expense, and the important interests involved.

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## CHAPTER VI.

Rocnd the World on a Mandof-War.

The Mediterranenn-White, blue, green, purple Waters-Cibraltar-lis litatory-Its first Iuhabitants the Monkey-The Soors-The Great Slege preceded by thirteen others-Tho Voynge of sigurd to the Hely Lathd-The Third Sieke .. starvation-The Fourth slege-lled-hot balls used before ordinary Cumom-inils-The Great Plakue-(iibraltar
 C'urewarded Hero-spuin's attempts to regaln It-The trent slege-The Bock lisulf and tis Surroundings-The stralen-Ceuta, Gibraltar's Itivai-The saltnesm of the Meilterramon-" tiolug aloft "- On to Malia.
In this and following chapters, we will ask the render to aceompany us in imagination round the world, on board a ship of the Royal Navy, visiting '"t routc the principal British naval stations and possessions, and a few of those friendly foreign ports which, as on the Pacific station, stand in lieu of them. We cannot do better than commence with the Mediterranean, to which the young sailor will, in all probability, be sent for a eruise after he las been thoroughly "broken in" to the mysteries of life on board ship, and where he has an opportunity of visiting many ports of ancient renown and of great historical interest.

The modern title applied to the sea "between the lands" is not that of the ancients, nor indeed that of some peoples now. The Greeks had no special name for it. Herodotus ealls it "this sea;" and Strabo the "sea within the columns," that is, within Calpe and Abyla-the fabled pillars of Hereules-to-day represented by Gibraltar and Ceuta. The Romans ealled it variously Mare Interuum and Mare Nostrum, while the Arabians termed it Bahr Riiu-the Roman Sea. The modern Greeks call it Aapri Thulussa-the White Sea; it might as appropriately be called blue, that being its general colour, or green, as in the Adriatic, or purple, as at its eastern end: but they use it to distinguish it from the "Sea of Storms"-the Black Sea. The Straits-"the Gate of the Narrow Passage," as the Arabians poetieally describe it, or the Gut, as it is termed by our prosaic sailors and pilots-is the narrow portal to a great inland sea with an area of 800,000 miles, whose shores are as varied in charaeter as are the peoples who own them. The Mediterranean is salter than the ocean, in spite of the great rivers which enter it-the Rhone, Po, Rbro, and Nile -and the innumerable smaller streams and torrents.* It has other physical and special characteristics, to be hereafter considered.

The political and social events which have been mingled with its history are interwoven with those of almost every people on the face of the globe. We shall see how much our own has been shaped and involved. It was with the memory of the glorions deeds of British seamen and soldiers that Browning wrote, when sailing through the Straits :-

> "Nobly, nobly, Cupe St. Vincent to the north-west died away;
> Sunsct ran, one glorious blood-red, recking into Cadiz Bay; Mluish, 'mid the burning water, full in fuce Trafulgar lay; In the dimmest north-east distance dawned Gibraltur, grand and gray;

[^40]> 'Itere, and here, did England help, me-how can I help England !'say Whoso turns an I, this ovening, turns to Cood to praise nad pray, White Jove's planet risew youder, silent over Africa."

And the poct is mhost literally correct in his description, for within sight, as we enter the Straits of Gibraltur, are the localities of inmmerable seat und land fights dating from earliest days. That grand odd Rock, what has it not witnessed since the first timid mariner erept out of the Mediterranean into the Athmitie-the Mare Tenebrosnm, - the "sen of darkness" of the ancients? Romans of old fought Carthugrinian galleys in its bay; the conquering Moors hed it minterruptedly for six hundred yenrs, and in all for over seven centuries; Spain owned it clase on two und a half centuries; and longland has dared the world to take it since 1701 -one hundred and seventy-thee years ago. Its very mrmorial bearings, which we have nolopted from those given by Denry of Castite and Leon, ure suggestive of its position and value: a castle on a rock with a key pendant -the key to the Meditermanan. The King of Spain still includes Calpe (Gibraltar) in his dominions; and natives of the phace, Ford tells us, in his "Handbook to Spain," are entitled to the rights and privileges of Spanish birth. It has, in days gone by, given great offence to French writers, who spoke of l'ombrayruse puissunce with displeasure. "Sometimes," says loorl, "there is ton wreat alurve de eanmus in this fortress ormée; then the grordens destroy 'widd nature;' in short, they abonse the red-jackets, gruns, nurserymaids, and even the monkeys." 'The present colony of upes are the descendints of the aboriginal inhabitants of the Rock. They have held it through all vicissitudes.

The Moorish writers were ever enthusiastic over it. With them it was "the Shining Monntan," "the Monntain of Victory." "The Mountain of 'Inrie"* (Gibraltar), says a Granadian prot, " is like a beacon spreading its rays over the sea, and rising far above the neighbouring mountains; one might lancy that its face almost reaches the sky, and that its eyes are watching the stars in the celestial track." An Ambian writer well describes its position:-" The waters surround Gibraltar on almost every side, so as to make it look like a wateh-tower in the midst of the sen."

The fame of the lust great siege, alveady briefly deseribed in these pages, $\dagger$ has so completely overshadowed the general history of the Rock that it will surprise many to learn that it has mudergone no less than fourteen sieges. The Moors, after suecessfully invading Spain, tirst fortified it in 711, and held uninterrupted possession until 1309, when Ferdinand IV. besieged and took it. The Spmiards only hedd it twenty-five years, when it reverted to the Moors, who kept it till $146 \%$. "Thus the Moors held it in all about seven centuries and a yuarter, from the making a castle on the Rock to the last sorrowfinl departure of the remnants of the nation. It has been said that Gibraltar was the landing-place of the vigorous Moorish race, and that it was the point of departure on which their footsteps lingered last. In short, it was the European léle de pont, of which Ceuta stands as the African fellow. By these means myriads of Moslems passed into Spain, and with them mueh for which the Spaniards are wrongfully unthankful. It is said that when the Moors left their houses in Granada, which they

[^41]we enter ating from first timid si"III, 一 the leys in its in all for ghland hus ago. Its of Castile y pendant (Gibraltar) to Spain," gone by, lispleasure. ruée; then s, nurseryints of the

1e Shining ltar), says far above sky, and vriter well so as to s, $\dagger$ has so many to uecessfully atil 1309 , five years, s held it the Rock said that the point opean tćle yriads of rongfully aich they

gibinatad: the Netifill grownd.
did with, so to speak, everything standing, many families took with them the grat wooden keys of their mansions, so confident were they of returning home again, when the keys should open the locks and the houses be joyful anew. It was not to be as thus longed for; but many families in Barbary still keep the keys of these long ago deserted and destroyed mansions."* And now we must mention an incident of its history, recorded in the "Norwegian Chronicles of the Kiugs," concerning Sigurd tho Crusnder-the Pilgrim. After battling his way from the North, with sixty "long slips," King Sigurd proceeded on his voyage to the Holy Land, "and came to Niönfa Sound (Gibraltar Straits), and in the Sound he was met by a large viking force (squadron of war-ships), and the King gave them battle; and this was his fifth engagement with heathens since the time he came from Norway. So says Halldor Skualldre:-

> " 'He moisiened your dry swords with blood, As through Niörfa Sound yo stood;
> The screaming raven got a feast,
> As ye sailed onwards to the East.'

Hence he went along Sarkland, or Saracen's Land, Mauritania, where he attacked a strong party, who had their fortress in a cave, with a wall before it, in the face of a precipiee: a place which was difficult to come at, and where the holders, who are said to have been freebooters, defied and ridiculed the Northmen, spreading their valuables on the top of the wali in their sight. Sigurd was equal to the oce sion in craft as in force, for he had his ships' boats drawn up the hill, filled them with archers and slingers, and lowered them before the mouth of the cavern, so that they were able to keep back the defenders long enough to allow the main body of the Northmen to ascend from the foot of the cliff and break down the wall. This done, Sigurd caused large trees to be brought to the mouth of the cave, and roasted the miserabie wretches within." Further fights, and he at last reached Jerusalem, where he was honourably received by Baldwin, whom he assisted with his ships at the siege of.Sidon. Sigurd also visited Constantinople, where the Emperor Alexius offeed lim his choice: either to receive six skif-pound (or about a ton of gold), or see the great games of the hippodrone. The Northman wisely chose the latter, the cost of which was said to be equal to the value of the gold offered. Sigurd presented his ships to the Emperor, and their splendid prows were hang up in the clurch $\sigma_{1}$ St. Pcier, at Constantinople.

In the year 1319, Pedro, Infante of Castile, fought the Moors at Granada. The latter were the victors, and their spoils were enormous, consisting in part of forty-three hundredweights of gold, one hundred and forty hundredweights of silver, with armour, arms, and horses in abundance. Fifty thousand Castilians were slain, and among the captives were the wife and children of the Infante. Gibraltar, then in the hands of Spain, with Tarifa and eighteen castles of the district, were offered, and refused for her ransom. The body of the Infante himself was stripped of its skin, and stuffed and hong over the gate of Gramada.

The third siege occurred in the reign of Mohammed IV., when the Spanish held the

[^42] rain, when to be as e long ago lent of its Sigurd the ong ships," öfa Sound squadron of ement with
ed a strong a precipice: , have been the top of for he had and lowered ae defenders foot of the brought to fights, and , whom be ople, where (or about a $y$ chose the ed. Sigurd the church

The latter ce hundredarms, and es were the Tarifa and the body of Gramada. sh held the

Rock. The governor at that time, Vasco Perez de Meira, was an avaricious and dishonest man, who embezzled the dues and other resources of the place and neglected his charge. During the siege, a grain-ship fell on shore,* and its cargo would have enabled him to hold out a long time. Instead of feeung his soldiers, who were reduced to eating leather, he gave and soll it to his prisoners, with the expectation of either getting heavy ransoms for them, or, if he should have to surrender, of making better terms for himself. It availed him nothing, for he had to capitulate ; and then, not daring to face his sovereign, Alfonso XI, he had to flee to Afriea, where he ended his days.

Alfonso besieged it twice. The first time the Granadians induced him to abandon it, promising a heavy ransom; the next time he commenced by reducing the neighbouring town of Algeciras, which was defended with great energy. When the spaniards brought forward their wheeled towers of wood, covered with raw hides, the Moors discharged cannon loaded with red-hot balls. This is noteworthy, for cannon was not used by the English till three years after, at the battle of Cresy, while it is the first recorded instance of rel-l-hob shot being used at all. $\dagger$ It is further deserving of notice, that the very means employed at Algeciras were afterwards so successfully used at the great siege. After taking Algeciras, Alfonso blockaded Gibraltar, when the plague broke out in his camp; he died from it, and the Rock remained untaken. This was the epoch of one of those great pestilences which ravaged Europe. Fifty thousand souls perished in London in 1348 from its effeets ; Florence lost two-thirds of her population; in Saragossa three hundred died daily. The sixth attack on the part of the King of Fez was unsuccessful; as was that in 1436, when it was besieged by a wealthy noble-one of the De Gusmans. His forces were allowed to land in numbers on a narrow beach below the fortress, where they were soon exposed to the rising of the tide and the missiles of the besieged. De Gusman was drowned, and his body, pieked up by the Moors, hung out for twenty-six years from the battlements, as a warning to ambitious nobles.

At the eighth siege, in 1462, Gibraltar passed finally into Christian lands. The garrison was weak and the Spaniards gained an easy vietory. When Henry IV. learned of its capture, he rejoiced greatly, and took immediate care to proclaim it a fief of the throne, adding to the royal titles that of Lord of Gibraltar. The armorial distinctions still borne by Gibraltar were first granted by him. The ninth siege, on the part of a De Gusman, was successful, and it for a time passed into the hands of a noble who had vast possessions and fisheries in the neighbourhood. Strange to say, such were the tronbles of Spain at the time, that Henry the before-named, who was known as "the Weak," two years after confirmed the title to the Rock to the son of the very man who had been constantly in arms against him. But after the civil wars, and at the advent of Ferdinand and Isabella, there was a deeided ehange. Isabella, acting doubtless under

[^43]the advice of her astute husband, whose entire poliey was opposed to such aggrandisement on the part of a subjeet, tried to induce the duke to surrender it, offering in exchange the City of Utrera. Ayala* tells us that he utterly refused. His great estates were protected by it, and he made it a kind of central depôt for his profitable tunny fisheries. He died in 1492, and the third duke applied to Isabella for a renewal of his grant and privileges. She promised all, but insisted that the Rock and fortress must revert to the Crown. But it was not till nine years afterwards that Isabella succeeded in compelling or inducing the Duke to surrender it formally. Dying in 1504, the qucen testified her wishes as follows :-"It is my will and desire, iusomuch as the city of Gibraltar has been surrendered to the Royal Crown, and been inserted among its titles, that it shall for ever so remain." Two years after her death, Juan de Gusman tried to retake it, and blockaded it for four months, at the end of whieh time he abandoned the siege, and had to make reparation to those whose property bad been injured. This is the only bloodless one among the fourteen sieges.

In 1540 a dash was made at the town, and even at a part of the fortress, by Corsairs. They plundered the neighbourhood, burned a chapel and hermitage, and dictated terms in the most high-handed way-that all the Turkish prisoners should be released, and that their galleys should be allowed to take water at the Gibraltar wells. They were afterwards seyerely chastised by a Spanish fleet.

In the wars between the Dutch and Spaniards a naval action occurred, in the year 1607, in the port of Gibraltar, which can hardly be omitted in its history. The great Sully has described it graphically when speaking of the efforts of the Dutch to secure the alliance of his master, Henry IV. of France, in their wars against Philip of Spain. He says: "Alvares d'Avila, the Spanish admiral, was orlered to cruise near the Straits of Gibraltar, to hinder the Dutch from entering the Mediterranean, and to deprive them of the trade of the Adriatic. The Dutch, to whom this was a most sensible mortification, gave the command of ten or twelve vessels to one of their ablest seamen, named Heemskerk, with the title of vice-admiral, and ordered him to go and reconnoitre this fleet, and attack it. D'Avila, though nearly twice as strong as his enemy, yet provided a reinforcement of twenty-six great ships, some of which were of a thousand tons burden, and augmented the number of his troops to three thousand five hundred men. With this accession of strength he thought himself so secure of victory that he brought a hundred and fifty gentlemen along with him only to be witnesses of it. However, instead of standing out to sea, as he ought to have done, he posted himself under the town and castle of Gibraltar, that he might not be obliged to fight but when he thought proper.
"Heemskerk, who had taken none of these precautions, no sooner perceived that his enemy seemed to fear him than he advanced to attack him, and immediately began the most furious battle that was ever fought in the memory of man. It lasted eight whole hours. The Dutch vice-admiral, at the beginning, attacked the vessel in which the Spanish admiral was, grappled with. and was ready to board her. A cannon-ball, which wounded him in the thigh soon after the fight began, left him only a hour's life, during which, and till within

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 exchange tates were y fisheries. grant and revert to compelling estified her braltar has it shall for ke it, and e, and had y bloodless ortress, by nd dietated ,e released, :lls. Theyn the year The great to secure of Spain. Straits of prive then ortification, Heemskerk, and attack inforcement augmented ceession of and fifty anding out Gibraltar,
d that his a the most hole hours. sh admiral him in the till within
a moment of his death, be continued to give orders as if he felt no pain. When be found himself ready to expire, he delivered his sword to his lieutenant, obliging him and all that were with him to bind themselves by an oath either to conquer or die. The lieutenant caused the same oath to be taken by the people of all the other vessels, when nothing was heard but a general ery of 'Vietory or Death!' At length the Duteh were victorious; they lost only two vessels, and about two hundred and fifty men; the Spaniards lost

muomsil towell at giblailtar.
sisteen ships, three were consumed by fire, and the others, among which was the admiral's ship, ran aground. D'Avila, with thirty-five captains, fifty of his volunteers, and two thousand eight hundred soldiers, lost their lives in the fight; a memorable action, whieh was not only the source of tears and affliction to many widows and private persons, but filled all Spain with horror." *

England won Gibraltar during the War of the Succession, when she was allied with Austria and Holland against Spain and France. The war had dragged on with varied results till 1704, when it was determined to attack Spain at home with the aid of the Portuguese. The commanders of the allied fleets and troops-i.e., the Landgrave George of Hesse-Darmstadt, Sir George Rooke, Admiral Byng, Sir Cloudesley Shovel, Admiral Leake, and the three

[^45]Dutch admirals-determined to attack Gibraltar, believed to be weak in forces and stores. On the 21 st of July, 1704, the fleet, which consisted of forty-five ships, six frigates, besides fire and bomb-ships, came to an anchor off the Rock, and landed 5,000 men, so as to at onee cut off the supplies of the garrison. The commanders of the allied forces sent, on the morning after their arrival, a demand for the surrender of Gibraltar to the Arehduks; Charles, whose elaims as rightful King of Spain they were supporting. The little garrison* answered valiantly; and had their brave governor, the Marquis Diego de Salinas, been properly backed, the fortress might have been Spain's to-day. The opening of the contest was signalised by the burning of a French privateer, followed by a furious caunonading: the new and old moles were speedily silenced, and large numbers of marines landed. The contest was quite uncqual, and the besieged soon offered to capitulate with the honours of war, the right of retaining their property, and six days' provisions. The garrison had three days allowed for its departure, and those, as well as the inhabitants of the Rock, who chose, might remain, with full civil and religious rights. Thus, in three days' time the famous fortress fell into the hands of the allies, and possession was taken in the name of Charles III. Sir George Rooke, however, over-rode this, and pulled down the standard of Charles, setting up in its stead that of England. A garrison of 1,800 English seamen was landed. The English were, alone of the parties then present, competent to hold it; and at the Peace of Utrecht, 1711, it was formally ceded "absolutely, with all manner of right for ever, without exemption or impediment," to Great Britain.

The Spaniards departed from the fortress they had valiantly defended, the majority remaining at St. Roque. "Like some of the Moors whom they had dispossessed, their desecndants are said to preserve until this day the records and family documents which form the bases of claims upon property on that Rock, which, for more than a century and a half, has known other masters."

Rooke went absolutely unrewarded. He was persistently ignored by the Government of the day, and being a man of moderate fortune, consulted his own dignity, and retired to his country seat. The same year, 1704, the Spanish again attempted, with the aid of France, to take Gibraltar. England had only three months to strengthen and repair the fortifications, and the force brought against the Rock was by no means contemptible, including as it did a fleet of two-and-twenty French men-of-war. Suecour arrived; Sir John Leake sueceeded in driving four of the enemy's ships ashore. An attempt to escalade the fortress was made, under the guidance of a native goat-herl. He, with a company of men, succeeded in reaching the signal station, where a hard fight occurred, and our troops killed or disabled 160 men , and took the remnant prisoners. Two sallies were made from the Rock with great effect, while an attempt made by the enemy to enter through a narrow breach resulted in a sacrifice of 200 lives. A French fleet, under Pointé, arrived; the English admiral eaptured three and destroyed one of them-that of Pointé himself. To make a six months' story short, the assailants lost 10,000 men, and then had to raise the siege. Although on several oceasions our rulers have since the Peace of Utrecht proposed to cede or exchange the fortress, the spirit of the people would not permit it; and there can be

[^46]and stores. tes, besides o as to at es sent, on Archduke e garrison* linas, been the contest unonading : nded. The he honours e garrison nts of the three days' ken in the down the 00 English mpetent to y , with all essed, their which form and a half, 1, with the and repair ntemptible, rived; Sir to escalade ompany of our troops made from h a narrow he English fo make a the siege. sed to cede ere can be
no doubt whatever that our right to Gibraltar is not merely that of possession-nine reints of the law-but cession wrung from a people unable to hold it. And that, in war, is fa:ir.

Twenty years later Spain again attempted to wring it from us. Mr. Stanhope, then our representative at Madrid, was told by Queen Isabella : "Either relinquish Gilraltar or your trade with the Indies." We still hold Gibraltar, and cur trade with the Indies is generally regarded as a tolerably good one. In December, 1726, peace or war was made the alternative regarding the cession; another bombardment followed. An officer* present said that it was so severe that "we seemed to live in flames." Negotiations for peace followed at no great distance of time, and the Spaniards suddenly drew off from the attaek. Various offers, never consuminated, were made for an exchange. Pitt proposed to cede it in exchange for Minorea, Spain to assist in recovering it from the French. At another time, Oran, a third-class port on the Mediterranean shores of Africa, was offered in exehange; and Mr. Fitzherbert, our diplomatist, was told that the King of Spain was "determined never to put a period to the present war" if we did not agree to the terms; and again, that Oran "ought to be accepted with gratitude." The tone of Spain altercd very considerably a short time afterwards, when the news arrived of the destruction of the floating batteries, and the failure of the grand attack. $\dagger$ This was at the last-the great siege of history. A few additional details may be permitted before we pass to other subjects.

The actual siege occupied three years and seven months, and for one year and nine months the bombardment went on without cessation. The actual losses on the part of the enemy can hardly be estimated; 1,473 were killed, wounded, or missing on the floating batteries alone. But for brave Curtis, who took a pinnace to the reseue of the poor wretches on the batteries, then in flames, and the ammunition of which was exploding every zuinute, more than 350 fresh vietims must have gone to their last account. His boat was engulfed amid the falling ruins; a large piece of timber fell through its flooring, killing the coxswain and wounding others. The sailors stuffed their jackets into the leak, and succeeded in saving the lives of 35 ? of their late enemies. For many days consecutively they had been peppering us at the rate of 6,500 shots, and over 2,000 shells each twentyfour hours. With the destruetion of the floating batteries "the siege was virtualiy concluded. The contest was at an end, and the united strength of two ambitious and powerful nations had been humbled by a straitened garrison of 6,000 effective men." $\ddagger$ Our losses were comparatively small, though thrice the troops were on the verge of famine. At the period of the great siege the Rock mounted only 100 guns; now it has 1,000 , many of them of great ealibre. In France, vietory for the allies was regarded as such a foregone conelusion that " a drama, illustrative of the destruction of Gibraltar by the floa..ug batteries, was acted nightly to applauding thousands!"§ The siege has, we believe, been a favourite subject at the minor English theatres many a time sinee; but it need not be stated that the views taken of the result were widely different to those popular at that time in Paris.

Gibraltar has had an eventful history even since the great siege. In 1804 a terrible epidemie swept the Rock; 5,733 out of a population of 15,000 died in a few weeks. The elimate is warm and pleasant, but it is not considered the most healthy of localities even

[^47]now. And on the 28th of October, 1805, the Victory, in tow of the Nrp/une, entered the bay, with the body of Nelson on board. The fatal shot had done its work; only eleven days before he had written to General Fox one of his happy, pleasant letters.

The Rock itself is a compaet limestone, a form of grey dense marble varied by beds of red sandstone. It abounds in caves and fissures, and advantage has been taken of these facts to bore galleries, the most celebrated of which are St. Michael's and Martin's, the former 1,100 feet above the sea. Tradition makes it a barren roek; but the botanists

malta.
tell us differently. There are 456 species of indigenous flowering plants, besides many which have been introduced. The advantages of its natural position lave been everywhere utilised. It bristles with batteries, many of whicin can hardly be seen. Captain Sayer tells us that every spot where a grun could be brought to bear on an enemy has one. "Wandering," says he, "through the geraninm-edged paths on the hill-side, or clambering up the rugged cliffs to the eastward, one stumbles unexpectedly upon a gun of the heaviest metal lodged in a secluded nook, with its ammunition, round shot, canister, and case piled around it, ready at any instant. . . . The shrubs and flowers that grow on the cultivated places, and are preserved from injury with so much solicitude, are often
entered t'le only eleven
ied by beds en taken of ad Martin's, he botanists
esides many a everywhere aptain Sayer my has one. hill-side, or upon a gun hot, canister, rs that grow de, are often

but the masks of guns, which lie erouched beneath the leaves ready for the port-fire." Everywhere, all stands ready for defence. War and peace are strangely mingled.

Gibraltar has me of the finest colonial libraries in the world, founded by the celebrated Colonel Drinkwater, whose ameount of the great sicge is still the standard autherity. The town possesses some advantages; but as 15,000 souls out of a population of about deuble tiat number are erowded into one square mile, it is not altogether a healthy place-alleeit much improved $\epsilon_{2}$ late years. Rents are exorbitant; but ordinary living and bad liquors are cheap. It is by no means the best place in the world fer "Jack ashore," for, as Shakespeare tells us, "sailors" are "but men," and there be "land rats and water rats," who live on their weaknesses. The town has a very mougrel population, of all shades of colour and eharneter. Alas! the monkeys, who were the first inhabitants of the Roek-tailless Barbary apes-are now becoming searee. Many a poor Joeko has fallen from the enemy's shot, killed in battles which he, at least, never provoked.

The seenery of the Straits, which we are now about to enter, is fresh and pleasant, and as we conmenced with an extraet from one well-known poet, we may be allowed to finish with that of another, which, if more hackneyed, is still expressive and beautiful. Byron's well-known lines will reetur to many of our readers :-
"Through Cr.lpe's Straits survey the steopy shore;
Europe and Afrie on each other gaze!
Lands of tho dark-eyed maid and dusky Moor
Alike beheld beneath pale Heeate's blazo;
How sofly on the Spanish shore sho plays,
Disclosing rock, and slope, and furest brown,
Distinct though darkening with her waning pluse."
In the distance gleams Mons Abyla-ilhe Apes' Hill of sailors-a term which could have been, for a very long time, as appropriately given to Gibraltar. It is the other sentinel of the Straits; while Centa, the strong fortress built on its flanks, is held by Spain on Moorish soil, just as we hold the Roek of Roeks on theirs. Its name is probably a corruption of Septem-Seven-from the number of hills on whieh it is built. It is to-day a military prison, there usual!y being here two or three thousand conviets, while both convicts and fortress are guarded by a strong garrison of 3,000 soldiers. These in their turn were, only a few years ago, guarded by the jealous Moors, who shot both guards and prisoners if they dared to emerge in the neighbourhood. There is, besides, a town, as at Gibraltar, with over 15,000 inhabitants, and at the present day holiday exeursions are commonly made aeross the Straits in strong little steamers or other craft. The tide runs into the Straits from the Atlantic at the rate of four or more knots per hour, and yet all this water, with that of the innumerable streams and rivers which fall into the Mediterranean, scarcely suffice to raise a pereeptible tide! What beeomes of all this water? Is there a hole in the earth through which it runs off? Hardly: evaporation is probably the true seceet of its disappearance: and that this is the reason is proved by the greater saltness of the Mediterranean as compared with the Atlantic.

In sailor's parlanee, "going aloft" has a number of meanings. He elimbs the slippery shrouds to "go aloft;" and when at last, like poor Tom Bowling, he lies a "sheer hulk," and-
" Liis budy's under hatchen, llis soul has 'yonc alofl.'"
"Going aloft" in the Mediterrancan has a very different meaning: it signifies passing upwards and eastwards from the Struits of Gibraltar.* We nre now going aloft to Malta, a British possession hardly second to that of the famed Ro:

## CHAPTER VII.

Round tie Wohld on a Man-cr-War (continued).<br>malta and tile sue\% canal.

Calypso's Isle-A Conviet Paradise-Maita, the "Flower of tho World"-The Knights of St. John-Rise of the OrderThe Crescent and the Cross-The Slege of thodes-LIsle Adam in Iondon-Tho Great Slego of Malta-Horrlble Eplsodes-Malta In French and Engllsh IIands-St. Paul's Cavo-The Catacombs-Modern Ineldents-The Shlpwreek of St. Paul-Gules In tho Mediterrancan-Exporlences of Nelson and Collingwood-Squalls in the Bay of San Franciseo-A Man Overboard-Spectal Winds of the Mediterrancan-The Suez Canal and M. de Lesseps-lils Dplomatic Career-Said Pacha as a Boy-As a Viceroy-The Plan Settled-Finanelal Troubles-Construetion of tho Canal-The Inauguration Feto-Snoz-1'assage of the Children of Israel throngh the led Sea.

Approncung Malta, we must "not in silence pass Calypso's Isle." Warburton deseribes it, in his delightful work on the East-a classic on the Mediterranean-as a little paradise, with all the beauties of a continent in miniature; little mountains with craggy summits, little valleys with cascades and rivers, lawny meadows and dark woods, trim gariens and tangled vineyards-all within a circuit of five or six miles.

One or two uninhabited little islands, "that seem to have strayed from the continent aml lost their way'," dot the sea betwoen the pleasant penal settlement and Gozo, which is also a elaimant for the doubtful honour of Calypso's Isle. Narrow straits separate it from the rock, the "inhabited quarry," called Malta, of which Valetta is the port. The capital is a cross between a Spanish and an Eastern town; most of its streets are flights of steps.

Although the elimate is delightful, it is extremely warm, and there is usually a glare of heat about the place, owing to its rocky nature and limited amount of tree-shade. "All Malta," writes Tallack, $\ddagger$ "seems to be light yellow-light yellow rocks, light yellow fortifications, light yellow stone walls, light yellow flat-topped houses, light yellow palaces, light yellow roads and streets." Stones and stone walls are the chicf and conspicuous objects in a Maltese landseape; and for good reason, for the very limited soil is propped up and kept in bounds by them on the hills. With the scanty depth of earth the vegetation between the said stone walls is wonderful. The green bushy carob and prickly eactus are

[^48]to be seen; but in the immediate neighbourhood of Malta few trees, only an ocensional and solitary palm. Over all, the bright blue sky; around, the deep blue sea. You must not say anything to a Multese against it ; with him it is "Flor del Mondo"-the "Flower of the World."

The poorest natives live in eapital stone houses, many of thein with façales and fronts which would be considered ornamental in an English town. The terraced roofs make up to its cooped iuhabitants the space lost by building. There are five or six hundred promemandble roofs in the city. Tullack says that the island generally is the abode of industry and contentment. Expenses are high, except as regarls the purchase of fruits, including the fumed "blood," "Mandolin" (sometimes called quite as correctly "Mandarin") orauges, and Japan medlars, and Marsala wine from Sicily. The mutives live simply, as a rule, but the officers and foreign residents commonly do not; and it is true here, as Ford says of the militury gentlemen at Gibraltar, that their faces often look somewhat redder than their jackets in consequence. As in India, many mewisely adopt the high living of their class, in a climate where a cool and temperute diet is indispensable.

The four great charaeteristics of Malta are soldiers, priests, goats, and bells-the latter not being confined to the necks of the goats, but jangling at all hours from the many church towers. The goats pervade everywhere ; there is scarcely any cow's milk to be obtained in Multa. They may often be seen with sheep, as in the patriarchal days of yore, following their owners, in accordance with the pastoral allusions of the Bible.

What naturo commenced, in Valetta, art has finished. It has a land-loeked harbourreally several, rumning into each other-surrounded by high fortified walls, above which rise houses, and other fortifications above them. There are galleries in the rock following the Gibraltar precedent, and batteries bristling with guns; bar: a. ks, magazines, large docks, foundry, lathe-rooms, and a bakery for the use of the "United" \& rrvice.

To every visitor the gorgeous church of San Giovanni, with its vanlted roof of gilded arabesque, its crimson hangings, and carved pulpits, is a great object of interest. Its floor resembles one grand escutcheon-a mosaic of knightly tombs, recalling days when Malta was a harbour of saintly refuge and princely hospitality for crusaders and pilgrims of the cross. An inner chapel is guarded by massive silver rails, saved from the French by the cunning of a priest, who, on their approach, painted them wood-colour, and their real nature was never suspected. But amid all the spiendour of the venerable pile, its proudest possession to-day is a bunch of old rusty keys-the $\mathrm{k} \cdot \mathrm{ys}$ of Rhodes, the keys of the Knights of St. John. What history is not locked up with those keys! There is hardly a country in Europe, Asia, or Northern Africa, the history of whiel has not been more or less entangled with that of these Knights of the Cross, who, driven by the conquering Crsseent from Jerusalem, took refuge suceessively in Typrus, Rhodes, Candia, Messina, and finally, Malta.

The island had an important place in history and commeree long cre that period. The Phenicians held it 700 years; the Grecks a century and a half. The Romans retained it for as long a period as the Phouicians ; and after being ravaged by Goths and Vandals, it was for three and a half centuries an appanage of the crown of Byzantium. Next came the Arabs, who were succeeded by the Normans, and soon after it had become a German possession, Charles V. presented it to the homeless knights.



In the middle of the eleventh century, some merchants of the then flourishing commercial city of Amalti obtained permission to erect three hostelries or hospitals in the Holy City, for the relief of pror and invilided pilgrims. On the taking of Jerusalem by the Crusaders, the position and prospects of the hospitals of St. John becume greatly improved. The organisation became a recognised religions order, vowing poverty, obedience, and chastity. It members were distinguished by a white cross of four double points worn on a black robe, of the form commonly to be met in the Maltese filigree jewellery of to-day,

catacombs at citta vecchia, malta.
often to be noted in our West End and other shops. Branch hospitals spread all over Europe with tha same admirable objects, and the order received constant aequisitions of property. Under the guidance of Raymond du Puy, military service was added to the other vows, and the monks became the White Cross Knights.* Henceforth each seat of the order became a military garrison in addition to a hospice, and each knight held himself in readiness to aid with his arms his distressed brethren against the infidel.

Slowly but surely the Crescent overshadowed the Cross: the Holy City had to be evacuated. The pious knights, after wandering first to Cyprus, settled quietly in Rhodes, where for two centuries they maintained a sturdy resistance against the Turks. At the first siege, in 1480, a handful of the former resisted 70,000 of the latter. The bombardment

[^49]was so terrific that it is stated to have been heard a hundred miles off, and for this extraordinary defence, Peter d'Aubusson, Graud Master, was made a cardinal by the Pope. At the second siege, L'Isle Adam, with 600 Knights of St. John, and 4,500 troops, resisted and long repelled a force of 200,000 infidels. But the odds were too great against him, and after a brave but hopeless defence, which won admiration even from the enemy, L'Isle Adam capitulated. After personal visits to the Pope, and to the Courts of Madrid, Paris, and London, the then almost valueless Rock of Malta was bestowed on the knights in 1530. Its noble harbours, and deep and sheltered inlets were then as now, but there was only one little town, called Burgo-Valetta as yet was not.

In London, L'Isle Adam lodged at the provincial hostelry of the order, St. John's Clerkenwell, still a house of entertainment, though of a very different kind. IIenry VIII. received him with apparent cordiality, and shortly afterwards confiscated ali the English possessions of the knights! This was but a trifle among their troubles, for in 1565 they were again besieged in Malta. Their military knowledge, and especially that of their leader, the great La Valette, had enabled them to already strongly fortify the place. La Valette had 500 knights and 9,000 soldiers, while the Turks had 30,000 fighting men, conveyed thither in 200 galleys, and were afterwards reinforced by the Algerine corsair, Drugot, and his men. A desperate resistance was made: 2,000 Turks were killed in a single day. The latter took the fortress of St. Elmo, with the loss of Drugot-just before the terror of the Mediterranean-who was killed by a splinter of rock, knocked off by a cannon-ball in its flight. The garrison was at length reduced to sixty men, who attended their devotions in the chapel for the last timc. Many of these were fearfully wounded, but even then the old spirit asserted itself, and they desired to be carried to the ramparts in chairs to lay down their lives in obedience to the vows of their order. Next day few of that devoted sixty were alive, a very small number escaping by swimming. The attempts on the other forts, St. Michael and St. Angelo, were foiled. Into the Eastern Harbour (iow the Grand), Mustapha ordered the dead bodies of the Cliristian knights and soldiers to be cast. They were spread out on boards in the form of a cross, and floated by the tide across to the besieged with La Valette, where they were sorrowfully taken up and interred. In exasperated retaliation, La Valette fired the heads of the Turkish slain back at their former companions-a horrible episode of a fearful struggle. St. Elmo alone cost the lives of 8,000 Turks, lon Knights of fii. John, and 1,300 of their men. After many false promises of assistance, and months of terrible suspense and suffering, an auxiliary force arrived from Sicily, and the Turks retired. Out of the 9,500 soldiers and knights who vere originally with La Valette, only 500 were alive at the termination of the great siege.

This memorable defence was the last of the speeial exploits of the White Cross Knights, and they rested on their laurels, the order becoming wealthy, luxurious, and not a little denoralised. When the French Revolution broke out in 1789, the confiscation of their property in France naturally followed; for they had been helping Louis XVI. with their revenues just previously. Nine years later, Napoleon managed, by skilful intrigues, to obtain quiet possession of Malta. But he could not keep it, for after two years of blockade it was won by Great Britain, and she has held it ever since. At the Congress of
this extrathe Pope. 00 troops, eat against the enemy, of Madrid, he knights , but there

St. John's enry VIII. he English 1565 they at of their place. La hting men, ne corsair, killed in a just before d off by a 10 attended r wounded, e ramparts day few of e attempts n Harbour soldiers to $y$ the tide d interred. ck at their tt the lives many false liary force ights who the great hite Cross s, and not fiseation of XVI. with intrigues, years of Jongress of

Vienna in 1814, our possession was formally ratified. We hold it on as good a title as we do Gibraltar, by rights aeknowledged at the signing of the Peace Treaty.*

The supposed seene of St. Paul's shipwreek is constantly visited, and although some have doubted whether the Melita of St. Luke is not the island of the same name in the Adriatie, tradition and probability point to Malta. $\dagger$ At St. Paul's Bay, there is a small chapel over the cave, with a statue of the apostle in marble, with the viper in his hand. Colonel Shaw tells us that the priest who shows the cave recommended him to take a piece of the stone as a speeific against shipwreek, saying, "Take away as mueh as you please, you will not diminish the cave." Some of the priests aver that there is a miraculous renovation, and that it cannot diminish! and when they tell you that under one of the Maltese churehes the great apostle did penance in a cell for three months, it looks still more as though they are drawing on their imagination.

The great eatacombs at Citta Veechia, Malta, were constructed by the natives as places of refuge from the Turks. They consist of whole streets, with houses and sleepingplaces. They were later used for tombs. There are other remaius on the island of mueh greater antiquity, Hugiur Chem (the stones of veneration) date from Phenician days. These include a temple resembling Stonehenge, on a smaller seale, where there are seven statuettes with a grotesque rotundity of outline, the seven Phoonieian Cubiri (deities; "great and powerful ones"). There are also seven divisions to the temple, which is mentioned by Herodotus and other aneient writers.

To come back to our own time. In 1508, the following remarkable event oceurred at Malta. One Froberg had raised a levy of Greeks for the British Government, by telling the individual members that they should all be corporals, generals, or what not. It was to be all officers, like some other regiments of which we have heard. The men soon found out the deceit, but drilled admirably until the brutality of the adjutant caused them to mutiny. Malta was at the time thinly garrisoned, and their partieular fort had only one small detachment of troops and thirty artillerymen. The mutineers made the officer of artillery point his guns on the town. He, however, managed that the shots should fall harmlessly. Another offieer eseaped up a chimney, and the Greeks coming into the same house, nearly suffocated him by lighting a large fire below. Troops arrived; the mutineers were secured, and a court-martial condemned thirty, half of whom were to be hanged, and the rest shot. Only five could be hanged at a time : the first five were thercfore suspended by the five who eame next, and so on. Of the men who

[^50]were to be shot one ran away, and got over a parapet, where he was afterwards shot: another is thought to have escaped.

Colonel Shaw tells the story of a soldier of the Sieilian regiment who had frequently deserted. He was condemned to be shot. A priest who visited him in prison left behind him-purposely, there can be little doubt-his iron crucifix. The soldier used it to scrape away the mortar, and moved stone after stone, until he got into an adjoining cell, where he found himself no better off, as it was locked. The same proeess was repeated, until he at last reached a cell of which the door was open, entered the passage and climbed a wall, beneath whieh a sentry was posted. Fortunately for the prisoner, a regular Maltese shower was pouring down, and the guard remained in his box. The fugitive next reached a high gate, where it seemed be must be foiled. Not at all! He went back, got his blanket, eut it into strips, made a rope, and by its means elimbed the gate, dropped into a fosse, from which he reached and swam across the harbour. He lived concealed for some time among the natives, but venturing one day into the town, was recognised and captured. The governor considered that after all this he deserved his life, and changed his sentence to transportation.

Before leaving Malta, which, with its docks, navy-yard, and splendid barbours, fortifieations, batteries, and magazines, is such an important naval and military station, we may briefly mention the revenue derived, and expenditure incurred by the Government in connection with it, as both are considerable. The revenue derived from imposts of the usual nature, harbour dues, \&ce., is about $£ 175,000$. The military expenditure is about $£ 366,000$, which ineludes the expenses conneeted with the detachments of artillery, and the Royal Maltese Fencibles, a native regiment of 600 to 700 men. The expenses of the Royal Navy would, of course, be incurred somewhere, if not in Malta, and have therefore nothing to do with the matter.

Our next points of destination are Alexandria and Suez, both intimately identified with British interests. On our way we shall be passing through or near the same waters as did St. Paul when in the custody of the centurion Julius, "one of Augustus' band." It was in "a ship of Alexandria" that he was a passenger on that disastrous voyage. At Fair Havens, Crete (or Candia), we know that the Apostle admonished them to stay, for "sailing was now dangerous," but his advice was disregarded, and "when the south wind blew softly" the master and owner of the vessel feared nothing, but
"The flattering wind that late with promis'd aid, From Candia's Bay th' unwilling ship betray'd, No longer fawns beneath the fair disguise,"
and "not long after, there arose against it a tempestuous wind called Euroelydon," before which the ship drave under bare poles. We know that she had to be undergirded; eables being passed under her hull to keep her from parting; and lightened, by throwing the freight overboard. For fourteen days the ship was driven hither and thither, till at length she was wrecked off Melita. Sudden gales, whirlwinds, and typhoons are not uneommon in the Mediterranean; albeit soft winds and calm seas alternate with them.

On the 22nd May, 1798, Nelson, while in the Gulf of Genoa, was assailed by a
vards shot: frequently left behind t to scrape cell, where eated, until 1 climbed a lar Maltese ext reached ck, got his ropped into ed for some nd captured. sentence to
d harbours, ary station, Government om imposts penditure is of artillery, The expenses and have
y identified same waters stus' band." ous voyage. em to stay, the south
don," before rded ; cables hrowing the her, till at ns are not em.
sailed by a
sudden storm, which carried away all the Vanguard's topmasts, washed one man overboard, killed an mufortunate middy and a seaman on board, and wounded others. This

M. Lesseps.
ship, which acted her name at the Nile only two months afterwards, rolled and laboured so dreadfully, and was in such distress, that Nelson himself declared, "The meanest frigate out of "sice would have been an unwelcome guest!" An officer relates that in the midlle of the Gulf of Lyons, Lord Collingwood's vessel, the Ocean, a roomy 98 -gun ship, was struck by a sea in the middle of a gale, that threw her on her beam-ends, 14
so much so that the men on the Royal Sovereign called out, "The admiral's gone down!" She righted again, however, but was terribly disabled. Lord Collingwood said afterwards that the heavy guns were suspended almost vertically, and that "he thought the topsides were actually parting from the lower frame of the ship." Admiral Smyth, in his important physical, hydrographical, and nautical work on the Mediterranean, relates that in 1812, when on the Roduey, a new 74-gun ship, she was so torn by the united violence of wind and wave, that the admiral had to send her to England, although sadly in need of ships. He adds, however, that noble as was her appearance on the waters, "she was one of that hastily-built batch of mer-of-war sarcastically termed the Forty Thieves!"

Many are the varieties of winds accompanied by special characteristics met in the Meäiterranean, and, indeed, sudden squalls are common enough in all usually calm waters. The writer well remembers such an incident in the beautiful Bay of San Francisco, California. He had, with friends, started in the morning from the gay city of "Frisco" on a deep-sea fisiing excursion. The vessel was what is technically known as a "plunger," a strongly-built two-masted boat, with deck and cabins, used in the bay and coast trade of the North Pacific, or for fishing purposes. When the party, consisting of five ladies, four gentlemen, the master and two men, started in the morning, there was scarcely a breath of wind or a ripple on the water, and oars as large as those used on a barge were employed to propel the vessel.

> "The sea was bright, and the bark rode well,"
and at length the desired haven, a sheltered nook, with fine cliffs, searveed-covered rocks, and deep, clear water, was reached, and a dozen strong lines, with heavy sinkers, put out. The sea was bountiful: in a couple of hours enough fish were caught to furnish a capital tunch for all. A camp was formed on the beach, a large fire of driftwood lighted, and sundry hampers unpacked, from which the neeks of bottles had protruded suspiciously. It was an al fresco pienic by the seaside. The sky was blue, the weather was delightful, "and all went merry as a marriage bell." Later, while some wandered to a distance and bathed and swam, others clambered over the hills, among the flowers and waving wild oats for which the country is celebrated. Then, as evening drew on, preparations were made for a return to the city, and "All aboard" was the signal, for the wind was freshening. All remained on deck, for there was an abundance of overcoats and rugs, and shortly the passing schooners and yachts could hear the strains of minstrelsy from a not altogether incompetent choir, several of the ladies on board being musically inclined. The sea gives rise to thoughts of the sea. The reader may be sure that "The Bay of Biscay," "The Larboard Watch," "The Minute Gun," anc: "What are the Widd Waves saying?" came among a score of others. Meantime, the wind kept freshening, but all of the number being well accustomed to the sea, heeded it not. Suddenly, in the midst of one of the gayest songs, a squall struck the vessel, and as she was carrying all sail, put her nearly on her beam-ends. So violent was the shock, that most things movable on deck, including the passengers, were thrown or slid to the lower side, many boxes and baskets going overboard. These would have been trifles, but alas, there is something sadder to relate. As one of the men was helping to take in sail, a great sea dashed over the vessel and threw him overboard, and for a few seconds only, his stalwart form was
seen struggling in the waves. Ropes were thrown to, or rather towards him, an empty barrel and a coop pitched overboard, but it was hopeless-

> "That cry is 'Help!' whero no help can eome,
> For the White Squall rides on the surging waro,"
and he disappeared in an "ocean grave," amid the mingled foam and driving spray. No more songs then; all gaiety was quenched, and many a tear-drop clouded eyes so bright before. The vessel, under one small sail only (the jib), drove on, and in half an hour broke out of obscurity and mist, and was off the wharfs and lights of San Francisco in calm water. The same distance had occupied over four hours in the morning.

In the Mediterranean every wind has its special name. There is the searching north wind, the Grippe or Mistral, said to be one of the scourges of gay Provence-
"La Cour do Parlement, le Mistral et la Durance,
Siont les trois féaux de la Provence."
The north blast, a sudden wind, is called Boras, and hundreds of sailors have practically prayed, with the song,

## "Ceaso, rude Boreas."

The north-east biting wind is the Gregale, while the south-east, often a violent wiuc, is the dreaded Sirocco, bad either on sea or shore. The last which need be mentioned here, is the stifling south-west wind, the Siffante. But now we have reached the Suez Canal.

This gigantic work, so successfully completed by M. Lesseps, for cver solved the possibility of a work which up to that time had been so emphatically declared to be an impossibility. In effect, he is a conqueror. "Impossible," said the first Napoleon, " $n$ 'est pas Français," and the motto is a good one for any man or any nation, although the author of the sentence found many things impossible, including that of which we speak. M. de Lesseps has done more for peace than ever the Disturber of Europe did with war.

When M. de Lesseps* commenced with, not the Canal, but the grand conception thereof, he had pursued twenty-nine years of first-class diplomatic service: it would have been an honourable career for most people. He gave it up from punctilios of honour ; lost, at least possibly, the opportunity of great political power. He was required to endorse that which he could not possibly endorse. Lesseps had lost his chance, said many. Let us see. The man who has conquered the usually unconquerable English prejudice would certainly surmount most troubles! He has only carried out the ideas of Sesostris, Alexander, Cæsar, Amrou, the Arabian conqueror, Napoleon the Great, and Mehemet Ali. These are simply matters of history. But history, in this case, has only repeated itself in the failures, not in the successes. Lesseps has made the success; they were the failures! Let us review history, amid which you may possibly find many truths. The truth alone, as far as it may be reached, appears in this work. The Peace Society ought to endorse Lesseps. As it stands, the Peace party-well-intentioned people-ought to raise a statue to the man who has made it almost impossible for England to be involved in war, so far as the great East is concerned, for many a century to come.

[^51]After all, who is the conqueror-he who kills, or he who saves, thousands?
To prove our points, it will not be necessary to recite the full history of the grandest engineering work of this century-a century replete with proud enginecring works. Here it can only be given in the barest outline.

Every intelligent child on looking at the map would ask why the natural route to India was not hy the Isthmus of Suez, and why a canal was not made. His schoolmaster answered, in days gone by, that there was a difference in the levels of the Mediterranean and the Red Sca. That question has been answered successfully, and the difference has not ruined the Canal. Others said that it was impossible to dig a canal through the desert. It has been done 1 Lord Palmerston, the most serious opponent in England that Lesseps had,* thought that France, our best ally to-day, would have too much influence in Egypt. Events, thanks to Lord Beaconsfield's astute policy, by purchasing the Khedive's interest, have given England the largest share among the shareholders of all nations.

It would not be interesting to follow all the troubles that Lesseps successfully combated. The idea had more than once occurred to him, when in 1852 he applied to Constantinople. The answer was that it in no way concerned the Porte. Lesseps returned to his farm at Berry, and not unlikely constructed miniature Suez Canals for irrigation, thought of camels while he improved the breed of cattle, and built houses, but not on the sand of the desert. Indeed, it was while on the roof of one of his houses, then in course of construction, that the news came to him of the then Pacha of Egypt's death (Mehemct Ali). They had once been on familiar terms. Mehemet Ali was a terribly severe man, and seeing that his son Sail Pacha, a son he loved, was growing fat, he had sent him to climb the masts of ships for two hours a day, to row, and walk round the walls of the city. Poor iittle fat boyl he used to steal round to Lesseps' rooms, and surreptitiousl.: obtain meals from the servants. Those surreptitious dinuers did not greatly hurt the interests of the Canal, as we shall see.

Mehemet Ali had been a moderate tyrant-to speak advisedly. His son-in-law, Defderdar, known popularly as the "Scourge of God," was his acting vieegerent. Ti.e brute once had his groom shod like a horse for having badly shod his charger. A woman of the country one day came before him, complaining of a soldier who had bought milk of her, and had refused to pay for it. "Art thou sure of it?" asked the tyrant. "Take care! they shall tear open thy stomach if no milk is found in that of the soldier." They opened the stomach of the soldier. Milk was found in it. The poor woman was saved. But, although his successor was not everything that could be wished, he had a gool heart, and was not "the terrible Turk."

In 1854, Lesseps met Said Pacha in his tent on a plain between Alexandria and Lake Marcotis, a swamp in the desert. His Highness was in good humour, and understood Lesseps perfectly. A fine Arabian horse had been presented to him by Saild Pacha a few

[^52]
## e grandest

 al route to choolmaster diterranean ference has hrough the grland that ch influence Khedive's successfully applied to ps returned irrigation, on the sand n course of (Mehemet ievere man, 1 sent him walls of the rreptitions! y hurt theson-in-law, rent. Tli.e A woman ought milk nt. "Take ier." They was savel. rad a gool
a and Lake understood acha a few

days previously. After examining the plans and investigating the subject, the ruler of Egypt said, "I accept your plan. We will talk about the means of its execution during the rest of the journey. Consider the matter settled. You may rely on me." He sent immediately for his generals, and made them sit down, repeating the previous conversation, and inviting them to give their opinion of the proposals of his friend. The impromptu counsellors were better able to pronounce on equestrian evolutions than on a vast enterprise. But Lesseps, a good horseman, haa just before cleared a wall with his charger, and they, seeing how he stood with the Viceroy, gave their assent by raising their bands to their foreheads. The dinner-tray then appeared, and with one accord all plunged their spoons into the same bowl, which contained some first-class soup. Lesseps considered it, very naturally, as the most important negotiation he had ever made.

Results speak for themselves. In 1854, there was not a fly in that hileous desert. Water, sheep, fowls, and provisions of all kinds bad to be carricd by the explorers. When at night they opened the coops of fowls, and let the sheep run loose, they did it with confidence. They were sure that next morning, in that desolate place, the animals dare not desert the party. "When," says Lesseps, "we struck our camp of a morning, if at the moment of departure a hen had lurked behind, pecking at the foot of a tamarisk shrub, quickly she would jump up on the back of a camel, to regain her cage." That desert is now peopled. There are three important towns. Port Said had not existed before : there is now what would be called a "city," in America, on a much smaller basis of truth : it has 12,000 people. Suez, with 15,000 people, wes not much more than a village previously. Ismailia, half-way on the route, has 5,000 or 6,000 of population. There are other towns or villages.

A canal actually effecting a junction between the two seas viâ the Nile was made in the period of the Egyptian dynasties. It doubtless fulfilled its purpose for the passage of galleys and smaller vessels; history hardly tells us when it was rendered useless. Napoleon the First knew the importance of the undertaking, and apponted a commission of engineers to report on it. M. Lepère presented him a report on its feasibility, and Napoleon observed on it, "It is a grand work; and though I cannot execute it now, the day may come when the Turkish Government will glory in accomplishing it." Other schemes, including those of eminent Turkish engineers, had been proposed. It remained to be aecomplished in this century. The advantages gained by its construction can hardly be enumerated here. Suffice it to say that a vessel going by the Cape of Good Hope from London to Bombay travels nearly 6,000 miles over the ocean; by the Suez Canal the distance is 3,100 , barely more than half the distance.

To tell the history of the financial troubles which obstrueted the scheme would be tedious to the reader. At last tliare was an International Commission appointed, which cost the Viceroy of Egypt $£ 12,000$, and yet no single member took a farthing for his services. The names are sufficient to prove with what care it had been selected. On the part of England, Messrs. Randel and MacClean, both eminent engineers, with, for a sufficiently good reason, Commander Hewet of the East India Company's service, who for twenty-sceen years had been making surveys in the Red Sea and Indian Ocean. France gave two of her greatest engineers, Messrs. Renaud and Liessou: Austria, one
the ruler of ttion during He sent ious converriend. The than on a all with his $t$ by raising e accord all p. Lesseps
leous desert. ers. When did it with als dare not b, if at the arisk shrub, at desert is efore : there of truth : it previously. other towns
ras made in the passage ed useless. eommission ibility, and t now, the (." Other It remained can hardly Good Hope Suez Canal
would be ted, which ng for his 1. On the ith, for a wice, who an Ocean. nstria, one
of the greatest practical engineers in the world, M. de Negrelli; Italy, M. Paléocapa; Germany, the distinguished Privy Councillor Lentzé; Holland, the Chevalier Conrad; Spain, M. de Montesino. They reported entirely in favour of the route. A second International Congress followed. The Viceroy behaved so magnificently to the seientific gentlemen of all nations who composed the commission, that M. de Lesseps thanked him publiely for having received them almost as erowned heads. The Viceroy answered gracefully, "Are they not the crowned heads of science?"

At last the financial and political difficulties were overcome. In 1858, an office was opened in Paris, into which money flowed freely. Lesseps tells good-naturedly some little episodes which occurred. An old bald-headed priest entered, doubtless a man who had been formerly a soldier. "Oh! those English," said he, "I am glad to be able to be revenged on them by taking shares in the Suez Canal." Another said, "I wish to subseribe for 'Le Chemin de Fer de l'Ile de Suède'" (The Island of Sweden Railway l) It was remarked to him that the scheme did not inelude a railway, and that Sweden is not an island. "That's all the same to me," he replied, "provided it be against the English, I subseribe." Lord Palmerston, whose shade must feel uneasy in the neighbourhood of the Canal, could not have been more prejudiced. At Grenoble, a whole regiment of engineers-naturally men of intelligence and teehnical knowledge, clubbed together for shares. The matter was not settled by even

yap of thi suzz candi.
the free inflow of money. The Viecroy had been so much annoyed by the opposition shown to the scheme, that it took a good deal of taet on the part of its promoter to make things run smoothly. For the first four years, Lesseps, in makiug the neeessary international and financial arrangements, travelled 30,000 miles per annum.

At length the scheme emerged from fog to fact. The Viceroy had promised 20,000 Egyptian labourers, but in 1861 he begged to be let out of his engagement. He had to pay handsomely for the privilege. Although the men were paid higher than they had ever been lefore, their labour was cheap: it cost double or treble the anount to employ foreigners.

The Cunal, in its course of a shade over 100 miles, passes through several salt marshes, "Les Petits Bassins des Laes Amers," in one of which a deposit of salt was found, seven miles long by five miles wide. It also passes through an extensive piece of water, Lake Menzaleh.

At Lake Menzaleh the banks are very slightly above the level of the Camal, and from the deek of a big steamer there is an mbounded view over a wide expanse of lake and morass studded with islets, and at times gay and brilliant with innumeralle flocks of rosy pelicans, scarlet flamingoes, and snow-white spoonbills, geese, ducks, and other birds. The pelicans may be caught bodily from a boat, so clumsy are they in the water, without the expenditure of powder and shot. Indeed, the sportsman might do worse than visit the Canal, where, it is almost needless to state, the shooting is open to all. A traveller, who has recently passed through the Canal en route to India, writes that there are alligators also to be seen. The whole of the channel through Lake Menzaleh was almost entirely excavated with dreages. When it was necessary to remove some surface soil before there was water enough for the dredges to float, it was done hy the natives of Lake Menzaleh, a hardy and peenliar race, quite at home in digging canals or building embankments. The following aceount shows their mode of proceeding :-"They place themselves in files across the chamel. The men in the middle of the file have their feet and the lower part of their legs in the water. These men lean forward and take in their arms large clods of earth, which they have previously dug up below the water with a species of pickaxe called a fass, somewhat resembling a short, big hoe. The clods are passed from man to man to the bank; where other men stand with their backs turned, and their arms crossed behind them, so as to make a sort of primitive hod. As soon as each of these has had enough clods piled on his back, he walks off, bent almost double, to the further side of the bank, and there opening his arms, lets his load fall throngh to the ground. It is umecessary to add that this original métier requires the absence of all clothing."*

Into the channel thus dug the dredges were floated. One of the machines employed deserves special mention. The long couloir (duct) was an iron spout 230 feet long, five and a half wide, and two deep, by means of which a dredger working in the centre of the chamel could discharge its contents beyond the bank, assisted by the water which was pumped into it. The work done by these long-spouted dredges has amounted to as muel as 120,000 cubie yards a-piece of soil in a month. By all kinds of ingenious appliances invented for the special needs of the oceasion, as much as $2,763,000$ culbic yards of
opposition promoter to ie necessary lised 20,000 He had to ley had ever foreiguers. several salt of salt was ive piece of
a Cinal, and anse of lake crable flocks other birds. , without the sit the Canal, , has reeently a to be seen. with dredges. ough for the peeuliar race, ccount shows The men in vater. These ve previously resembling a e other men make a sort his back, he ing his arms, riginal métier
nes employed eet long, five $n$ the centre water which hominted to as of ingenious cubic yards of
excavation were accomplished in a month. M. de Lesseps tells us that " were it pheed in the Phace Vendome, it would fill the whole square, and rise five times higher than the


THE SCEZ CANAL: DREDGES AT WORK,
surrounding houses." It would cover the entire length and breadth of the Champs Elysées, and reach to the top of the trees on either side.

Port Said, which owes its very existence to the Canal, is to-day a port of considerable importance, where some of the finest steamships in the world stop. All the through 1.5
steamers between Europe and the Jast-our own grand "P. \& O." (Peniusular and Oriental) line, the splendid French "Messageries," the Austrian Loyd's, and dozens of excellent lines, all make a stay here of eight or ten hours. This is long enough for most travellers, as, sooth to say, the very land on which it is built had to be "made," in other words, it was a truct of swampy desert. It has respectable streets and squares, doeks, quays, churches, mosyues, and hotels. The outer port is formed hy two enormous breakwaters, one of which runs straight out to sen for a distance of 2,726 yards. They have lighthouses upon them, using electricity as a meaus of illumination. Messrs. Borel and Lavalley were the principal contractors for the work. The ingenious machinery used cost nearly two an! a hulf' million pounds (actually $£ 2,100,000)$, and the monthly consumption of conl cost the Company $\mathrm{E} 40,000$.

The distance from Port Saild to Suez is 100 miles. The width of the Canal, where the banks are low, is about 325 feet, and in deep cuttings 190 feet. The deep channel is marked with buoys. The mole at the Port Said (Mediterranean) end of the Cunal stretches out into the sea for over half a mile, near the Damietta branch of the Nile. This helps to form an artificial harbour, and checks the mud deposits which might otherwise choke the entrance. It cost as much as half a million. In the Caual there are recesses-shall we eall them sidings, as on a railway?-where vessels can enter and allow others to pass.

The seenery, we must confess, is generally monotonous. At Ismailia, however, a town has arisen where there are charming gardens. We are told that "it seems only necessary to pour the waters of the Nile on the desert to produce a soil which will grow anything to perfection." Here the Viceroy built a temporary palace, and M. de Lesseps himself has n chalet. At Suez itself the seenery is charming. From the height, on which is placed another of the Khedive's residences, there is a magnificent panorama in view. In the forcground is the town, larbour, roadstead, and mouth of the Canal. To the right are the mountain heights-Gebel Attákal_-which hem in the Red Sen. To the left are the rosy peaks of Mount Sinai, so familiar to all Biblical students as the spot where the great Jewish Law was given by God to Moses; and between the two, the deep, deep blue of the Gulf. Near Suez are the so-called "Wells of Moses," natural springs of rather brackish water, surrounded by tamarisks and date-palms, which help to form an onsisa pic-nic ground-in the desert. Dean Stanley has termed the spot "the Riehmond of Suez."

Before leaving the Canal on our ontward voynge, it will not be out of place to note the inauguration fête, which must have been to M. de Lesseps the proulest day of a useful life. Two weeks before that event, the engineers were for the moment baffled by a temporary obstruction-a mass of solid rock in the ehannel. "Go," said the unconquerable projector, "and get powder at Cairo-powder in quantities; and then, if we ean't blow up the rock, we'll blow up ourselves." That rock was very soon in fragments! The spirit and bonhomie of Lessejs made everything easy, and the greatest difficulties surmountable. "From the leginning of the work," says he, "there was not a tent-keeper who did not consider himself an agent of civilisation." This, no donbt, was the great sceret of his grand sucesss.

The great day arrived. On the 16 th of November, 1868, there were 160 vessels
eninsular and and dozens of ough for must ale," in other quares, docks, mons breakyards. They Messrs. Borel achinery used monthly con-

Canal, where deep chamel of the Camal auch of the which might mal there are ter and allow
ever, a torn nly neeessary row anything sseps himself on which is in view. In 'To the right left are the t where the e decp, deep igs of rather an oasisnd of Suez." laee to note - of a useful affled by a unconquerif we can't nents! The es surmountper who did secret of his
realy to pmss the Camal. At the last moment that evening it was manounced that an Sgryptian frigate had rin on one of the banks of the Camal, and was hopelessly stuck there, obstructing the passage. She could not be towed off, and the mited efforts of several hundred men on the bank could not at first move her. The Vieeroy even proposed to How her up. It was only five minntes before arriving it the site of the necident that an ligyptian admiral sigmalled to Lesseps from a little steam-launch that the Canal was free. A procession of 130 vessels was formed, the steam :neht l'Aligle, en acant, carrying on board the Empress of the French, the Emperor of Austria, und the Viceroy. This noble-hearted Empress, who has been so long exiled in a country she has learned to love, told Lesseps at Ismailia that during the whole journey she had felt "as though a circle of fire were romul her head," fearing that some disuster might mar the day's proceedings. Her pent-up feelings gave way at last; and when success was assured, sho retired to her eabin, where sobs were heard by her devoted friends--sobs which did great honour to her true and patriotic heart.

The Viceroy on that ocension entertained 0,000 foreigners, a large proportion of whom were of the most distinguished kind. Men of all nationalities came to honour an enlightened ruler, and witness the opening of a grand engineering work, which had been carried through so many opposing difficulties; to applaud the man of cool head and active brain, who had a few years before been by many jeered at, snubbed, and thwurted. To suitably entertain the vast assemblage, the Viceroy had engaged 500 eooks and 1,000 servants, bringing many of them from Marseilles, Trieste, Genoa, and Leghorn.

Although the waters of the Canal are usunlly pheid-almost sleepily calm-they are oceasionally lashed up into waves by sudden storms. One such, which did some damage, occurred on Deeember 9th, 1877.

And now, before leaving the subject, it will be right to mention a few facts of importance. The tonnage of vessels passing the Canal quadrupled in five years. As many as thirty-three vessels have been passing in one day at the same time, although this was exceptional. In 1874, the relative proportions, as regards the nationalities of tonnage, if the expression may be permitted, were as follows :-

| English | $\ldots$ | 222,000 | tons, |
| :--- | :--- | ---: | :--- |
| French | $\ldots$ | 103,000 | , |
| Duteh | $\ldots$ | 84,000 | " |
| Austrian | $\ldots$ | 63,000 | " |
| Italian | $\ldots$ | 50,000 | ", |
| Spanish | $\ldots$ | 39,000 | ", |
| German | $\ldots$ | 28,000 | " |
| Various | $\ldots$ | 65,000 | ," |

The present tonnage passing the Canal is much greater. All the world knows how and why England aequired her present interest in the Canal, but all the world does not appreciate its value to the full extent.

Suez has special claims to the attention of the Biblieal student, for near it-according to some, eighteen miles south of it-the children of Israel passed through the Red Sen; 2,000,000 men, women, and children, with flocks of cattle went dryshod through the
dividing walls of water. Holy Writ informs us that "the Lord caused the sea to go back by a strong east wind all that night, and made the sea dry land, and the waters were divided."* The effect of wind, in both raising large masses of water and in driving them back, is well known, while there are narrow parts of the Red Sea which have been forded. In the morning "the Egyptians pursued, and went in after them to the midst of the sea,


Catciing pelicans on lake menzaleh.
even all Pharaoh's horses, his chariots, and his horsemen." We know the sequel. The waters returned, and covered the Egyptian hosts; "there remained not so much as one of them." "Then sang Moses and the children of Israel this song unto the Lord, and spake, saying, I will sing unto the Lord, for he hath trimmphed gloriously: the horse and his rider hath he thrown in the sea. $* * *$
"Pharaoh's chariots and his host hath he cast into the sea: bis chosen captains also are drowned in the Red $S_{\text {sa }}$.
"The depths have covered them : they sank into the bottom as a stone."

[^53]to go back by re divided."* them back, is ${ }^{1}$ forded. In t of the sea,

sequel. The much as one he Lord, and y : the horse captains also

## CHAPTER VIII.

Round tire World on a Man-of-War (continuelf). THE INDIA AND CHINA STATIONS.

Tho Red Sea and its Name-Its Ports-On to the India Station-Bombay : Isiand, City, Presidency-Calcutta-Ceylon, a Paradise-The China Station-Hong Kong-Macao-Canton-Capture of Commissioner Yeh-The Sea of Soup-Shanghai-"Jack" Ashore thero-Luxuries in Market-Drawbacks, Earthquakes, and Sand Showers-Chinose Explanations of Earthquakes-The Roving Life of tho Sailor-Compensating Advantages-Japan and its PeopleThe Engiishmen of the Pacific-Yokohama-Peculiarities of the Japanese-Off to the North.

Tue Red Sea separates Arabia from Egypt, Nubia, and Abyssinia. Its name is either derived from the animalculæ which sometimes cover parts of its surface, or, more probably, from the red and purple coral which abound in its waters. The Hebrew name


JIDDAH, FHOM THE NEA.
signifies "the Weedy Sea," because the corals have often plant-like forms. There are reefs of coral in the Red Sea which utterly prevent approach to certain parts of the coasts. Many of the islands which border it are of voleanic origin. On the Zeigar Islands there was an alarming eruption in 1846. England owns one of the most important of the islands, that of Perim, in the Straits of Bab-el-Mandeb. it is a barren, black rock, but possesses a fine harbour, and commands one entrance of the Red Sea. It was occupied by Great Britain in 1799, abandoned in 1801, and re-occupied on the 11th of February, 1857. Its fortifications possess guns of sufficient calibre and power to command the Straits.

The entire circuit of the Red Sea is walled by grand mountain ranges. Some of its ports and harbours are most important places. There is Mocha, so dear to the coffeedrinker; Jiddah, the port for the holy city of Mecea, whither innumerable pilgrims repair; Hodeida, and Locbeia. It was in Jiddah that, in 1858, the Moslem population rose against the Christians, and killed forty-five, including the English and French consuls.

On the African side, besides Suez, there are the ports of Cosseir, Suakim, and Massuah. The Red Sea is deep for a partially inland sea; there is a recorded instance of soundings to 1,000 fathoms-considerably over a mile-and no bottom found.

After leaving the Red Sea, where shall we proceed? We have the choice of the India, China, or Australia Stations. Aetually, to do the voyage systematically, Bombay would be the next point.

Bombay, in general terms, is three things: a city of three-quarters of a million souls; a presidency of $12,000,000$ inhabitants; or an island-the island of Mambai, according to the natives, or Buon Bahia, the "good haven," if we take the Portuguese version. The city is built on the island, which is not less than eight miles long by three broad, but the presidency extends to the mainland.

In 1509, the Portuguese visited it, and in 1530 it became theirs. In 1661, it was Ulindly ceded to our Charles II., as simply a part of the dowry of his bride, the Infanta Catherine. Seven years after Charles the Dissolute had obtained what is now the most valuable colonial possession of Great Britain, he ceded it to the Honourable East India Company-though, of course, for a handsome consideration.

Bombay has many advantages for the sailor. It is always accessible during the terrible south-west monsoons, and possesses an anchoring ground of fifty miles, sheltered by islands and a magnificent series of breakwaters, at the sonth end of which is a grand lighthouse. Its docks and dockyards cover fifty acres; ship-building is carried on extensively; and there is an immense trade in cotton, coffee, opium, spices, gums, ivory, and shawls. Of its 700,000 inhabitants, 50,000 are Parsees-Persiansdescendants of the original Fire-worshippers. A large proportion of them are merchants. It may not be generally known to our readers that the late Sir Jamsetjee Jeejeebhoywho left wealth untold, although all his days he had been a humane and charitable man, and who established in Bombay alone two fine hospitals-was a Parsee.

Calcutta, in 1700, was but a collection of petty villages, surrounding the factories or posts of the East India Company, and which were presented to that eorporation by the Emperor of Delhi. They were fortified, and received the name of Fort William, in honour of the raigning king. It subsequently reeeived the title of Calcutta, that being the name of one of the aforesaid villages. Seven years after that date, Caleutta was attacked suddenly by Surajah Dowlah, Nawah of Bengal. Abandoned by many who should have defended it, 146 English fell' into the enemy's hands, who put them into that confined and loathsome cell of which we have all read, the "Black Hole of Caleutta." Next morning but twenty-three of the number were found alive. Lord Clive, eight months later, succeeded in recapturing Caleutta, and after the subsequently famous battle of Plassey, the possessions of the East India Company greatly extended. To-day Calcutta has a "Strand" longer than that of London, and the batteries of Fort William, which, with their outworks, cover an area half a mile in diameter, and have cost $£ 2,000,000$, form the strongest fortress in India.

Across the continent by raikvay, and we land easily in Caleutta. It has, with its suburbs, a larger population than Bombay, but can never rival it as a port, beeause it is a hundred miles up the Hooghly River, and navigation is risky, although ships of 2,000
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661, it was the Infanta v the most East India during the fifty miles, th end of -building is ium, spices, -Persiansmerchants. eejeebhoycharitable he factories corporation rt William, leatta, that e, Caleutta many who n into that Calcutta." fht months of Plassey, "Strand" outworks, est fortress
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tons can reach it. It derives its name from Kali Ghatta, the ghaut or landing-place of the goddess Kali. Terrible eyelones have often devastated it; that in 1867 destroyed 30,000 native houses, and a very large amount of human life.

The sailor's route would, however, take him, if bound to China or Australia, round the island of Ceylon, in which there are two harbours, Point de Galle, used as a stoppingplace, a kind of "junction" for the great steamship lines, of whieh the splendid Peninsular and Oriental (the "P. \& O") Company, is the principal. Point de Galle is the most convenient point, but it does not possess a first-class harbour. At Trincomalee, however, there is a magnificeut harbour.

Ceylon is one of the most interesting islands in the world. It is the Serendib of the "Arabian Nights," rich in glorious scenery, equable climate, tropical vegetation, unknown quantities of gems and pearls, and many minerals. The sapphire, ruby, topaz, garnet, and anethyst abound. A sapphire was found in 1853 worth $£ 4,000$. Its coffee plantations are a souree of great wealth. Palms, flowering shrubs, tree ferns, rhododendrons, as big as timber trees, clothe the island in perennial verdure. The elephant, wild boar, leopard, bear, buffalo, humped ox, decr, palm-cat and civet are common, but there are few dangerous or venomous animals. The Singhalese population, really Hindoo colonists, are effeminate and eowardly. The Kandyans, Ceylonese Highlanders, who dwell in the mouutains, are a more ereditable race, sturdy and manly. Then there are the Malabars, early Portuguese and Duteh settlers, with a sprinkling of all nationalities.

There, too, are the outeast Veddahs, the real wild men of the woods. With them there is no God-no worship. The Rock Veddahs live in the jungle, follow the ehase, sleep in eaves or in the woods, eat lizards, and consider roast monkey a prime dish. The Village Veddahs are a shade more eivilised.

One reads eonstantly in the daily journals of the India, China, or Australian Stations, and the reader may think that they are very intelligible titles. He may be surprised to learn that the East India Station not merely includes the ports of India and Ceylon, but the whole Indian Oeean, as far sonth as Madagasear, and the east coast of Africa, ineluding Zanzibar and Mozambique, where there are doekyards. The China Station ineludes Japan, Borneo, Sumatra, the Philippine Islands, and the coast of Kamchatka and Eastern Siberia to Bering Sea. The Australian Station includes New Zealand and New Guinca. The leading stations in China are Hong Koug, Canton, and Shanghai. Vessels bound to the port of Canton have to enter the delta of the Pearl River, the area of which is largely occupied with isles and sandbanks. There are some thirty forts on the banks. When the ship has passed the mouth of this embouchure, which forms, in general terms, a kind of triangle, the sides of which are 100 miles each in length, you ean proceed cither to tie island of Hong Kong, an English colony, or to the old Portuguese settlement of Macao.

The name Hong Kong is a corruption of Hiang Kiang,* which is by interpretation "Seented Stream." Properly, the designation belongs to a small stream on the southern side of the island, where ships' boats lave long been in the habit of obtaining fine pure
*"Life in Chima," by William C. Milne, M.A.
water; but now the name is given by foreigners to the whole island. The island is about nine miles in length, and has a very rugged and barren surface, consisting of rocky ranges of hills and mountains, intersected by ravines, through which streams of the purest water flow unceasingly. Victoria, Hong Kong, is the capital of the colony, and the seat


CYCLONE AT CALCUTTA.
of government. It extends for more than three miles east and west, part of the central grounds being occupied by military barracks and hospitals, commissariat buildings, colonial churches, post-office, and harbour-master's depôt, all of which are overlooked by the Government-house itself, high up on the hill. Close to the sca-beach are the commercial houses, clubs, exchange, and market-places.

It was the shelter, security, and convenience offered by the sarbour that induced our
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Governnent to select it for a British settlement; it has one of the noblest roadsteads in the world. Before the cession to England in 1841, the native population on the island did not exceed 2,000 ; now there are 70,000 or 80,000 .

Macao (pronounced Macov) is forty miles to the westward of Hong Kong, and an agreeable place as regards its scenery and surroundings, but deficient as regards its harbour accommodation. Dr. Milne, himself a missionary resident for fourteen years in China, says, writing in 1859: "To some of the present generation of English residents in China, there can be anything but associations of a comiortable kind connected with Macoo, recollecting as they must the unfriendly policy which the Portuguese on the spot pursued some sixteen or seventeen years since, and the bitterly hostile bearing which the Chinese of the settlement were encouraged to assume towards the 'red-haired English.'"

Macao is a peninsula, eigit miles in circuit, stretching out from a large island. The connecting piece of land is a narrow isthmus, which in native topography is called "the stalk of a water-lily." In 1840 a low wall stretched across this isthmus, the foundation stones of which had been laid about three hundred years ago, with the acknowledged object of limiting the movements of foreigners. This was the notorious "barrier," which, during the Chinese war of 1840-1, was used to annoy the English. As large numbers of the peasantry had to pass the "barrier gates" with provisions for the mixed population at Macao, it was a frequent maneuvre with the Chinese authorities to stop the market supplies by closing the gate, and setting over it a guard of half-starved and ravenous soldiery.

Leaving Macao for Canton, the ship passes the celebrated "Bogue Forts," threads her course through a network of islets and mud-banks, and at last drops anchor twelve miles from the city off the island of Whampoa, where the numerous and grotesque junks, "egg boats," "sampans," \&c., indicate a near approach to an important place. The name Canton is a European corruption of Kwang-tung, the "Broad East." Among the Chinese it is sometimes described poetically as "the city of the genii," "the city of grain," and the "city of rams." The origin of these terms is thus shown in a native legend. After the foundation of the city, which dates back 2,000 years, five genii, clothed in garments of five different colours, and riding on five rams of different colours, met on the site of Canton. Each of the rams bore in its mouth a stalk of grain having five ears, and presented them to the tenants of the soil, to whom they spake in these words :-
" May famine and death never visit you!"
Upon this the rams were immediately petrified into stone images. There is a "Temple of the Five Rams" close to one of the gates of Canton.

The river scene at Canton is most interesting. It is a floating town of huts built on rafts and on piles, with boats of every conceivable size, shape and use, lashed together. "It is," says Dr. Milne, "an aquarium of human occupants." Canton has probably a population of over a million. The entire circuit of city and suburbs cannot be far from ten miles.

Canton was bombarded in 1857-8 by an allied Euglish and French force. Ten days were given to the stubborn Chinese minister, Yeh, to accede to the terms dictated by the Allies,
and every means was taken to inform the native population of the real casus brlli, and to advise them to remove from the scene of danger. Consul Parkes and Captain Hall wcre engaged among other colporteurs in the rather dangerous labour of distributing traets and bills. In one of their rapid descents, Captain Hall eaught a maindarin in his chair, not far from the eity gate, and pasted him up in it with bills, then starting off the bearers to ear:y this new advertising van into the eity! Tho Chinese erowd, always alive to a praetieal joke, roared with laughter. When the truee expired, more than 400 guns and mortars opened fire upon the city, great pains being taken only to injure the city walls, official Chinese residences, and hill forts. Then a foree of 3,000 men was landed, and the eity was between two fires. The hill-forts were soon taken, and an expedition planned and executed, chiefly to capture the native officials of high rank. Mr. Consul Parkes, with a party, burst into a yamun, an official residence, and in a few seconds Commissioner Yeh was in the hands of the English. An ambitious aide-de-camp of Yeh's staff protested strongly that the captive was the wrong man, loudly stammering out, "Me Yeh! Me Yeh!" But this attempted deceit was of no avail; the prize was safely bagged, and shortly afterwards the terms of peace were arranged. The loss of life in the assault was not over 140 British and 30 Frenel.

Shanghai is a port which has grown up almest entirely since 1844, the date of its first occupation by foreigners for purposes of commerce Then there were only forty-four foreign merchant ships, twenty-three foreign residents and families, one consular flag, and two Protestant missionaries. Twelve years later, there were, for six months' returns, 249 British ships, fifty-seven American, eleven Hamburg, eleven Dutch, nine Swedish, seven Danish, six Spanish, and seven Portuguese, besides those of other nationalities. The returns for the whole year embraced 434 ships of all comutries; tea exports, 76,711,659 pounds ; silk, $5 \mathbf{5 , 5 3 7}$ bales.

Shanghai ("the Upper Sea") has been written variously Canhay, Changhay, Xanghay, Zonghae, Shanhae, Shanghay, and so forth. Its proper pronumeiation is as if the final syllable were " high," not " hay."
"Sailing towards the north of China," says Milne, "keeping perhnps fifty or sixty miles off the coast, as the ship enters the thirtieth parallel, a stranger is startled some fine morning by coming on what looks like a shoal-perlaps a sand-bank, a reef-he knows not what. It is an expanse of coloured water, stretehing out as far as the eye can reaeh, east, north, and west, and entirely distinet from the deep-blue sea whieh hitherto the ressel had been ploughing. Of course: he finds that it is the 'Yellow Sea;' a sea so yellow, turbid, and thiek, certainly, that you might think all the pease-soup in creation, and a great deal more, had been emptied into one monster eistern." The name is therefore appropriate, as are the desiguations of several others:

> "The Yellow Sea, the Sea that's Red, The White, the Black, the one that's I cad."

Between the thirtieth degree of north latitude, where the group of the Choosan Islands commences, and the thirty-seventh degree, this sea of sonp, this reservoir of tawny liquid, ranges, fed by three great rivers, the Tseen-Tang, the Yargtsze-Kiang, and the Hwang-Ho, the greatest of wiich is the seeond, and which contributes the larger part
ms belli, and Captain Hall buting traets in his. chair, rting off the always alive 00 guns and walls, official and the city ion planned usul Parkes, rommissioner aff protested Me Yeh!!" and shortly alt was not
date of its y forty-four ar flag, and eturns, 249 edish, seven ities. The $76,711,059$ , Xanghay, if the final ty or sixty artled some a reef-he as the eye sea which :llow Sca; ase-soup in The name

## e Choosan

 servoir of Siang, and larger partof the mudly solution held in its waters. Forty-five miles from the embluouchure of the Yangtsze-Kiang, you reach the Woosung anchorage, and a few miles further the eity of Shanghai, where the tributary you have been following dividos into the Woosung and Whampoa branches, at the fork of which the land ceded to the British is situated. Here there is a splendid British consulate, churches, mamsions, and foreign mereantile houses.

The old eity was built over three centurics ago, and is eneircled, as indeed are nearly all large Chinese cities and towns, by a well twenty-four feet high and fifteen broad; it is nearly four miles in eircumference. Shanghai was at one time greatly exposed to the depredations of freebooters and pirates, and partly in consequence of this the wall is plentifully provided with loop-holes, arrow-towers, and military observatories. The s'r g'reat gates of the city of Shanghai have grandiloquent titles, da lainoise. The tiorth gate is the "calm-sea gate;" the great east gate is that for "paying obeisance to the honourable ones;" the little east one is "the precious girdle gate;" the great south is the gate for "riding the dragon," while another is termed "the pattern Phœnix."

It oldest name is Hoo. In early days the following curious mode of eatehing fish was adopted. Rows of bamboo stakes, joined by cords, were driven into the mud of the stream, among which, at ebb tide, the fish became entangled, and were easily caught. This mode of fishing was called hoo, and as at one time Shanghai was famous for its fishing stakes, it gained the name of the "Hoo eity." The tides rise very rapidly in the river, and sometimes give rise to alarming inundations. Lady Wortley's deseription of the waters of the Mississippi apply to the river-water of Shanghai; "it looks marvellously like an enormous running stream of apothecary's stuff, a very strong deeoction of mahogany-eoloured bark, with a slight dash of port wine to deepen its hue; it is a mulatto-complexioned river, there is no doubt of that, and wears the deep-tanned livery of the burnished sun." Within and without the walls, the city is cut up by ditehes and moats, which, some years ago, instcad of being sourees of benefit and health to the inhabitants, as they were originally intended to be, were really open sewers, breathing out effluvia and pestilence. In some respects, however, Shanghai is now better ordered as regards municipal arrangements.

The fruits of the earth are abundant at Shanghai, and "Jack ashore" may revel in delicious peaches, figs, prrsimmons, cherries, plums, oranges, eitrons, and pomegranates, while there is a plentifnl supply of fish, flesh, and fowl. Grains of all kinds, rice, and cotton are cultivated extensively; the latter gives employment at the loom for thousands. On the cther hand there are drawbacks in the siape of clouds of musquitoes, flyingbeetles, heavy rains, monsoons, and earthquakes. The prognostics of the latter are a highly electric state of the atmosphere, long drought, excessive heat, and what can only be described as a stagnation of all nature. Dr. Milne, reeiting his experiences, says: "At the critical moment of the commotion, the earth began to rock, the beams and walls cracked like the timbers of a ship under sail, and a nausea came over one, a sea-siekness really horrible. At times, for a second or two previous to the vibration, there was heard a subterraneow growl, a noise as of a mighty rushing wind whirling about under ground."

The natives were terror-struck, more especially if the quake happened at night, and there would burst a mass of confused sounds, 'Kew ming! Kew ming l' ('Save your lives ! save your lives!') Dogs added their yells to the medley, amid the striking of gongs and tomtoms. Next day there would be exhaustless gossip concerning upheaval and sinking of land, flames issuing from the hill-sides, and ashes cast about the country. The Chinese ideas on the subject are various. Some thought the earth had become too hot, and that it had

macao.
to relieve itself by a shake, or that it was changing its place for another part of the universe. Others said that the Supreme One, to bring transgressors to their senses, thought to alarm them by a quivering of the earth. The notion most common among the lower classes is, that there are six huge sea-monsters, great fish, which support the earth, and that if any one of these move, the earth must be agitated. Superstition is rife in ascribing these earth-shakings chiefly to the remissness of the priesthood. In almost every temple there is a muh-yu-an image of a scaly wooden fish, suspended near the altar, and among the duties of the priests, it is rigidly prescribed that they keep up an everlasting tapping on it. If they become lax in their duties, the fish wriggle and shake the earth to bring the drowsy priests to a sense of their duty.
and thero your lives ! gongs and nd sinking he Chinese that it had

e universe. hought to the lower earth, and is rife in nost every altar, and everlasting the earth

A singular meteorological phenomenon often occurs at Shanghai-a fall of dust, fine, light and impalpable, sometimes black, ordinarily yellow. The sun or moon will scarcely be visible through this sand shower. The deposit of this exquisite powder is sometimes to the extent of a quarter of an inch, after a fall of a day or two; it will penetrate the closest venetian blinds; it overspreads every article of furniture in the house; finds its way into the innermost chambers and recesses. In walking about, one's clothes

vessels in tife port of shanghat.
are covered with dust-the face gets grimy, the month and throat parched; the teeth grate ; the eyes, ears, and nostrils become itchy and irritable. The fall sometimes extends as far as Ningpo in the interior-also some 200 miles out at sea. Some think that it is blown all the way from the steppes of Mongolia, after having been wafted by typhoons into the upper regions of the air: others think that it comes across the seas from the Japanese voleanoes, which are constantly subject to eruptions.

The population of Shanghai, rapidly increasing, is probably about 400,000 to 450,000 souls. It swarms with professional beggars. Among the many creditable things cited by Milne regarding the Chinese, is the number of native charitable institutions in Canton, Ningpo, and Shanghai, including Fouudling Hospitals, the (Sbanghai) "Asylum for Ontcast

Children, retreats for poor and destitute widows, shelters for the maimed and blind, medical dispensaries, leper hospitals, vaccine establishments, almshouses, free burial societies," and so forth. So much for the heartless Chinese.

Tho sailor certainly has this compensation for his hard life, that he sees the world, and visits strange countries and peoples by the dozen, privileges for which many a man tied at home by the inevitable force of circumstances would give up a great deal. What an oracle is he on his return, amid his own family circle or friends! How the youngsters in particular hang on his every word, look up at his bronzed and honest face, and wish that they could be sailors,-
"Strange countries for to see."
How many curiosities has he not to show-from the inevitable parrot, chattering in a foreign tongue, or swearing roundly ir English vernacular, to the little ugly idol brought from India, but possibly manufactured in Birmingham !* If from China, he will probably have brought home some curious caddy, fearfully and wonderfully inlaid with dragons and impossible landscapes; an ivory pagoda, or, perhaps, one of those wonderfully-carved balls, with twenty or so more inside it, all separate and distinct, each succeeding one getting smaller and smaller. He may have with,him a native oil-painting; if a portrait, stolid and hard; but if of a ship, true to the last rope, and exact in every particular. In San Francisco, where there are 14,000 or more Chinese, may be seen native paintings of vessels which could hardly be excelled by a European artist, and the cost of which for large sizes, say $3 \frac{1}{2}$ by $2 \frac{1}{2}$ feet, was only about fifteen dollars ( $£ 3$ ). What with fans, handkerchiefs, Chinese ladies' shoes for feet about three inches in length, lanterns, chopsticks, pipes, rice-paper drawings, books, neat and quaint little porcelain articles for presents at home, it will be odd if Jack, who has been mindful of the "old folks at home," and the young folks too, and the "girl he left behind him," does not become a very popular man.

And then his yarns of Chinese life! How on his first landing at a port, the natives in proffering their services hastened to assure him in "pigeon English" ("pigeon" is a native corruption of "business," as a mixed jargon had and has to be used in trading with the lower classes) that "Me all same Englische man; me belly good man ;" or "You wantee washy? me washy you?" which is simply an offer to do your laundry work; $\dagger$ or "You wantee glub (grub); me sabee (know) one shop all same Englische belly good." Or, perhaps, he has met a Chinaman accompanying a coffin home, and yet looking quite happy and jovial. Not knowing that it is a common custom to present coffins to relatives during lifetime, he inquires, "Who's dead, John?" "No man hab die," replies the Celestial, "no man hab die. Me makee my olo fader cumsha. Him likee too muchee, countoo my number one popa, s'pose he die, can catchee," which freely translated is-"No

[^54]ad, medical s," and so the world, uny a man al. What youngsters face, and
ring in a ol brought l probably agons and ally-carved succeeding ting ; if a in every $y$ be seen $t$, and the llars (£3). in length, porcelain the " old does not "pigeon" n trading b or "You work; † ly good." ing quite relatives plies the muchee, is_" No
o idol trade are true to ally in San
one is dead. It is a present from me to my aged father, with which he will be much pleased. I estcem my father greatly, and it will be at his service when he dics." How one of the common names for a foreigner, especially an Englishman, is "I say," which derived its use simply from the Chinese hearing our sailors and soldiers frequently ejaculate the words when conversing, as for example, "I say, Bill, there's a quecr-looking pigtail!" The Chinese took it for a generic name, and would use it among themselves in the most curious way, as for example, "A red-coated $I$ say sent me to buy a fowl;" or "Did you see a tall $I$ say here a while ago?" The application is, however, not more curious than the title of "John" bestowed on the Chinaman by most foreigners as a generic distinction. Less flattering epithets used to be freely bestowed on us, especially in the interior, such as "foreign devil," "red-haired devil," \&c. The phrase Hungmaou, "redhaired," is applied to foreigners of all classes, and arose when the Dutch first opened up trade with China. A Chinese work, alluding to their arrival, says, "Their raiment was red, and their hair too. They had bluish eyes, deeply sunken in their head, and our people were quite frightened by their strange aspect."

Jack will have to tell how many strange anomalies met his gaze. For example, in launching their junks and vessels, they are sent into the water sideways. The horseman mounts on the right side. The scholar, reciting his lesson, turns his back on his master. And if Jack, or, at all events one of his superior officers, gees to a party, he shonld not wear light pumps, but as thick solid shoes as he can get; white lead is used for blacking. On visits of ceremony, you should keep your hat on; and when you advane, to your host, you should close your fists and shake hands with yourself. Dinners commence with sweets and fruits, and end with fish and soup. White is the funereal colour. You may see adults gravely flying kites, while the youngsters look on; shuttlecocks are battledored by the heal. Books begin at the end; the paging is at the bottom, and in reading, you proceed from right to left. The surname precedes the Christian name. The fond mother holds her babe to her nose to smell it-as she would a ross-instead of kissing it.

What yarns he will have to tell of pigtails! How the Chinese sailo: lashes it round his cap at sea; how the crusty pedagogue, with no other rod of corrcction, will, on the spur of the moment, lash the refractory scholar with it; and how, for fun, a wag will tie two or three of his companions' tails together, and start them off in difterent directions! But he will also know from his own or others' experiences that the foreigner must not attempt practical jokes upon John Chinaman's tail. "Noli me tangere," says Dr. Milne, " is the order of the tail, as well as of the thistle."

Now that most of the restrictions surrounding foreigners in Japan have been removed, and that enlightened people-the Englishmen of the Pacific in enterprise and progress-have taken their proper place among the nations of the earth, visits to Japan are commonly made by even ordinary tourists making the circuit of the globe, and we shall have to touch there again in another "voyage round the world" shortly to follow. The English sailors of the Royal Navy often have an opportunity of visiting the charming islands which constitute Japan. Its English name is a corruption of Tih-punquoChinese for "Kingdom of the Source of the Sun." Marco Polo was the first to bring


to Europe intelligence of the bright isles, whose Japanese name, Nipon or Niphon, means literally "Sun-source."

On the way to Yokohama, the great port of Japan, the voyager will encounter the monsoons, the north-east version of which brings deliciously cool air from October to March, while the south-west monsoon brings hot and weary weather. On the way Nagasaki, on the island of Kiusiu, will almost certainly be visited, which has a harbour with a very narrow entrance, with hills running down to the water's edge, beautifully covered with luxuriant grass and low trees. The Japanese have planted batteries on either side, which would probably prevent any vessel short of a strong ironclad from getting in or


THE FUSIYAMA MOUNTAIN
out of the harbour. The city has a population at least of 150,000 . There are a number of Chinese restricted to one quarter, surrounded by a high wall, in which is a heavy gate, that is securely locked every night. Their dwellings are usually mean and filthy, and compare very unfavourably with the neat, clean, matted dwellings oi the Japanese. The latter despise the former; indeed, you can scarcely insult a native more than to compare him with his brother of Nankin. The Japanese term them the Nankin Sans.

The island of Niphon, on which Yokohama is situated, is about one hundred and seventy miles long by seventy broad, while Yesso is somewhat longer and narrower. Japan really became known to Europe through Fernando Mendez Pinto, a Portugese who was shipwrecked there in 1549. Seven years later the famo' Jesuit, Francis Xavier, introduced the Catholic faith, which for a long time made great progress. But a fatal mistake was made in 1580 , when an embassy was sent to the Pope with presents and
vows of allegiance. The reigning Tycoon* had his eyes opened by this act, and saw that to profess obedience to any spiritual lord was to weaken his own power immeasurably. The priests of the old religions, too, eomplained bitterly of the loss of their flocks, and the Tycoon determined to crush out the Christian faith. Thousands upon thousands of converts were put to death, and the very last of them are said to have been hurled from the roek of Papenberg, at Nagasaki, into the sea. In 1600, William Adams, an English sailor on a Dutch ship, arrived in the harbour of Bungo, and speedily became a favourite with the Tycoon, who, through him, gave the English permission to establish a trading "factory" on the island of Firando. This was later on abandoned, but the Dutch East India Company continued the trade on the same island, under very severe restrictions. The fire-arms and powder on their ships were taken from them immediately on arrival, and only returned when the ships were ready for sea again.

Yokohama, the principal port, stands on a flat piece of ground, at the wide end of a valley, which runs narrowing up for several miles in the country. The site was reclaimed from a mere swamp by the energy of the Government; and there is now a fine sea-wall facing the sea, with two piers running out into it, on each of which there is a customhouse. The average Japanese in the streets is clothed in a long thin cotton robe, open in front and gathered at the waist by a cloth girdle. This constitutes the whole of his dress, save a seanty cloth tied tightly round the loins, eotton socks and wooden elogs. The elder women look lideous, but some of their ugliness is self-inflieted, as it is the fashion, when a woman becomes a wife, to draw out the hair of her eyebrows and varnish her teeth black! Their teeth are white, and they still have their eyebrows, but are too much prone to the use of chalk and vermilion on their cheeks. Every one is familiar with the Japanese stature-under the general average-for there are now a large number of the natives resident in London.

Jack will soon find out that the Japanese cuisine is most varied. Tea and sacki, or rice beer, are the only liquors used, except, of course, by travelled, Europeanised, or Americanised Japanese. They sit on the floor, squatting on their heels in a manner which tires Europeans very rapidly, although they look as comfortable as possirle. The floor serves them for ehair, table, bed, and writing-desk. At meals there is a small stand, about nine inches high, by seven inches square, placed before each individual, and on this is deposited a small bowl, and a variety of little dishes. Chopstieks are used to convey the food to their mouths. Their most common dishes are fish boiled with onions, and a kind of small bean, dressed with oil; fowls stewed and cooked in all ways; boiled rice. Oil, mushrooms, earrots, and various bulbous roots, are greatly used in making up their dishes. In the way of a bed in summer, they merely lie down on the mats, and put a wooden pillow under their heads; but in winter indulge in warm quilts, and have brass pans of chareoal at the feet. They are very cleanly, baths being used constantly, and the public bathhouses being open to the street. Strangely enough, however, although so particular in bodily cleanliness, they never wash their clothes, but wear them till they almost drop to

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sacki, or nised, or er which Che floor d, about deposited to their all bean, shrooms, the way iv under chareoal ie bathcular in drop to he prinees Che Prineo i £402,900.
pieces. A gentleman who arrived there in 1859, had to send his clothes to Shanghai to be washed-a journey of 1,600 miles ! Since the great iuflux of foreigners, however, plenty of Niphons have turned laundrymen.

Their tea-gardens, like those of the Chinese, are often large and extremely ornamental, and at them one obtains a cup of genuine tea made before your eyes for one-third of a halfpenny.*

The great attraction, in a landscape point of view, outside Yokohama, is the grand Fusiyama Mountain, an extinct voleano, the great object of reverence and pride in the Japanese heart, and which in native drawings and earvings is incessantly represented. A giant, 14,000 feet high, it towers grandly to the eloads, snow-eapped and streaked. It is deemed a holy and worthy deed to climb to its summit, and to pray in the numerous temples that adorn its sides. Thousands of pilgrims visit it annually. And now let us make a northward voyage.

## CHAPTER IX.

Round the World on a Man-of-War (continuel).
northeard and southward-the australian station.
The Port of Peter and Paui-Wonderful Colouring of Kamehatka Hills-Grand Voicanoes-The Fight at Petropauiovski -A Contrast-An International Pie-nle-A Double Wedding-Bering's Voyages - Kamchatka worthy of Further Expioration-Plover Bay-Tehuktehi Natives-Whaling-A Terrible Gaie-A Novel "Smoke staek"-Southward again-The Liverpool of the East-Singapore, a Paradise-New Harbour-Wharves and Shipping-Cruelties of the Cooiio Trade-Junks and Prahus-The Kling-gharry Drivers-The Durian and its Devotees-Australia-Its Discovery -Botany Bay and the Conviets-The First Goid-Port Jackson-Beauty of Sydney-Port Phiiip and Melbourne.

Many English men-of-war have visited the interesting peninsula of Kamehatka, all ineluded in the China station. How well the writer remembers the first tim" he visited Petropaulovski, the port of Peter and Paul! Entering first one of the noblest bays in the whole worldglorious Avatcha Bay-and steaming a short distance, the entrance to a capital harbour disclosed itself. In half an hour the vessel was inside a landlocked harbour, with a sand-spit protecting it from all fear of gales or sudden squalls. Behind was a highly-coloured little town, red roofs, yellow walls, and a chureh with burnished turrets. The hills around were autumnly frost-coloured; but not all the ideas the expression will convey to an artist could conjure up the reality. Indian yellow merging through tints of gamboge, yellow, and brown ochre to sombre brown; madder lake, brown madder, Indian red to Roman sepia; greys, bright and dull greens indefinable, and utterly indeseribable, formed a mélange of colour which defied description whether by brush or pen. It was delightful; but it was puzzing. King Frost had completed at night that which autumn had done by day. Then behind rose the grand mountain of Koriatski, one of a series of great voleanoes.

[^56]It seemed a few miles off; it was, although the wonderful clearness of the atmosphere belied the fact, some thirty miles distant. An impreguable fortress of rock, streaked and capped with snow, it defies time and man. Its smoke was constantly observed; its pure snows only hid the boiling, bubbling lava beneath.

With the exception of a few decent houses, the residences of the civil governor, captain of the poit, and other officials, and a few foreign merchants, the town makes no great show. The poorer dwellings are very rough, and, indeed, are almost exelusively $\log$ cabins. A very picturesque and noticeable building is the old Greek church, which has painted red and green roofs, and a beliry full of bells, large . d small, dstached from the building, and only a foot or two raised above the ground. It is to be noted that the town, as it existed in Captain Clerke's time, was built on the sandspit. It was once a military post, but the Cossack soldiers have been removed to the Amoor.

There are two monuments of interest in Petropaulorski; one in honour of Bering, the second to the memory of La Perouse. The former is a plain cast-iron column, railed in, while the latter is a most nondescript construction of sheet iron, and is of octagonal form. Neither of these navigators is buried in the town. Poor Bering's remains lit on the island where he miserably perished, and which now bears his name; while of the fate of La Perouse, and his unfortunate companions, little is known.

In 1855, Petropaulosski was visited by the allied fleets, curing the period of our war with Russia. They found an empty town, for the Russian Government bad given up all idea of defending it. The combined fleet captured one miserable whaler, razed the batteries, and destroyed some of the government buildings. There were good and sufficient reasons why they should have done nothing. The poor little town of Saints Peter and Paul was beneath notice, as victory there could never be glorious. But a stronger reasor existed in the fact, recorded in a dozen voyages, that from the days of Cook and Clerke to our own, it had always been famous for the unlimited hospitality and assistance shown to explorers and voyagers, without regard to nationality. All is not fair in war. Possibly, however, reason might be found for the lavoe done, in the events of the previons year.

In August, 1854, the inhabitants of Petropaulovski had covered themselves with glory, much to their own surprise. On the 2Sth of the month, six English and French vesselsthe President, Firago, Pique, La Fort, l'Eurylice, and l'Olligndo-entered Avatcha Bay. Anmiral Price reconnoitred the harbour and town, and placed the Tirago in position at 2,000 yards. The Russians had two vessels, the Aurora and Dwina, to defend the harbour, and a strong chain was placed across its narrow entrance. The town was defended by seven batteries and earthworks, mounting fifty guns.

It was not difficult to silence the batteries, and they were accordingly silenced. The townspeople, with their limited knowledge of the English-those English they had always so hospitably received, and who were now doing their best to kill them-thought their hour was come, and that, if not immediately executed, they would have to languish exiles in a foreign land, far from their beautiful Kamchatka. The town was, and is, defended almost as much by nature as by art. High hills shut it in so completely, and the harlour entrance can be so easily defended, that there is really only one vulnerable point, in its rear,
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war with all idea batteries, ; reasons ?aul was existed e to our hown to Possibly, year.
h glory, vesselsha Bay. ition at harbour, nded by
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where a small valley opens out into a plot of land bordering the bay. Here it was thought desirable to land a body of men.

Accordingly, 700 marines and sailors were put ashore. The men looked forward to an eass: vietory, and hurriedly, in detached and straggling style, pressed forward to secure it. Alas! they had reekoned without their host-they were rushing heedlessly into the jaws of death. A number of bushes and small trees existed, and still exist, on the hill-sides surrounding this spot, and behind them were posted Cossack sharp-shooters, who fired into our men, and, either from skill or aecident, picked off nearly every offieer. The men, not seeing their enemy, and having lost their leaders, became panic-struck, and fell back in disorder. A retreat was sounded, but the men struggling in the bushes nud underbiush (and, in truth, most of them being sailors, were out of their element on 1 nd) became much scattered, and it was generally believed that many were killed by the random shots of their companions. A number fled up a hill at the rear of the town; their foes pursued and pressed upon them, and many were killed by falling over the steep eliff in which the hill terminates.

The inhabitants, astonished at their own prowess, and knowing that they could not hold the town against a more vigorous attack, were preparing to vacate it, when the fleet weighed anchor and set sail, and no more was seen of them that year! The sudden death of our admiral is always attributed to the events of that attack, as he was known not to have been killed by a ball from the enemy.*

The writer has walked over the main battle-field, and saw cannon-balls unearthed when some men were digging gravel, which had laid there since the events of 1854. The last time he passed over it, in 1860, was when proceeding with some Russian and American friends to what might be termed an "international" pie-nic, for there were present European and Asiatic Russians, full and half-breed natives, Americans, including genuine "Yankee" New Englanders, New Yorkers, Southerners, and Californians, Englishmen, Frenchmen, Germans, and one Italian. Chatting in a babel of tongues, the party climbed a path on the hill-side, leading to a beautiful grassy opening, overlooking the glorious bay below, which extended in all directions a dozen or fifteen miles, and on one side farther than the eye could reach. Several grand snow-covered volcanoes towered above, thirty to fifty miles off ; one, of most beautiful outline, that of Vilutchinski, was on the opposite shore of Avatcha Bay.

The sky was bright and blue, and the water without a ripple; wild flowers were abundant, the air was fragrant with them, and, but for the mosquitoes (which are not confined to hot countries, but flourish in the short summer of semi-Aretic elimes), it might have been considered an earthly edition of paradise! But even these pests could not worry the company mueh, for not merely were nearly all the men smokers, but most of the ledies also! Here the writer may remark, parenthetically, that many of the Russian ladies smoke cigarettes, and none object to gentlemen smoking at table or elsewhere. At the many dinners and suppers offered by the hospitable residents, it was customary to draw a feew whiffs between the courses; and when the cloth was removed,

[^57]the ladies, instead of retiring to another room, sat in company with the gentlemen, the larger proportion joining in the social weed. After the enjoyment of a liberal al fresco dinner, songs were in order, and it would be easier to say what were not sung than to give the list of those, in all languages, which were. Then after the songs came some games, one of them a Russian version of "hunt the slipper," and another rery like "kiss in the ring." The writer particularly remembers the latter, for he had on that occasion the honour of kissing the Pope's wifel This needs explanation, although the Pope was his friend. In the Greck Church the priest is "allowed to marry," and his title, in the Russian language, is "Pope."

And the recollection of that particular "Pope" recalls a well-remembered ceremony -that of a doulle wedding in the old church. During the ceremony it is customary to crown the bride and bridegroom. In this case two considerate male friends lield the crowns for three-quarters of an hour over the brides' heads, so as not to spoil the artistic arrangement of their hair and head-gear. It seems also to be the custom, when, as in the present case, the couples were in the humbler walks of life, to ask some wealthy individual to act as master of the ceremonies, who, if he accepts, has to stand all the expenses. In this case M. Phillipeus, a merchant who has many times crossed the frozen steppes of Siberia in seareh of valuable furs, was the victim, and he accepted the responsibility of entertaining all Petropaulovski, the officers of the splendid Russian corvette, the Variag, and those of the Telegraph Expedition, with cheerfulness and alacrity.

The coast-line of Kamchatka is extremely grand, and far behind it are magnificent volcanic peaks. The promontory which terminates in the two capes, Kamchatka and Stolbevoy, has the appearance of two islands detached from the mainland, the intervening country being low. This, a circumstance to be constantly observed on all coasts, was, perhaps, specially noticeable on this. The island of St. Lawrence, in Bering Sea, was a very prominent example. It is undeniable that the apparent gradual rise of a coast, seen from the sea as you approach it, affords a far better proof of the rotundity of the earth than the illustrations usually employed, that of a ship, which you are supposed to see by instalments, from the main-royal sail (if not from the 'sky-scraper' or 'moon-raker') to the bull. The fact is, that the royal and top-gallant sails of a vessel on the utmost verge of the horizon may be, in certain lights, barely distinguishable, while the dark outline of an irregular and rock-bound coast can be seen by any one. First, maybe, appears a mountain peak towering in solitary grandeur above the coast-line, and often far behind it, then the high lands and hills, then the cliffs and low lands, and, lastly, the flats and beaches.

It was from the Kamchatka River, which enters Bering Sea near the cape of the same name, that Vitus Bering sailed on his first voyage. That navigator was a persevering and plucky Dane, who had been drawn into the service of Russia through the fame of Peter the Great, and his first expedition was directly planned by that sagacious monarch, although he did not live to carry it out. Müller, the historian of Bering's career, says : "The Empress Catherine, as she endeavoured in all points to execute most precisely the plans of her deceased husband, in a manner began her reign with an order for the expedition to Kamchatka." Bering had associated with him two active subordinates,

Spanberg and Tschirikoff. They left St. Petersburg on February 5th, 1725, proceeding to the Ochotsk Sea, via Siberia. It is a tolerable proof of the difficulties of travel in those days, that it took them two years to transport their outfit thither. They crossed to Kamchatka, where, on the 4th of April, 1728, Müller tells us, " $a$ boat was put upon the stocks, like the packet-boats used in the Baltic, and on the 10th of July was launched, and named the boat Gabriel." A few days later, and she was creeping along the coast of Kamehatka and Eastern Siberia. Bering on this first voyage discovered St. Lawrence Island, and reached as far north as $67^{\circ} 18^{\prime}$, where, finding the land trend to the westward, he came to the conclusion that he had reached the eastern extremity of Asia, and that Asia and America were distiuct continents. On the first point he was not, as a matter of detail, quite correct; but the second, the important object of his mission, settled for ever the vexed question.

A second voyage was rather unsuccessful. His third expedition left Petropaulovski on the 4th of July, 1741. His little fleet became dispersed in a storm, and Bering pursued his discoveries alone. These were not unimportant, for he reached the grand chain of the rock-girt Aleutian Islands, and others nearer the mainland of America. At length the scurvy broke out in virulent form among his crew, and he attempted to return to Kamchatka. The sickness increased so much that the "two sailors who used to be at the rudder were obliged to be led in by two others who could hardly walk, and when one could sit and steer no longer, one in little better condition supplied his place. Many sails they durst not hoist, because there was nobody to lower them in case of need." At length land appeared, and they cast anchor. A storm arose, and the ship was driven on the rocks; they cast their second anchor, and the cable snapped before it took ground. A great sea pitched the vessel bodily over the rocks, behind which they happily found quieter water. The island was barren, devoid of trees, and with little driftwood. They had to roof over gulches or ravines, to form places of refuge. On the " 8 th of November a beginning was made to land the sick; but some died as soon as they were brought from between decks in the open air, others during the time they were on the deck, some in the boat, and many more as soon as they were brought on shore." On the following day the commander, Bering, himself prostrated with disease, was brought ashore, and moved about on a hand-barrow. He died a month after, in one of the little ravines, or ditches, which had been covered with a roof, and when he expired was almost covered with the sand which fell from its sides, and which he desired his men not to remove, as it gave him some little warmth. Before his remains could be finally interred they had literally to be disinterred.

The vessel, unguarded, was atterly wrecked, and their provisions lost. They subsisted mainly that fearful winter on the carcases of dead whales, which were d:iven ashore. In the spring the pitiful remnant of a once hardy crew managed to construct a small vessel from the wreck of their old ship, and at length succeeded in reaching Kamchatka. They then learned that Tschirikoff, Bering's associate, had preceded them, but with the loss of thirty-one of his crew from the same fell disease which had so reduced their numbers. Bering's name has ever since been attached to the island where he died.

There is no doubt that Kamchatka would repay a detailed exploration, which it
proceeding of travel in hey crossed $s$ put upon s launched, the coast of Lawrence westward, a, and that Is a matter settled for aulovski on ing pursued d chain of At length 0 return to 0 be at the when one aee. Many need." At driven on ok ground. ppily found ood. They : November re brought deck, some e following ashere, and ravines, or ost covered remove, as tbey had subsisted ren ashore. ct a small Kamehatka. with the lueed their lied.
which it
has never yet received. It is a partially settled country. The Kamchatdales are a good-humoured, harmless, and semi-civilised race, and the Russian offieials and settlers at the few little towns would gladly welcome the traveller. The dogs used for sledging in winter are noble animals, infinitely stronger than those of Alaska or cven Greenland. The attractions for the Alpine climber cannot be overstated. The peninsula contains a chain of volennie peaks, attaining, it is slated, in the Klutchevskoi Mountain a height

of 16,000 feet. In the country immediately behind Petropaulovski are the three peaks, Koriatski, Avatcha, and Koseldskai; the first is about 12,000 feet in height, and is a conspicuous landmark for the port. A comparatively level country, covered with rank grass and underbrush, and intersected by streams, stretches very nearly to their base.

And now, before leaving the Asiatic coast, let us, as many English naval vessels have done, pay a flying visit to a still more northern harbour, that of Plover Bay, which forms the very apex of the China Station. Sailing, or steaming, through Bering Sea, it is satisfactory to know that so shallow is it that a vessel can anchor in almost
any part of it, though hundreds of miles from land.* Plover Bay does not derive its name from the whaling which is often pursued in its waters, although an ingenious Dutehman, of the service in which the writer was engaged at the periods of his visits, persisted in ealling it "Blubber" Bay; its namo is due to the visit of H.M.S. Plover in 1848-9, when engaged in the search for Sir John Franklin. The bay is n most secure haven, sheltered at the ocean end by a long spit, and walled in on three sides by rugged mountains and bare cliffs, the former composed of an infinite number of fragments of rock, split up by the aetion of frost. Besides many coloured lichens and mosses, there is hardly a sign of vegetation, except at one patch of county near a small inner harbour, where domesticated reindeer graze. On the spit before mentioned is a village of Teluktehi natives; their tents are composed of hide, walrus, seal, or reindeer, with here and there a piece of old sail-cloth, obtained from the whalers, the whole patchwork eovering a framework formed of the large bones of whales and walrus. The remains of undergromd houses are seen, but the people who used them have passed away. The present race makes no use of such houses. Their eanoes are of skin, covering sometimes a wooden and sometimes a bone frame. On either side of one of these craft, which is identical with the Greenland "oomiak," or women's boat, it is usual to have a sealskin blown out tight, and the ends fastened to the gunwale; these serve as floats to steady the canoe. They often carry sail, and proceed safely far out to sea, even erossing Berisg Straits to the American side. The natives are a hardy race; the writer has seen one of them earry the awkward burden of a earpenter's ehest, weighing two hundred pounds, withont apparent exertion. One of their principal men was of considerable service to the expedition and to a party of telegraph constructors, who were left there in a wooden house made in San Francisco, and ereeted in a few days in this barren spot. This native, by name Naukum, was taken down into the engine-room of the telegraph steamerG. S. Wright. He looked round carefully and thoughtfully, ad then, shaking his head, said, solemnly, "Too muchee wheel; makee man too muchee think!" His curiosity on board was unappeasable. "What's that fellow?" was his query with regard to anything, from the donkey-engine to the hencoops. Colonel Bulkley gave him a suit of mock uniform, gorgeous with buttons. One of the men remarked to him, "Why, Naukum, you'll be a king soon l" But this magnificent prospect did not seem, judging from the way he received it, to be much to his taste. This man had been sometimes entrusted with as much as five barrels of villainous whisky for trad.ng purposes, and he had always accounted satisfactorily to the trader for its use. The whisky sold to the natives is of the most horrible kind, searcely superior to "coal oil" or paraffine. They appeared to understand the telegraph scheme in a general way. One explaining it, said, "S'pose lope fixy, well; one Melican man Plower Bay, make talky all same San Flaneisco Melican." Perhaps quite as lueid an explanation as you could get from an agricultural labourer or a street arab at home.

Colonel Bulkley, at his second visit to Plover Bay, caused a small house of planks

[^58]derive its ingenious his visits, S. I'lover ast secure y rugrged ments of ses, there harbour, Tehuktehi and there overing a dergromnd ee makes oden and tieal with out tiglit, se. They ts to the em earry without to the a wooden is native, steamerhis head, curiosity egard to a suit of
"Why, , judging en someposes, and ld to the ne. They it, said, Flaneisco gricultural of planks f of Marine ees (between
to be construeted for Naukum, and made him many presents. A draughtsman attached to the party made a sketch, "A Dream of the Future," which was a lively representation of the future prospects of Naukum and his family. The room was picturesque with paddles, skins, brand-new Henry rifles, preserved meat tins, \&e.; and civilisation was triumphant.

Although Plover Bay is almost in sight of the Aretic Oecan, very little snow remained on the barren country round it, except on the distant mountains, or in deep ravines, where it has lain for ages. "That there snow," said one of the sailors, pointing to such a spot, "is three hundred years old if it's a day. Why, don't you see the wrinkles all over the face of it?" Wrinkles and ridges are common enough in snow; but the idea of associating age with them was original.

The whalers are often very suceessful in and outside Plover Bay in securing their prey. Each boat is known by its own private mark-a cross, red stripes, or what not-on its sail, so that at a distance they can be distinguished from their respeetive vessels. When the whale is harpooned, often a long and dangerous job, and is floating dead in the water, a small flag is planted in it. After the monster is towed alongside the vessel, it is cut up into large rectangular chunks, and it is a curious and not altogether pleasant sight to witness the deck of a whaling ship covered with blubber. This can be either barreled, or the oil "tryed out" on the spot. If the latter, the blubber is eut into "mincemeat," and chopping knives, and even mincing machines, are employed. The oil is boiled out on board, and the vessel when seen at a distance looks as if on fire. On these occasions the sailors have a feast of dough-nuts, which are cooked in boiling whale-oil, fritters of whale brain, and other dishes. The writer has tasted whale in various shapes, but although it is eatable, it is by no means luxurious food.

It was in these waters of Bering Sea and the Arctic that tie Shenandoah played such havoe during the Ameriean war. In 1865 she burned thirty American whalers, taking off the officers and erews, and sending them down to San Franciseo. The captain of an English whaler, the Robert Tawns, of Sydney, had warned and saved some American vessels, and was in consequence threatened by the pirate captain. The writer was an eye-witness of the results of this wanton destruction of private property. The coasts were strewed with the remains of the burned vessels, while the natives had boats, spars, \&c., in numbers.

But Plover Bay has an interest attaching to it of far more importance than anything to be said about whaling or Aretie expeditions. It is more than probable that from or near that bay the wandering Tunguse, or Tchuktchi, crossed Bering Straits, and peopled America. The latter, in canoes holding fifteen or twenty persons, do it now ; why not in the "long ago?" The writer has, in common with many who have visited Alaska (formerly Russian-Ameriea, before the country was purchased by the United States), remarked the almost Chinese or Japanese cast of features possessed by the coast natives of that country. Their Asiatic origin could not be doubted, and, on the other band, Aleuts-natives of the Aleutian Islands, which streteh out in a grand chain from Alaskawho had shipped as sailors on the Russo-American Telegraph Expedition, and a Tehuktchi
boy brought down to be eduented, were constantly taken for Jupanese or Clinamen in San Franciseo, where there are 40,000 of the former people. Junks have on two occasions been driven across the Pacifio Ocem, and have handed their crews.* These facts weenrred in 183:2-3; the first on the coast near Cape Flattery, North-west America, and the second in the harbour of Oahu, Sandwich (Hawaiian) Islands. In the former case nll the crew but two men and a boy were killed by the antives. In the latter case,


WHALERS AT WORK.
however, the Sandwich Islanders treated the nine Japanese, forming the crew of the junk, with kindness, and, when they saw the strangers so much resembling them in many respects, said, "It is plain, now, we come from Asia." How easily, then, could we account for the peopling of any island or coast in the Pacific. Whether, therefore, stress of weather obliged some unfortunate Chinamen or Japanese to people America, or whether they, or, at all events, some Northern 'Asiatics, took the "short sea route," ria Bering Straits,
" Vide Washington Irving's "Astoria; " also, Sir Edward Belcher's "Voyąge of the Sulphur."
namen in occasions lese facts erica, and rmer caso atter case,

the junk, in many c account f weather they, or, Straits,
there is a very strong probability in favour of the Now World having been peopled from not merely the Old Wosid, but the Oldest World-Asia.

The Paeific Ocean generally bears itself in a manner which justifies its title. The long sweeps of its waves are far more pleasant to the sailor than the "choppy" waves of


OUR "PATENT SMOKE-STACK."
the Atlantic. But the Pacific is by no means always so, as the writer very well knows. He will not soon forget November, 1865, nor will those of his companions who still survive.

Leaving Petropaulovski on November 1st, a fortnight of what sailors term "dirty weather" culminated in a gale from the south-east. It was no "capful of wind," but a veritable tempest, which broke over the devoted ship. At its outset, the wind was so powerful that it blew the main-boom from the ropes which held it, and it swung round with great violence
against the "smoke-stack" (funnel) of the steamer, knocking it overboard. The guys, or chains by which it had been held upright, were snapped, and it went to the bottom. Here was a dilemma; the engines were rendered nearly nseless, and a few hours later were made absolutely powerless, for the rudder became disabled, and the steering-wheel was utterly unavailable. During this period a very curions circunstance happened; the sea driving faster than the vessel-itself a log lying in the trough of the waves, which rose in mountains on all sides-acted on the serew in such a manner that in its turn it worked the engines at a greater rate than they had ever attained by steam! After much trouble the couplings were disconnected, but for several hours the jarring of the machinery revolving at lightning speed threatened to make a breach in the stern.

No one on board will soon forget the night of that great gale. The vessel, scarcely larger than a "penny" steamer, and having "guards," or bulwarks, little higher than the rail of those boats, was engulfed in the tempestuous waters. It seemed literally to be driving under the water. Waves broke over it every ferv minutes; a rope had to be stretched along the deck for the sailors to hold on by, while the brave commander, Captain Marston, was literally tied to the aft bulwark, where, half frozen and half drowned, he remained at his post during an entire night. The steamer had the "house on deck," so common in American vessels. It was divided into state-rooms, very comfortably fitted, but had doors and windows of the lightest character. At the commencement of the gale, these were literally battered to pieces by the waves dashing over the vessel; it was a matter of doubt whether the whole house might not be carried off bodily. The officers of the expedition took refuge in the small cabin aft, which had been previously the general ward-room of the vessel, where the meals were served. A great sea broke over its skylight, smashing the glass to atoms, putting out the lamps and stove, and filling morentarily the cabin with about three feet of water. A landsman would have thought his last hour had come. But the hull of the vessel was sound; the pumps were in good order, and worked steadily by a "donkey" engine in the engine-room, and the water soon disapreared. The mon coiled themselves up that night amid a pile of ropes and sails, boxes, and miscellaneous matters lying on the "counter" of the vessel, i.e., thai nart of the stern lying immediately over the rudder. Next morning, in place of the ciai ital breaki:sts all had been enjoying-fish and game from Kamehatka, tinned fruits and meats from 'ailfornia, hot rolls and cakes-the steward and cook could only, with great difficulty, provide some rather shaky coffee and the regular "hard bread" (biseuit) of the ship.

The storm increased in violence; it was unsafe to venture on deck. The writer's room-mate. M. Laborne, a genial and cultivated mav of the world, who spoke seven languages fluently, sat down, and wrote a last letter to his mother, enclosing it afterwards in a bottlc. "It will never reach her," said poor Laborne, with tears dimming his cyes; "but it is all I can do." Each tried to comfort the other, and prcpare for the worst. "If we are to die, let us die like men," said Adjutant Wright. "Come down in the engine-room," auother said, "and if we've got to die, let's die decently." The chief engineer lighted a fire on the iron floor below the boilers, and it was the only part of the vessel which was at all comfortable. Noble-hearted
ie guys, bottom. urs later ng-wheel hed ; the s , which ; turn it fer much rachinery scareely eer than literally rope had co comzen and had the te-rooms, At the dashing e carried ich had rved. A mps and andsman ind ; the ne-room, pile of ssel, i.e., place of ed fruits ly, with (biscuit)

Colonel Bulkley spent his time in cheering the men, and reminding them that the sea has been proved to be an infinitely safer place than the land. No single one on board really expected to survive. Meantime, the gale was expending its rage by tearing every sail to ribbons. Rags and streamers fluttered from the yards; there was not a single piece of canvas intact. The cabins held a wreek of trunks, furniture, and croekery.

In one of the cabins several boxes of soap, in bars, had been stored. When the gale commenced to abate, some one ventured into the house on deek, when it was discovered that it was full of soapsuds, which swashed backwards and forwards through the series of rooms. The water had washed and rewashed the bars of soap till they were not thicker than sticks of sealing-wax.

At last, after a week of this horrible weather, morning broke with a sight of the sun, and moderate wind. There were spare sails on board, and the rudder could be repaired; but what could be done about the funnel? 'The engineer's ingenuity eame out conspicuously. He had one of the usual water-tanks brought on deck, and the two ends knocked out. Then, setting it up over the boiler, he with pieces of sheet-iron raised this square erection till it was about nine feet high, and it gave a sufficient draught to the furnaees. "Covert's Patent Smoke-Stack" created a sensation on the safe arrival of the vessel in San Francisco, and was inspected by hundreds of visitors. The little steamer had ploughed through 10,000 miles of water that season. She was immediately taken to one of the wharfs, and entirely remodelled. The sides were slightly raised, and a ward-room and aftcabin, handsomely fitted in yacht-fashion, took the place of the house on deck. It was roofed or decked at top in such a manner that the heaviest seas could wash over the vessel without doing the slightest injury, and she afterwards made two voyages, going over a distance of 20,000 miles. Poor old Wright! She went to the bottom at last, with all her crew and passengers, some years later, off Cape Flattery, at the entrance of the Straits of Fuca, and searcely a vestige of her was ever found.

And now, retracing our steps en route for the Australian station, let us call at one of the most important of England's settlements, which has been termed the Liverpool of the East. Singapore consists of an island twenty-five miles long and fifteen or so broad, lying off the south extremity of Malacca, and having a city of the same name on its southern side. The surface is very level, the highest elevation being only 520 feet. In 1818, Sir Stamford Raffles found it an island covered with virgin forests and dense jungles, with a miserable population on its creeks and rivers of fishermen and pirates. It has now a population of about 100,000 , of which Chinese number more than half. In 1819 the British flag was hoisted over the new settlement; but it took five years on the part of Mr. Crawford, the diplomatic representative of Great Britain, to negotiate terms with its then owner, the Sultan of Johore, whereby for a heavy yearly payment it was, with all the islands within ten miles of the coast, given up with absolute possession to the Honourable East India Company. Since that period, its history has been one of unexampled prosperity. It is a free port, the revenue being raised entirely from imports on opium and spirits. Its prosperity as a commercial port is due to the fact that it is an entrepôt for the whole trade of the Malayan Archipelago, the Eastern Archipelago, Cochin Cbina,

Siam, and Java. Twelve years ago it exported over sixty-six million rupees' worth of gambier, tin, pepper, nutmegs, coffee, tortoise-shell, rare woods, sago, tapioca, camphor, gutta-percha, and rattans. It is vastly greater now. Exclusive of innumerable native craft, 1,607 square-rigged vessels entered the port in 1864-5. It has two splendid harbours, one a sheltered roadstead near the town, with safe anchorage; the other, a land-locked harbour, three miles from the town, capable of admitting vessels of the largest draught. Splendid wharfs have been crected by the many steam-ship companies and merchants, and there are fortifications which command the harbour and roads.
"A great deal has been written about the natural beauties of Ceylon and Java," says Mr. Cameron,* "and some theologians, determined to give the first scene in the Mosaic narrative a local habitation, have fixed the paradise of unfallen man on one or other of those noble islands. Nor has their enthusiasm carried them to any ridiculous extreme; for the beauty of some parts of Java and Ceylon might well accord with the description given us, or rather which we are accustomed to infer, of that land from which man was driven on his first great sin.
" I have seen both Ceylon and Java, and admired in no grudging measure their many charms; lut for calm placid loveliness, I should place Singapore high above them both. It is a loveliness, too, that at once strikes the eye, from whatever point we view the island, which combines all the advantages of an always beautiful and often imposing coast-line, with an endless succession of hill and dale stretching inland. The entire circumference of the island is one panorama, where the magnificent tropical forest, with its undergrowth of jungle, runs down at one place to the very water's edge, dipping its large leaves in the glassy sea, and at another is abruptly broken by a brown roeky eliff, or a late landslip, over which the jungle has not yet had time to extend itself. Here and there, too, are scattered little green islands, set like gems on the bosom of the hushed waters, between which the excursionist, the trader, or the pirate, is wont to steer his course. 'Eternal summer gilds these shores;' no sooner has the blossom of one tree passed away, than that of another takes its place and sheds perfume all around. As for the foliage, that never seems to die. Perfumed isles are in many people's minds merely fabled dreams, but they are easy of realisation here. There is scarcely a part of the island, except those few places where the original forest and jungle have been cleared away, from which at night-time, on the first breathings of the land winds, may not be felt those lovely forest perfumes, even at the distance of more than a mile from shore. These land winds-or, more properly, land airs, for they can scarcely be said to blow, but only to breathe-usually commence at ten o'clock at night, and continue within an hour or two of sunrise. They are welcomed by all-by the sailor because they speed him on either course, and by the wearied resident because of their delicious coolness."

Another writer $\dagger$ speaks with the same enthusiasm of the well-kept country roads, and approaches to the houses of residents, where one may travel for miles through unbroken avenues of fruit-trees, or beneath an over-arching canopy of evergreen palms. The long and well-kept approaches to the European dwellings never fail to win the praise of

[^59]orth of amphor, native splendid pther, a of the mpanies
strangers. "In them may be discovered the same lavish profusion of overhanging foliage which we see around us on every side; besides that, there are often hedges of wild heliotrope, cropped as square as if built up of stone, and forming eompact barriers of green leaves, which yet blossom with gold and purple flowers." Behind these, broad bananas nod their bending leaves, while a choice flower-garden, a close-shaven lawn, aad


UIEW IN THE STRAITS OF MALACCA
a eroquet-ground, are not uncommonly the surroundings of the residence. If it is early morning, there is an unspeakable charm about the spot. The air is eool, even bracing; and beneath the shade of forest trees, the rich blossom of orehids are seen depending from the boughs, while songless birds twitter among the foliage, or beneath shrubs which the convolvulus has decked with a hundred variegated flowers. Here and there the slender stem of the aloe, rising from an armoury of spiked leaves, lifts its cone of white bells on high, or the deep orange pine-apple peeps out from a green belt of fleshy foliage, and breathes its bright fragrance around. The house will invariably have a spacious veraudah, 19
underneath which flowers in China vases, and easy chairs of all kinds, are placed. If perfect peace can steal through the senses into the soul-if it can be distilled like some subtle ether from all that is beantiful in nature-surely in such an island as this we shall find that supreme happiness which we all know to be unattainable elsewhere." Alas ! even in this bright spot, unalloyed bliss cannot be expected. The temperature is very high, showing an average in the shade, all the year round, of between $85^{\circ}$ and $95^{\circ}$ Fahr. Prickly heat, and many other disorders, are caused by it on the European consticution.

The old Strait of Singhapura, that lies between the island of Singapore and the mainland of Johore, is a narrow tortuous passage, for many ceriaries the only theroughfare for ships passing to the eastward of Malacea. Not many years ago, where charming bungalows, the residences of the merchants, are built among the ever verdant foliage, it was but the home of hordes of piratical marauders, whio carried on their depredations with a high hand, sometimes adventuring on distant voyages . $:$ fleets of forty or fifty prahus. Indeed, it is stated, in the old Malay annals, that for nearly two hundred years the entire population of Singapore and the surrounding islands and coasts of Johore subsisted on fishing and pirating ; the former only being resorted to when the prevailing monsoon was too strong to admit of the successful prosecution of the latter. Single cases of piracy sometimes occur nuw ; but it has been nearly stopped. Of the numberless vessels and boats which give life to the waters of the old strait, nearly all have honest work to do-fishing, timber carrying, or otherwise trading. "A very extraordinary flotilla," says Mr. Cameron, " of a rather nondeseript character may be often seen in this part of the strait at certain seasons of the year. These are huge rafts of unsawn, newly-cut timber; they are generally 500 or 600 feet long, and sixty or seventy broad, the logs being skilfully laid together, and carefully bound by strong rattan-rope, each raft often containing 2,000 logs. They have always one or two attap-houses built upon them, and carry crews of twenty or twenty-five men, the married men taking their wives and children with them. The timber composing them is generally cut many miles away, in some creek or river on the mainland." They sometimes have saiis. They will irresistibly remind the traveller of those picturesque rafts on the Rhine, on which there are cabins, with the smoke curling from their stove-pipes, and women, chiidren, and dogs, the men with long sweeps keeping the valuable floating freight in the cur:ent. Many a German, now in England or America, made his first trip throngh the Fatherland to its coast on a Rhine raft.

The sailor generally makes bis first acquaintance with the island of Singapore by entering through New Harbour, and the scenery is said to be almost unsurpassed by anything in the world. The steamer enters between the large island and a cluster of islets, standing ligh out of the water with rocky banks, and covered to their summits ly rich green jungle, with here and there a few forest trees towering above it high in the air. Under the vessel's keel, too, as she passes slowly over the shoaler patches of the entrance, may be seen benutiful beds of coral, which, in their variegated colours and fantastic shapes, vie with the scenery above. The Peninsular and Oriental Stcamers' wharfs are situated at the head of a small bay, with the island of Pulo Brani in front. They have a frontage of 1,200 feet, and coal sheds built of brick, and tile-roofed; they often
contain $20,000 \mathrm{t}$ ms of coal. Including some premises in Singapore itself, some $£ 70,000$ or $£ 80,000$ hipe been expended on their station-a tolerable proof of the commercial importance of the place. Two other companies have extensive wharfs also. The passengers land here, and drive up to the eity, a distanee of some three miles. Those who remain on board, and "Jack" is likely to be of the number, for the first few days ofter arrival, find entertainment in the feats of swarms of small Malay boys, who immediately surround the vessel in toy boats just big enough to float them, and induce the passengers to throw small eoins into the water, for whieh they dive to the bottom, and generally suceeed in reeovering. Almost all the ships visiting Singapore have their bottoms examined, and some have had as many as twenty or thirty sheets of copper put on by Malay divers. One man will put on as many as two sheets in an hour, going down a dozen or more times. There are now extensive docks at and around New Harbour.

On rounding the eastern exit of New Harbour, the ship ing and harbour of Singapore at onee burst on the view, with the white walls of the houses, and the dark verdure of the shrubbery of the town nearly hidden by the network of spars and rigging that intervenes. The splendid boats of the Frenel Messageries, and our own Peninsular and Oriental lines, the opium steamers of the great firm of Messrs. Jardine, of China, and Messrs. Cama, of Bombay; and the beautifully-modelled American or English clippers, whieh have taken the place of the box-shaped, heavy-rigged East Indiamen of days of yore, with men-of-war of all nations, help to make a noble sight. This is only part of the seene, for interspered are huge Chinese junks of all sizes, ranging up to 600 or 700 tons measurement. The sampans, or two-oared Chinese boats, used to convey passengers ashore, are identieal in slape. All have alike the square bow and the broad flat stern, and from the largest to the smallest, on what in a British vessel would be ealled her "head-boards," all have two eyes embossed and painted, glaring out over the waterr. John Chinaman's explanation of this custom is, that if "no got eyes, no ean see." During the soutl-west :uonsoon they are in Singapore by scores, and of all colonrs, red, green, black, or yellow ; these are said to be the badge of the partienlar provinee to whieh they belong. Ornamental painting and carving is confined principally to the high stern, whieh generally bears some fantastic figuring, conspicuous in which can invariably be traced the outlines of a spread eagle, not unlike that on an Ameriean dollar. Did "spreadeagleism" as well as population first reaeh Ameriea from China?
"It is difficult," says Mr. Cameron, "while looking at these junks, to imagine how they ean manage in a seaway; and yet at times they must encounter the heaviest weather along the Chinese eoast in the northern latitudes. It is true that when they encounter a gale they generally run before it; but yet in a typhoon this would be of little avail to ease a ship. There is no doult they must possess some good qualities, and, probably, speed, with a fair wind in a smooth sea, is one of them. Not many years ago a boatbuilder in Singapore bought one of the common sampans used by the coolie boatmen, which are exaetly the same shape as the junks, and rigged her like an English eutter, giving her a false keel, and slifting weather-board, and, strange to say, won with her every race that he tried."

Passing the junks at night, a strange spectacle may be observed. Amid the beating
of gongs, jangling of bells, and discordant shouts, the nightly religious ceremonies of the sailors are performed. Lanterns are swinging, torches flaring, and gilt paper burning, while quantities of food are scattered in


JUNKS IN A CHINESE HARBOUR. the sea as an offering of their worship. Many of those junks, could they but speak, might reveal a story, gentle reader-
"A tale unfold, whose lightest word Would harrow up thy soul."

The chief trade of not a few has been, and still is, the traffic of human freight; and it is, unfortunately, only too lucrative. Large numbers of junks leave China for the islands annually packed with men, pieked up, impressed, or lured on board, and kept there till the gambier and pepper planters purchase them, and hurry them off to the interior. It is not so much that they usually have to complain of cruelty, or even an unreasonably long term of servitude; their real danger is in the overcrowding of the vessels that bring them. The men cost nothing, except a meagre allowance of rice, and the more the shipper can crowd into his vessel the greater must be his profit. " It would," says the writer just quoted, "be a better speculation for the trader whose junk could only carry properly 300 men, to take on board 600 men , and lose 250 on the way down, than it would be for him to start with his legitimate number, and land them all safely; for in the first case, he would bring 350 men to market, and in the other only 300 . That this process of reasoning is actually put in practice by the Chinese, there was not long ago ample and very mournful evidence to prove. Two of these junks had arrived in the harbour of Singapore, and had remained unnoticed for abont a week, during which the owners had bargained for the engagement of most of their cargo. At this time two dead bodies
onies of burning, ttered in worship. hey but , gentlo rd
as been, freight; to lueraks leave - packed ssed, or till the purchase the inrat they cruelty, term of $s$ in the at bring , except and the into his s profit. er just tion for ly carry n board the way him to per, and the first men to ly 300 . ning is ad very jour of ers had bodies
were found floating in the harbour; an inquest was held, and it then transpired that one of these two junks on the way down from China had lost 250 men out of 600 , and the other 200 out of 400 ."

The Malay prahus are the craft of the inbabitants of the straits, and are something like the Chinese junks, though never so large as the largest of the latter, rarely exceeding fifty or sixty tons burden. They have one mast, a tripod made of three bamboos, two


CHINESE JUNK AT BINGAPORE.
or three feet apart at the deck, and tapering up to a point at the top. Across two of the bamboos smaller picces of the same wood are lashed, making the mast thus act as a shroud or ladder also. They carry a large lug-sail of coarse grass-cloth, having a yard both at top and bottom. The curions part of them is the top hamper about the stem. With the deck three feet out of the water forward, the top of the housing is fifteen or more feet high. They are steered with two rudders, one on either quarter. In addition to the ships and native craft, are hundreds of small boats of all descriptions constantly moving about with fruits, provisions, birds, monkeys, shells, and corals for sale. The sailor
has a splendid chance of seeuring, on merely nominal terms, the inevitable parrot, a funny little Jocko, or some lovely corals, of all hues, green, purple, pink, mauve, blue, and in shape often resembling flowers and shrubbery. $\Lambda$ whole boat-load of the latter may be obtained for a dolliar and a half or a couple of dollars.

Singapore has a frontage of three miles, and has fine Government buildings, courthouse, town-hall, elubs, institutes, masonic lodge, theatre, and the grandest English eathedral in Asia-that of St. Audrew's. In Commercial Square, tho business centre of Singapore, all nationalities seem to be represented. Here, too, are the Kling gharrydrivers, having active little ponies and neat eonvejanees. Jack ashore will be pestered with their applications. "These Kling,"," ays Mr. Thomson, "seldom, if ever, resort to blows; but their language leaves nothin ${ }_{2}$, most vindictive spirit to desire. Once, at one of the landing-places, I observed a tritish she come ashore for a holiday. He was forthwith beset by a group of Kling gharry-drivers, atd, finding that the strongest of British words were as nothing when pitted against the Kling vocabulary, and that no half-dozen of them would stand up like men against his huge iron fists, he seized the nearest man, and hurled hin in to the sea. It was the most harmless way of disposing of his enemy, who swam to a boat, and it left Jack in undisturbed and immediate possession of the field." The naval officer will find excellent deer-hunting and wild-hog shooting to be had near the eity, and tiger-hunting at a distance. Tigers, indeed, were formerly terribly destructive of native life on the island; it was said that a man per diem was sacrificed. Now, eases are more rare. For good living, Singapore can hardly be beaten; fruit in particular is abundant and cheap. Pine-apples, cocoa-nuts, bananas of thirty varieties, mangoes, custardapples, and oranges, with many commoner fruits, abound. Then there is the mangosteen, the delicious "apple of the East," thought by many to surpass any fruit in the world, and the durian, a fruit as big as a boy's head, with seeds as big as walnuts enclosed in a pulpy, fruity custard. The taste for this fruit is an acquired one, and is impossible to deseribe, while the smell is most disgusting. So great is the longing for it, when once the taste is acquired, that the highest prices are freely offered for it, particularly by some of the rich natives. A former King of Ava spent enormous sums over it, and could hardly then satisfy his rapacious appetite. A succeeding monarch kept a special steamer at Rangoon, and when the supplies came into the city it was loaded up, and dispatched at onee to the capital- 500 miles up a river. The smell of the durian is so unpleasant that the fruit is never seen on the tables of the merchants or planters; it is eaten slily in corners, and out of doors.

And Jack ashore will find many other novelties in eating. Roast monkèy is obtainable, althongh not eaten as much as formerly by the Malays. In the streets of Singapore a meal of three or four courses can be obtained for three halfpence from travelling restaurateurs, always Chinamen, who carry their little charcoal stoves and soup-pots with them. The authority prineipally quoted says that, contrary to received opinion, they are very clean and partieular in their culinary arrangements. One must not, however, too closely examine the nature of the viands. And now let us proceed to the Australian Station, which ineludes New Guinea, Australia proper, and New Zealand.

This is a most important colony of Great Britain, although by no means its most
a funny , and in may be s, courtEnglish centre of gharrypestered resort to Once, He was f British alf-dozen est man, s enemy, n of the had near estructive ow, cases ticular is , custardngosteen, he world, closed in ossible to once the some of ld hardly eamer at atched at sant that 1 slily in zuratcurs, m. The ery clean ; examine a includes
important possession, a country as English as England itself, tempered only by a slight colonial flavour. Here Jack will find himself at home, whethes in the fine streets of Melbourne, or the older and more pleasant city of Sydney, with its beautiful surroundings.

When the seventeenth century was in its rarly youth, that vast ocean which stretehros from Asia to the Antarctic was scarcely known by navigators. The coasts of Laste a Afrir i, of India, and the archipelago of islands to the eastward, were partially expleri i; bu, while there was a very strong belicf that a land existed in the southern hemisphere, it was an inspiration only based on probabilities. The pilots and map-makers put down, as well as they were able, the discoveries already made; must there not be some great island or continent to balance all that waste of water which they were forced to place on the southern hemisphere? 'Terra Australis, "the Southern Land," was therefore in a sense discovered before its discovery, just as the late Sir Roderick Murchison predicted gold there before Hargreaves found it.*

In the year 1606, Pedro Fernando de Quiros started rom Peru on a voyage of discovery to the westward. He found some important islands, to which he gave the name "Australia del Espiritu Santo," and which are now belie, ed to have been part of the New Hebrides group. The vessel of his second in command became separated in consequence of a storm, and by this Luis vas Torres in eon uquence reached New Guinea and Australia proper, besides what is now known as Tor: straits, which channel separates them. The same year a Dutch vessel coasted about t. s Gulf of Carpentaria, and it is to the persistent efforts of the navigators of Holland that the Australian coasts became well explored. From 1616, at intervals, till 1644, they instigated many voyages, the leading ones of which were the two made by Tasman, in the second of which he circumnavigated Australia. "New Holland" was the title long applied to the western part of Australia-sometimes, indeed, to the whole country.

The voyages of the Dutch had not that glamour of romance which so often attaches to those of the Spanish and English. They did not meet natives laden with evidences of the natural wealth of their country, and adorned by barbaric ornaments. On the contrary, the coasts of Australia did not appear prepossessing, while the natives were wretched and squalid. Could they have known of its after-destiny, England might not hold it to-day. When Dampier, sent out by William III. more than fifty years afterwards, re-discovered the west coast of Australia, be had little to record more than the number of sharks on the coast, his astonishment at the kangaroos jumping about on shore, and his disgust for the few natives he met, whom he described as "the most unpleasantlooking and worst-featured of any people" he had ever encountered.

Nearly seventy years elapsed before any other noteworthy discovery was made in regard to Australia. In Captain Cook's first voyage, in 1768, he explored and partially surveyed the castern part of its coasts, and discovered the inlet, to which a considerable notoriety afterwards clung, which he termed Botany Bay, on account of the luxuriant vegetation

* It is stated that an old man, named Macgregor, had long before been in the habit of bringing once a year to Sydney small pieces of gold, which he always sold to a joweller there, and also that a convict had been whipped for having lumps of gold in his possession prior to the above. Hargreaves' claim rests both on the actual amount discovered, and on his publishing the fact at once.

singapole, Lookino seawaids.
of its shores. Rounding the western side, he proceeded northwards to Torres Straits, near whieh, on a small island off the mainland, he took possession of the whole country, in the name of his sovereign, George III., christening it New South I/ ales. It is still called Possession Island. Captain Cook gave so favourable an aceount of Botany Bay on his return, that it was determined at once to form a colony, in which convict labour should be systematically employed. Accordingly, a fleet of eleven vessels, under Captain Phillip, left Portsmouth on the 13th of May, 1787, and after a tedious voyage, reaehed Botany Bay the following January.

Captain Phillip found the bay was not a safe anchorage, and in other respects was unsuitable. A few miles to the northward he discovered an inlet, now named Port Jackson-from the name of the seaman who discovered it-and which had been overlooked by Cook. The fleet was immediately removed thither, the convicts landed, and the British flag raised on the banks of Sydney Cove. Of the thousand individuals who formed this first nucleus of a grand colony, more than three-fourths were convicted offenders. For some time they were partially dependent on England for supplies. It had been arranged that they should not, at first, be left without sufficient provisions. The first ship sent out after the colonists had been landed for this purpose was struck by an iceberg in the neighbourhood of the Cape of Good Hope, and might not have been saved at all, but for the scamanship of the "gallant, good Riou," who afterwards lost his life at the battle of Copenhagen. He managed to keep her afloat, and she was at length towed into Table Bay, and a portion of her stores saved. Meantime, the colonists were living "in the constant belief that they should one day perish of hunger." Governor Phillip set a noble example by putting himself on the same rations as the
meanest conviet; and when on state oceasions he was obliged to invite the officers of the colony to dino with him at the Government House, he used to intimate to the guests that "they must bring their bread along with them." At last, in June, 1790, some stores arrived; and in the following year a seeond fleet of vessels eame out from England, one ship of the Royal Navy and ten transports; 1,763 eonvicts had left England on board the latter, of whom nearly 200 died on the voyage, and many moro on arrival. The number of free settlers was then, and long afterwards, naturally very small; they did not like to be so intimately and inevitably associuted with convieted criminals. In 1810 the total population of Australia was about 10,000 . In 1836 it had risen to 77,000 , two-fifths of whom were conviets in aetual bondage, while of the remainder, a large proportion had at one time been in the same condition. Governor King, one of the earlier officials of the colony, complained that "he could not muke farmers out of piekpoekets;" and Governor Maequarie later said that "there were only two elasses of individuals in New South Wales-those who had been convicted, and those who ought to have been." Under these diseouraging eircumstances, coupled with all kinds of other difficulties, the colony made slow headway. Droughts and inundations, famine or scareity, and hostility on the part of the natives, helped seriously to retard its progress. About the period of Sir Thomas Brisbane's administration, there was an influx of a better class of colonists, owing to the inauguration of free emigration. In 1841, transportation to New South Wales ceased. Ten years later the diseovery of gold by Mr. E. H. Hargreaves (on the 12th of February, 1851) caused the first great "rush" to the eolony, which influx has since continued, partly for better reasons than gold-finding-the grand chances offered for stock-raising, agrieultural, horticultural, and vinieultural pursuits.


LOUKINO DOWN ON sLNOAPORE.

To the north and south of Sydney, the coast is a nearly unbroken range of ironbound cliffs. But as a vessel appronches the shore, a narrow entrance, between the two "Heads" of Port Jackson, as they are called, discloses itself. It is nowhere greater than a mile in width, and really does not appear so mueh, on account of the height of the cliffs. On entering the harbour a fine sea-lake appears in view, usunlly blue and calm, and in one of its clarming inlets is situated the eity of Sydnoy. "There is not," writes Professor Hughes, "a more thoroughly English town on the face of the globe-not even in Suglund itself-than this southern emporium of the commeree of nations. Syduey is eatirely wanting in the novel and exotic aspect which belongs to foreign enpitals. The emigrant lands there, and hears his own mother tongue spoken on every side; he looks around upon the busy life of its crowded streets, and he gazes on scenes exaetly similar to those daily observable in the highways of London, Liverpool, Birmingham, or Manchester
' Wero it not,' says Colonel Mundy, 'for an oeeasional orunge-treo in full bloom, or fruit in the background of some of the older cottages, or a flock of little green parrots whistling as they alight for a moment on a house-top, one might fancy himself in Brighton or Plymouth.'"* Gay equipuges crowd its streets, which are lined with handsome slops; tho eity abounds in fine public buildings. In the outskirts of the eity are flour-mills of all kinds, worked by horse, water, wind, and steam; great distilleries and breweries, soap and eandle works, tameries, and woollen-mills, at the latter of which they turn out an exeellent tweed cloth. Ship-huilding is carried on extensively around Port Jackson. Although now overshadowed by the commereial superiority of Melbourne, it has tho proeminenee as a port. In faet, Melbourne is not a sea-port at all, as we slall sec. Vessels of large burdens can lie alongside the wharves of Sydney, and "Jack," in tho Royal Navy at least, is more likely to stop there for awhile, than ever to see Melbourne. He will find it a cheap place in most respects, for everywhere in New South Wales meat is excessively lowpriced; they used formerly to throw it away, after taking off the hides and boiling out the fat, but are wiser now, and send it in tins all over the world. Such fruits as the peneh, nectarine, aprieot, plum, fig, gr:pe, cherry, and orange are as plentiful as blackberries. The orangeries and orchards of New South Wales are among its sights; and in the neighbourhood of Sydney and round Port Jackson there are beautiful groves of orangetrees, which extend in some places down to the water's edge. Irdividual settlers havo groves which yield as many as thirty thousand dozen oranges per annum. One may there literally "sit under his own vine and fig-tree." If a peach-stone is thrown down in almost any part oi Australia where there is a little moisture, a tree will spring up, whieh in a few years will yield handsomely. A well-known botanist used formerly to earry with him, during extensive travels, a small bag of peach-stones to plant in suitable places, and many a wandering settler has blessed him since. Pigs were formerly often fed on peaches, as was done in Califcrnia, a country much resembling Southern Australia; it is only of late years they have been utilisel in both places by drying or otherwise preserving. A lasket-load may be obtained in the Sydney markets during the season for a few pence. The summer heat of Sylney is about that of Naples, while its winter corresponds with that of Sicily.

[^60] the two greater eight of nd calm, ," writes not even yducy is f. The s aronnd to those or fruit vhistling pliton or - shops; -mills of ies, soap out all Jaekson. the preVessels al Navy find it a ely lowout the peach, kberries. 1 in the orangers have ay there almost ich in a ry with ces, and peaches, only of ing. $A$ pence. ds with

But are there no drawbaeks to all this happy state of thiugs? Well, yes; about the worst is a hot blast which sometimes blows from the interier, known popularly in Sydney as a "brick-fielder" or "southerly buster." It is much like that already described, ard neither the most closely-fustened doors nor windows will keep out the fearful duststorm. "Its effect," says Professor Hughes, "is particularly destructive of every sense of comfort; the dried and dust-besprinkled skin acquiring for the time some resemblance to parehment, and the hair feeling more like hay than any softer material."

Should Jack or his superior officers land during tho heat of autumn, he may huve the opportunity of passing a novel Christmas-very completely un-Einglish. The gayest and brightest flowers will be in bloom, and the musquitoes out in full foree. "Sitting," says a writer, "in a thorough draught, clad in a holland blouse, you may see men and boys dragging from the neighbouring bush piles of green stuff (oak-brauches in full leaf and acorn, and a handsome slirub with a pink flower and pale green leaf-the "Christmus" of Australia, for the decoration of churehes and dwellings, and stopping every fifty yards to wipe their perspiring brows."

Before leaving Sydney, the grand park, called "The Domain," which stretehes down to the blue water in the pieturesque indentations around Port Jackson, must be mentioned. It contains several hundred acres, tastefully laid out in drives, and with public walks eut through the indigenous or planted shrubberies, and amidst the richest woodland seenery, or winding at the clgo of the roeky bluffs or by the margin of the glittering waters. Adjoining this lovely spot is one of the finest botanic gardens in the world, considered by all Sydney to be a veritable Eden.

Port Phillip, like Port Jackson, is entered by a narrow passage, and immediately inside is a magnificent basin, thirty miles aeross in almost any direction. It is so seenrely sheltered that it affords an admirable anchorage for shipping. Otherwise, Melbourne, now a grand city with a population of about 300,000 , would have had little chance of attaining its great commercial superiority over any eity of Australia. Melbourne is situated about eight miles up the Yarra-Yarra ("flowing-flowing") river, which flows into the head of Port Phillip. That poetieally-named, but really lazy, mudly stream is only navigable for vessels of very small draught. But Melbourne has a fine country to back it. Many of the old and rich mining-districts were round Port Phillip, or on and about streams flowing into it. Wheat, maize, potatoes, vegetables and fruits in general, are greatly cultivated; and the colony of Victoria is pre-eminent for sheep-farming and cattleruns, and the industries connected with wool, hides, tallow, and, of late, meat, which they bring forth. Melbourne itself lies rather low, and its original site, now entirely filled in, was swampy. ILence came oecasional epidemies-dysentery, influenza, and so forth.


A TIMBER WHARF AT SAN FRANCISCO.

## CHAPTER X.

Round the Worid on a Man-or-War (continued). the pacific station.

Across tho Pacific-Approneh to the Golden Gate-The Bay of San Franeisco-The City-First Dinner Ashore-Cheap Luxury-San Franclseo by Night-The Land of Gcld, Grain, and Grapes-Ineidents of the Early Days-Expensivo Papers-A Lucky Sailor-Chances for English Girls-The Baby at the Play-A capltal Port for Scamen-llospitality of Californians-Victoria, Vancouver Island-The Naval Station at Esquimalt-A Delightful Place-Advice to Intending Emigrants-British Columbian Indians-Their fine Canocs-Experiences of the Writer-The Island on Firo -The Chinook Jargen-Indlan "ligeon-English "-North to Alaskn-'The Purehase of Russian Amerlea by the United States-Results-Life at Sitka-Grand Volcanoes of the Aleutinn Islands-Tho Great Yukon RiverAmerican Trading Posts round Bering Sea.

A common course for a vessel crossing the Pacific would be from Australia or New Zealand to San Francisco, California. The mail-steamers follow this route, touching at the Fiji and Hawaiian groups of islands; and the sailor in the Royal Navy is as likely to find this route the orders of his commander as any other. If the writer, in describing the country he knows better than any other, be found somewhat enthusiastic and gushing, he will at least give reasons for his warmth. On this suljject, above all others, he writes
con amore. He spent over twelve years on the Pacifie eoasts of America, and out of that time about seven in the Golden State, California.

It has been said, "See Naples, and die!" The reader is recommended to see the glorious Bay of San Francisco before he makes up his mind that there is nought else worthy of note, beeause he has sailed on the blue waters of the most beautiful of the Mediterranean bays. How well does the writer remember his first sight of the Golden Gate, as the entranee to San Hraneiseo Bay is poetically named! The good steamer on which he had spent some seventy-five days-which had passed over nearly the entire Atlantic, weathered the Horn, and then, with the favouring " trade-winds," had sailed and steamed up the Pacific with one grand sweep to California, out of sight of land the whole time-was sadly in want of coals when she arrived off that eoast, which a dense fog entirely hid from view. The engines were kept going slowly by means of any stray wood on board; valuable spars were saerificed, and it was even proposed to strip the woodwork out of the steerage, whieh contained about two hundred men, women, and children. Guns and roekets were fired, but at first with no result, and the prospeet was not cheering. But at last the welcome little pilot-boat loomed through the fog, and was soon alongside, and a healthy, jovial-looking pilot came aboard. "You can all have a good dimer to-night ashore," said that exeellent seaman to the passengers, "and the sea shan't rob you of it." The fog lifted as the vessel slowly steamed onwards.

On approaching the entrance to the bay, on the right eliffs and roeks are seen, with a splendid beach, where earriages and buggies are constantly passing and repassing. On the top of a rocky bluff, the Seal Roek or "Cliff" House, a popular hotel; below it, in the sea, a couple or so of rocky islets covered with sea-lions, which are protected by a law of the State. To the left, outside some miles, the Farralone Islands, with a capital lighthouse perehed on the top of one of them. Entering the Golden Gate, and looking to the right again, the Fort Point Barracks and the outskirts of the city; to the leit the many-eoloured headlands and eliffs, on whose summits the wild oats are pale and golden in the bright sunlight. Before one, sevemal islands-Aleatraz, bristling with guns, and covered with fortifications; Goat Island, presumably so called because on it there are no goats. Beyond, fifty miles of green water, and a forest of shipping; and a city, the history of whieh has no parallel on earth. Hills behind, with streets as steep as those of Malta; high land, with spires, and towers, and fine edifiees innumerable; and great wharves, and slips, and doeks in front of all ; with steamships and steam ferry-boats constantly arriving and departing. And now the vessel anchors in the stream, and if not earing to haggle over the half-clollar-a large sum in English ears-whieh the boatman demands from each passenger who wishes to go ashore, the traveller finds himself in a strange land, and amid a people of whom he will learn to form the very hicridest estimate.

That first dinner, after the eternal bean-coffee, boiled tea, tinned meats, dried vegetables, and "salt horse" of one's ship, in a neat restaurant, where it seems everything on earth can be obtained, will surprise most visitors. An irreproachable potage: broiled salmon (the fish is a drug, almost, on the Paeifie eoasts) ; turtle steaks, oyster plant, artichokes, and green corn; a California quail "on toast;" grand museatel grapes, green figs, and a cooling slice of melon; Roquefort cheese, or a very good imitation of it; black coffee, and
cigars; native wine on the table; California cognae on demand; service excellent-napkins, hot plates, flowers on the table; price moderate for the luxuries obtained, and no waiter's fees. The visitor will mentally forgive the boatman of the morning. Has he arrived in the Promised Land, in the Paradise of bon vivants? It seems so. In the evening, he may take a stroll up Montgomery Street, and a good seat at a creditably performed opera may be obtained. Nobody knows better than the sailor and the traveller the splendid luxury of such moments, after a two or three months' monotonous voyage. And, in good sooth, he generally abandons himself to it. He has earned it, and who shall say him nay? The same evening may be, he will go to a 300 -roomed hotel-they have now one of 750 rooms-where, for three dollars (12s. 6d.), he can sup, sleep, breakfast, and dine sumptuously. He will be answered twenty questions for nothing by a civil clerk in the office of the hotel, read the papers for nothing in the reading-room, have a bath - for nothing - and find that it is not the thing to give fees to the waiters. It is a new revelation to many who have stopped before in dozens of first-class English and Continental houses.
"Seen," says Mr. W. F. Rae,* "as I saw it for the first time, the appearance of San Francisco is enchanting. Built on a hill-slope, up which many streets run to the top, and illumined as many of these strects were with innumerable gas-lamps, the effect was that of a h .ge dome ablaze with lamps arranged in lines and circles. Those who have stood in Princes Street at night, and gazed upon the Old Town and Castle of Edinburgh, can form a very correct notion of the fairy-like spectacle. Expecting to find San Francisco a sity of wonders, I was not disappointed when it seemed to my eyes a city of magic-such a city as Aladdin might have ordered the genii to create in order to astonish and dazzle the spectator. I was warned by those whom personal experience of the city had taught to distinguish glitter from substance, not to expect that the reality of the morrow would fulfil the promise of the evening. Some of the parts which now appeared the most fascinating were said to be the least attractive when viewed by day. Still, the panorama was deprived of none of its glories by these whispers of well-meant warning." The present writer has crossed the Bay in the ferry and other loats a hundred times, and on a fine night-and they have about nine months of fine nights in California -he never missed the opportunity of going forward towards the bows of the boat when it approached San Francisco. As Mr. Rae writes, "The full-orbed stars twinkling overhead are almost rivalled by the myriads of gas-lights illuminating the land." Less than thirty years ago this city of 300,000 souls was but a mission-village, and the few inhabitants of Califormia were mostly demoralised Mexicans, lazy half-breeds, and wretched Indians, who could almost live without work, and, as a rule, did so. Wild cattle roamed at will, and meat was to be had for the asking. The only ships which arrived were like the brig Pilgrim, described by Dana in "Two Years before the Mast," bound to California for hides and tallow. Now, the tonnage of the shipping of all nations which enters the port of San Francisco is enormous. The discovery made by Marshall, in 1847, first brought about the revolution. "Such is the power of gold." Now, California depends far

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Those Yastle of to find cyes a order to ience of reality ich now by day. 11-meant hundred alifornia at when verhcad 11 thirty abitants Indians, at will, he brig or hides port of brought nds far
more on her corn, and wool, and hides, her wine, her grapes, oranges, and other fruits, and on innumerable industries. Reader, you have eaten bread made from California wheatit fetches a high price in Liverpool on account of its fine quality ; you may have been clothed in California wool, and your boots made of her leather; more than likely you have drunk California wine, of which large quantities are shipped to Hamburgh, where they are watered and doctored for the rest of Lurope, and exported under French and German names; your head may have been shampooed with California borax; and your watch-chain was probably, and some of your coin assuredly, made from the gold of the Golden State.

This is not a book on "The Land," but two or three storics of Californian life in the early days may, however, be forgiven. The first is of a man who had just landed from a ship, and who offered a sornewhat seedy-looking customer, lounging on the wharf, a dollar to carry his portmanteau. He got the reply, "I'll give you an vunee of gold to see you carry it yourself," The new arrival thought he had come to a splendid country, and shouldered his burden like a man, when the other, a successful gold-finder, not merely gave him his ounce-little less than \&it sterling-but treated him to a bottle of champagne, which cost another ounce. The writer can well believe the story, for he paid two and a half dollars-nearly half a guinea-for an Illustrated London News, and two dollars for a copy of Punch, in the Cariboo mines, ia 1863; while a friendnow retired on a competency in England-started a little weekly newspaper, the size of a sheet of foolscap, selling it for one dollar ( 4 s .2 d. ) per copy. He was fortunately not merely a competent writer, but a practical printer. He composed his articles on paper first, and then in type; worked the press, delivered them to his subscribers, collected advertisements and payments, and no doubt would have made his own paper-if rags had not been too costly 1

A sailor purchased, about the year 1849, in an auction-room, while out on a "sprec," the lots of land on which the Plaza, one of the most important business squares of San Francisco, now stainds. He went off again, and after several years cruising about the world, returned to find himself a millionaire. Th, City Hall stands on that property; it is surrounded by offices, shops, and hotels, and very prettily planted with shrubs, grass-plots, and flowers.

There was a period when females were so scarce in California that the mines and farmhands, ay, and farmers and proprietoss too-a large number of these were old sailors-would travel any distance merely to see one.* At this present time any decent English housemaid receives twenty dollars ( $£ 4$ ) per month, and is "found," while a superior servant, a first-class cook, or competent housckecper, gets anything from thirty dollars upwards.

Theatres at San Francisco were once rude buildings of boards and canvas, and the stalls were benches. A story is told that at a performance at such a house quite a commetion was cansed by the piercing squall of a healthy baby-brought in by a mother who, perhaps, had not had any amusement for a year or two, and most assuredly had no servant with whom to leave it at home-which was heard above the music. "Here, you

[^62]fiddlers," roareà out a stal:vart man in a red shirt and "gum" boots, just down from thr mines, "stop thel lune; I haven't heard a ba'sy cry for several years; it does me good to hear it." The "one toueh of nature" made that rough audience akin, and all rose to their feet, cheering the baby, and insisting that the orehestra must stop, and stop it did until the child was quieted. Then a eollection was made-not of coppers and small silver, but of ounces and dollars-to present the child with something handsome as a souvenir of its success.

the bay of san franeisco.

San Franciseo, as the most important commercial emporium and port of the whole Pacifie, has a particular interest to the "man of the sea." It has socicties, "homes," and bethels for his benefit, and a fine marine hospital. At the Merchants' Jxehange be will find the latest atipping-news and quotations, while many public institutions are open to him, as to all others. Above all, he will find one of the most conseientions and kind, as well as influential, of British Consuls there-and how often the sailor abroad may need his interference, nnly the satior and merehant knows - who is also one of the oldest in II.B.M. consular servim. No matter his sect, it is represented; San Francisco is full of churches and chapels. If te needs instrumen and literary entertainment, be will get it at the spleudid Mercantile Library, or admirably-eonducted Mechanies' Institute. There is a capital "Art Association," wath burndreds of members. He will find journalism of a new type:
the whole nes," and e he will open to kind, as need his oldest in is full of $t$ it at the a capital rew type:

"live," vigorous, generous, and semi-oceasionally vicious. The papers of San Francisco will, however, compare favonrably with those of any other American city, short of New York and Boston. The sailor will find the city as advanced in all matters pertaining to modern civilisation, whether good or bad, as any he has ever visited. The naval oflicer will find admirable clubs, and if of the Royal Navy will most assuredly be put on the books of one or more of them for the period of his stay. He will find, too, that San Francisco hospitality is unbounded, that balls and parties are nowhere better earried out, and that the rising generation of California girls are extremely good-looking, and that the men are stalwart, finc-looking fellows, very unlike the typical bony Yankee, who, by-the-by, is getting very scarce even in his own pait of the country, the New England States.

If Jack has been to China, he will recognise the truth of the fact that parts of San Francisco are Chinese as Houg Kong itself. There are Joss-houses, with a big, stolidlooking idol sitting in state, the temple gay with tinsel and china, metal-work and paint, smelling faintly of inceuse, and strongly of burnt paper. There que Chinese restaurants by the dozen, from the high-class dining-rooms, with baleonies, flowers, small banners and inscriptions, down to the itinerant restaurateur with his chareoal-stove and soup-pot. Then there are Chinese theatres, smelling strongly of opium and tobacco, where the orchestra sits at the back of the stage, which is curtainless and devoid of scenery. The dresses of the performers are gorgeous in the extreme. When any new arrangement of properties, \&c., is required on the stage, the changes are made before your eyes; as, for example, placing a table to represent a raised balcony, or piling up some boxes to form a eastle, and so forth. Their dramas are often almost interminable, for they take the reign of an emperor, for example, and play it through, night after night, from his birth to his death. In details they are very literal, and hold "the mirror up to nature" fully. If the said emperor had special vices, they are displayed on the stage. The music is, to European ears, fearful and wonderful-a mixture of discordant sounds, resembling those of ungreased cart-wheels and railway-whistles, mingled with the rolling of drums and striking of gongs. Some of the streets are lined with Chinese shops, ranging from those of the merchants in tea, silks, porcelain, and lacquered ware-a dignified and polite elass of men, who are often highly educated, and speak English extremely well-to those of the cigar-makers, barbers, shoemakers, and laundry-men. Half the laundry-work in San Francisco is performed by John Chinaman. There is one Chinese hotel or caravanserai, which looks as though it might at a stretch accommodate two hundred people, in which 1,200 men are packed.

The historian of the future will watch with interest the advancing or receding waves of population as they move over the surface of the globe, now surging in great waves of resistless force, now peacefully subsiding, leaving hardly a trace behind. The Paeific Mail Steamship Company's steamers have brought from China to San Francisco as many as 1,200 Chinamen-and, very occasionally, of course, more than that number-on a single trip. The lowest estimate of the number of Chinese in California is 70,000, while they are spread all over the Pacific states and territories, and, indeed, in lesser numbers, all over the American continent. One finds them in New England factories, New York laundries, and Southern plantations. Their reception in San Franciseo used to be with brickbats and
other missiles, and hooting and jeering, on the part of the lower classes of the community. This is not the place to enter into a discussion on the political side of the question. Suffice it to say that they were and still are a necessity in California, where the expense of reaching the country has kept out "white" labour to an extent so considerable, that it still rules higher than in almost any part of the world. The respectable middle classes would hardly afford servants at all were it not for the Chinese. All the better classes support their claims to full legal and social rights. The Chinamen who come to San Franciseo are not coolies, and a large number of them pay their own passages over. When brought over by merchants, or one of the six great Chineso companies, their passage-money is advanced, and they, of course, pay interest for the accommodation. On arrival in California, if they do not immediately go to work, they proceed to the "Company-house" of their particular province, where, in a kind of caravanserai, rough accommodations for sleeping and cooking are afforded. Hardly a better system of organisation could be adopted than that of the companies, who know exactly where each man in their debt is to be found, if he is hundreds of miles from San Francisco. Were it possible to adopt the same system in regard to emigrants from this country, thousands would be glad to avail themselves of the opportunity of proceeding to the Golden State.

One little anecdote, and the Chinese must be left to their fate. It happened in 1869. Two Chinese merchants had been invited by one of the heads of a leading steamship company to visit the theatre, where they had taken a box. The merehants, men of high standing among their countrymen, accepted. Their appearance in front of it was the signal for an outburst of ruffianism on the part of the gallery ; it was the "gods" versus the celestials, and for a time the former had it all their own way. In vain Lawrence Barrett, the actor, came forward on the stage to try and appease them. He is supposed to have stid that any well-conducted person had a right to his seat in the house. An excited gentleman in the dress-circle reiterated the same ideas, and was rewarded by a torrent of hisses and caterwauling. The Chinamen, alarmed that it might result in violence to them, would have retired, but a dozen gentlemen from the dresscircle and orchestra seats requested them to stay, promising them protection, and the merchants remained. They could see that all the better and more respectable part of the house wished them to remain. After twenty or more minutes of interruption, the gallery was nearly cleared by the police, and the performance alloved to proceed. And yet the very class who are so opposed to the Caucasian complain the the does not spend his money in the country where he makes it, but hoards it up for China. The story explains the actual position of the Chinaman in America to-day. The upper and middle classes, ay, and the honest mechanics who require their assistance, support their claims; the lowest scum of the population persecute, injure, and not unfrequently murder them. Many a poor John Chinaman has, as they say in America, been "found missing."

The sailor ashore in San Francisco may likely enough have an opportunity of feeling the tremor of an earthquake. ${ }^{*}$ As a rule, they have been exceedingly slight, but that of the 21st October, 1868, was a serious affair. Towers and steeples swayed to and fro: tall houses tremblod, badly-built wooden houses became disjointed; walls fell. Many buildings, for some tine afterwards, showed the effects in eracked valls and plastering, dislecated
doors and window-frames. A writer in the Ocerlund Monthly, soon after the event, put the matter furcibly when reealling the great earthquake of Lisbon. He said, "Over the parts of the city where ships anchored twenty years ago, they may anchor again," for the worst effects were contined to the "made" ground-i.e., land rechained from the Bay. Dwellings on the rocky hills were seareely injured at all, reminding us of tho relative fates of the man "who built his house upon a rock" and of him who placed it on the sand. Four persons only were killed on that oecasion, all of them from the fall of badly-eonstrueted walls, loose parapets, \&c. The alarm in the eity was great; exeited people rushing wildly through the streets, and frightened horses ruming through the crowds.

California possesses other ports of importance, but as regards English naval interests in the Paeific, Esquimalt, Vaneouver Island, B.C., which has a fine laud-locked harbour of deep water, doek, and naval hospital, deserves the notice of the reader. It is often the rendezvous for seven or eight of IL.M.'s vessels, from the admiral's Hag-ship to the tiniest steam gun-boat. Vietoria, the eapital, is three miles off, and has a pretty little harbour itself, not, however, adapted for large vessels. Formerly the colonies of Vaneouver Island and British Columbia, the mainland, were separate and distinet colonies; they are now identified under the latter name. Their value never warranted the full paraphernalia of a double colonial government-two governors, colonial secretaries, treasurers, attorney-generals, \&c., \&e.; for these countries, charming and interesting to the tourist and artist, will only attraet population slowly. The resonrees of British Columbia in gold, timber, coal, fisheries, \&c., are considerable; but the long winters on the mainland, and the small quantity of open land, are great drawbaeks. Approaching Vancouver Island from the sea, the "inside channel" is entered through the grand opening to the Straits of Fuea, which Cook missed and Vaneouver diseovered. To the eastward are the roeks and light of Cape Flattery, while the rather low termination of Vancouver Island, thick with timber, is seen to the westward. The seene in the Straits is often lively with steamers and shipping, great men-of-war, sometimes of foreign nationalities; coast packet-boats proceeding not merely to Vancouver Island, but to the ports of Washington Territory, on the Ameriean side; timber (ealled "lumber" always on that side of the world) vessels; colliers proceeding to Nanaimo or Bellingham Bay to the coal-mines; ce -ting and trading selooners; and Iudian canoes, some of them hig enough to aceommodae sixty or more persons, and carrying a good amount of sail. The Straits have many beauties; and as, approaeling the entrance of Esquimalt Harbour, the Olympian range of mountains, snow-eovered and rugged, loom in the distance, the seene is grandly beautiful; while in the channel, rocky islets and islands, covered with pine and arbutus, abound. Outside the Straits two lighthouses are plaeed, to warn the unwary voyager by night. Often those lighthouses may be noted apparently upside down! Mirage is common enough in the Straits of Fuca.

Vietoria, in 1862 , had at least 12,000 or 15,000 people, mostly drawn thither by the fame of the Cariboo mines, on the mainland of British Columbia. Not twenty per cent. ever reacher those mines. When ships arrived in the autumn, it was utterly ueeless to attempt the long journey of aboat 600 miles, partly by steamer, but twothirds of which must be accomplished on foot or horseback, or often mule-back, over
rugged mountain-paths, through swamps and forests. Consequently, a large number had to spend the winter in idleness; and in the spring, in many cases, their resonrces were exhausted. Many became tired of the colony; "roughing it" was not always the pleasant kind of thing they had imagined, and so they went down to Califormia, or left for home. Others were stuck fast in the colony, and many sulfered severe privations; although, so long as they conld mange to live on salmon alone, they eould obtain plenty from the ludians, who hawked it about the streets for a shilling or two shillugs apicee-the latter for a very large lish. The son of a baronet at oue time might be seen breaking stones for a living in Victoria; and muless men had a very distinet calling, profession, or trade, they had to live on their means or have a very rough time of it.

These remarks are not made to deter adventurous spirits from gring abroad; but wo would advise them to "look well hefore they leap." But how utterly unfitted for miningwork were the larger part of the young men who had travelled so farr, only to be disalp pointed. There was no doubt of the gold leeing there: two hundred onnces of the precious metal have been "washed out" in an cight hours' "shift" (a "shift" is the same as a "watch" on board ship); and this was kept up for many days in sueeession, the miners working day and night. But that mine had been three years in process of development, and only one of the original proprietors was among the lucky number cf shareholders. A day or so before the first gold had been fomud-"struck" is the techuical expression-lis eredit was exhausted, and he had beggel vainly for flour, se., to enable him to live and work. The ordinary price of a very orlinary meal was tuea dollars; and it will be seen that, unless employed, or simply travelling for pleasure, it was a ruinous place to stop in. Fancy, then, the condition of perhaps as many as 4,000 unemployed men, out of a total of 7,000 men, on the varions creeks, a good half of whom were of the middle and upper classes at home. But for one happy faet, that beef-which, as the miners said, puckeed itsefff into the mines (in other words, the eattle were driven in from a distance of humdreds of miles)-was reasonally cheap, hundreds of them must have starved. Everything-from flour, tea, sugar, baeon, and beans, to metal implements and machinery-had to be packed there on the backs of mules, and cost from fifty eents and upwards per pound for the mere cost of transportation Tea was ten slillings a pound, flour and sugar a dollar a pound, and so on. Those who fancy that gold-mining, and especially deep gravel-mining, as in Cariboo, is play-work, may be told that it is perhaps the hardest, as it is certainly the most risky and uncertain, work in the world; and that it requires machinery, expensive tools, \&e., which, in places like Cariboo, cost enormous sums to supply. If labour was to le employed -good practical miners, carpenters, \&c. (much of the machinery was of wood)-received, at that period, ten to sixteen dollars per day. This digression may be pardoned, as the sea is so intimately bound up with questions of emigration. $\Lambda_{\mathrm{p}} \mathrm{ar}$ from fhis, from personal observation, the write: knows that quite a proportion of miners have been sailors, and, in many cases, desertel their ships. In the "early days" of Australia, California, and British Columbin, this was eminently the case.

A large proportion of the sailors in the Royal Navg have, or will at some period, pass some time on the Pacific station, in which case, they will inevitubly go to Vancouver

Ishund, where there is much to interest them.* 'They will find Victoria a very pretty little town, with Government honse, eathedral, churches and chapels, a mechanics' institute, a theatre, good hotels and restaurants-the latter generally in l'rench hands. He will find n curions mixture of English and American manners and customs, and a very curious mixture of coinage-shillings being the same as quarter-dollars, while crowns aro only the value of dollars (os., against 4s. 2 d. .). Some years ago the island system was different from that of the mainland; on the latter, florins were equal to half-dollars (which they are, nearly), while on the islund they were $37 \frac{1}{2}$ eents only (ls. $7 \frac{1}{2}$ d.). The Hudson's Bay Company, which has trading-posts throughont British Columbia, took

the hutisil camp: san juan.
advantage of the fact to give change for Ameriean money, on their steamers, in English florins, obtaining them on the island. They thus made nearly twenty-five per cent. in their transaction, besides getting paid the passenger's fare. Yet the traveller, strange to say, did not lose by this, for, on landing at New Westminster, he found that what was rated at a little over eighteenpence on Vancouver Island, had suddenly, after travelling only seventy miles or so, inereased in value to upwards of two shillings !

Outside Victoria there are many pleasant drives and walks: to "The Arm," where, amid a charming landscape, interspersed with pines and natural fir woods, wild flowers, and mossy roeks, there is a pretty little rapid, or fall; to Sanich, where the settlers' homesteads have a semi-eivilised appearance, half of the houses being of squared logs, but

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comfortable withal insile, and where a rele plenty reigns; or to Beacon Hill, where there is an excellent race-course and drive, which commands fine views up and down the Straits. In sight is San Juan Island, over which England and Anerica once squabbled, while the two garrisons which occupied it fraternised cordially, and outvied with each other in hospitality. The island-rocky, and covered with forest and underbrush, with a farm or two, made by clearing away the big trees, with not a little difficulty, and burning and partially uprooting the stumps-does not look a worthy subject for international differences. But the fact is, that it commands the Straits to some extent. However, all that is over now, and it is England's property by diplomatic arrangement. There are other islands, nearly as large, in the archipelago which stretches northward up the Gulf of Georgia, which have not a single human inhabitant, and have never been visited, except by some stray Indians, miners, or traders who have gone ashore to cook a meal or camp for the night.

Any one who has travelled by small canoes on the sea must remember those happy camping-times, when, often wet, and always hungry and tired, the little party cautiously selected some sheltered nook or specially good beach, and then paddled with a will ashore. No lack of drift-wood or small trees on that coast, and no lord of the manor to interfere with one taking it. A glorious fire is soon raised, and the cooking preparations commenced. Sometimes it is only tlie stereotyped tea-frying-pan bread (something like the Australian "damper," only baked before the fire), or "slapjacks" (i.e., flour-and-water pancakes), fried bacon, and boiled Chili beans; but ofttimes it can be varied by excellent fish, game, bearmeat, venison, or moose-meat, purchased from some passing Indians, or killed by themselves. It is absurd to suppose that "roughing it" need mean hardship and semi-starvation all the time. Not a bit of it! On the northern consts now being described, ene may often live magnificently, and most travellers learn instinctively to cook, and make the most of things. Nothing is finer in camp than a roast fish-say a salmon-split and gutted, and stuck on a stick before the fire, not over it. A ferv dozen turns, and you have a dish worthy of a prince. Or a composition stew-say of deer and bear-meat and beaver's tail, well seasoned, and with such vegetables as you may obtain there; potatoes from some seaside farm-and there are such on that coast, where the settler is as brown as his Indian wife-or compressed vegetables, often taken on e.plcring expeditions. Or, again, venison dipped in a thick batter and thrown into a pan of boiling-hot fat, making a kind of meat fritter, with not a drop of its juices wasted. Some of these explorers and miners are veritable chefs. They can make good light bread in the woods from plain flour, water, and salt, and ask no oven but a frying-pan. They will make beans, of a kind only given to horses at home, into a delicious dish, by boiling them soft-a long job, generally done at the night camp -and then frying them with bread-crumbs and pieces of bacon in the morning, till they are brown and crisp.

It was at one of these camps, on an island in the Gulf of Georgia, that a camp fire spread to some grass and underbrush, mounted with lightning rapidity a steep slope, and in a fer minutes the forest at the top was ablaze. The whole island was soon in flames! For hours afterwards the flames and smoke could be seen. No harm was done; for it is extremely unlikely that island will be inhabited for the next five hundred years. But
forest fires in partially inhabited districts are more serious, or when near trails or roads. In the long summer of Vancouver Island, where rain, as in California, is almost unknow:n, these fires, once started, may burn for weeks-ay, months.

The Indians of this part of the coast, of dozens of petty tribes, all speaking different languages, or, at all events, varied dialects, are not usually prepossessing in appearance, but the male half-breeds are often fine-looking fellows, and the girls pretty. The sailor will be interested in their cedar canoes, which on Vancouver Island are beautifully modelled. A first-class elipper has not more graceful lines. They are always cut from one log, and are fincly and smoothly finished, being usually painted black outside, and finished with red ornamental work within. They are very light and buoyant, and will carry great weights; but one must be careful to avoid rocks on the coast, or "snags" in the rivers, for any sudden concussion will split them all to pieces. When on the Vancouver Island Exploring Expedition, a party of men found themselves suddenly deposited in a swift-running stream, from the cance having almost parted in half, after touching on a sunken rock or log. All got to shore safely, and it took about half a day of patching and caulking to make her sufficiently river-worthy (why not say "river-worthy" as well as "sea-worthy?") to enable them to reach camp. The writer, in 1864, came down from the extreme end of Bute Inlet-an arm of the sea on the mainland of British Columbia-across the Gulf of Georgia (twenty miles of open sea), coasting southwards to Victoria, V.I., the total voyage being 180 miles, in an open cedar canoe, only large enough for four or five people. The trip oceupied five days. But while there is some risk in such an undertaking, there is little in a voyage in the great Haidah canoes of Queen Charlotte's Island (north of Vancouver Island). These canoes are often cighty feet long, but are still always made from a single log, the splendid pines of that coast* affording ample opportunity. They have masts, and carry as much sail as a schooner, while they can be propelled by, say, forty or fifty paddles, half on either side, wielded by as many pairs of brawny arms. The sevage Haidahs are a powerful race, of whom not much is knowu. They, however, often come to Victoria, or the American ports on Puget Sound, for purposes of trading.
"How," it might be asked, "does the trade communieate with so many varieties of natives, all speaking different tongues?" The answer is that there is a jargon, a kind of "pigeen-English," which is aequired, more or less, bv almost all residents on the coast for purposes of intereourse with their Indian servants or others. This is the Chincok jargon, a mixture of Indian, Euglish, and French-the latter coming from the French Canadiau voyageurs, often to be found in the employ of the Hudson's Bay Company, as they were formerly in the defunct North-West Company. Some of the words used have curious oriz̧ins. Thus, an Englishman is a "King-George-man," becanse the first explorers, Cook, Vanconver, and others, arrived there during the Georgian era. An American is a "Boston-man," because the first ships from the United States which visited that coast

[^65]hailed from Boston. This lingo has no grammar, and a very few hundred words satisfies all its requirements. Young ladies, daughters of Hudson's Bay Company's employés in Victoria, rattle it off as though it were their mother-tongue. "Ikte mika tikkee?" ("What do you want?") is probably the first query to an Indian who arrives, and has something to sell. "Nika tikkee tabac et la biscuit" ("I want some tobacco and biscuit"). "Cleush; mika potlatch salmon?" ("Good; will you give me a salmon?"). "Nāwitka, Se-ām" ("Yes, sir") ; and for a small piece of black cake-tobacco and tivo or three biscuits (sailors' "hard bread" or "hard tack") he will exchange a thirty-pound or so sulmon.

The Chinook jargon, in skilful hands, is susceptible of mueh. But it is not adapted for sentiment or poetry, although a naval officer, onee stationed on the Pacific side, did evolve an effusion, which the sailor is almost sure to hear there. It needed, however, a fair amount of English to make it read pleasantly. Old residents and visitors will recognise some of its stanzas:-

> "Oh! be net quass of nika;
> Thy scahoose iurn on me;
> For thou must but hyas cumtux, That I hyas tikkee thee! Nika potiatch hyu ictas; Nika makook sappalell Of persicees and la biscuit, I will give thee all thy fill!"
which, addressed to a "sweet Klootchman," a "forest maiden," means, that loving her so much, all that he had was hers. Much greater absurdities have been put in plain English.

A bishop of British Columbia was, however, hardly so successful; not being himself a student of Chinook, the entire vocabulary of which would have taken him rather less time to learn than the barest elements of Latin, he engaged an interpreter, through whom to address the Indians. The latter was perfectly competent to say all that can be said in Chinook, but was rather nonplussed when his lordship commenced his address by "Children of the forest!" He scratched his head and looked at the bishop, who, however, was determiner", ad commenced once more, "Children of the forest!" The interpreter knew that it m . nake nonsense, but he was cornered, and had to do it. And this is what he said: "Tenass man copa stick!"-literally, "Little men among the stumps" (or trunks of trees). The writer will not comment upon the subject here, more than to say that Chinook is not adapted for the translation of Milton or Shakespeare; while the simplest story or parable of the Scriptures must be unintelligible, or worse, when attempted in that jargon.

The only other settlement on Vancouver Island which has any direct interest to the Royal Navy, is Nanaimo, the coal-mines of which yield a large amount of the fuel used by the steamships when in that neighbourhood and about all that is used on the island; a quantity is also shipped to San Francisco. The mines are worked by English companies, and are so near the coast that, by means of a few tramways and locomotives, the coal is conveyed to the wharves, where it can be at once put on board. It is a pleasant
ls satisfies employés tikkee?" and has biscuit").
" Nāor three and or so t adapted side, did ver, a fair recognise
g her so lish. , himself less time whom to said in Children ver, was er knew what he $r$ trunks say that simplest in that ael used sland ; a npanies, he coal pleasant
little place, and many an Finglish miner would be glad to be as well off as the men settled there, who earn more money than at home, own their cottages and plots of land, obtain most of their supplies cheaper than in England, and have a beautiful gulf before them, in summer, at least, as calm as a lake, on which boating and canoeing is all the rage in the evenings or on holidays.

The Pacifie Station is an extensive one, for it commences at the most northernmost parts of Bering Sea, and extends below Cape Horn. It embraces the Alaskan coast. Many English men-of-war have visited these latitudes, principally, however, in the cause of seience and discovery.

In the old days, when the colony of Russian America was little better than are many parts of Siberia-convict settlements-the few Government officials and officers of the Russian Fur Company were, it may well be believed, only too ready to welcome any change in the monotony of their existence, and a new arrival, in the slape of a ship from some foreign port, was a day to be remembered, and of which to make much. The true Russians are naturally hospitably and sociably inclined, and such times were the occasion for balls, dinners, and parties to any extent. The writer well remembers his fisst visit to Sitka, which, although the capital of Alaska, is situated on an island off the mainland. On approaehing the small and partially land-locked harbour, a mountain of no inconsiderable height, wooded to the top, appeared in view, and below it a little town of highly-coloured roofs, in the middle of which rose a picturesque rock, surmounted by a semi-fortified castle, which, in the distance at least; looked most imposing. Near this, but separated by a stockade, was the village of the Kalosh Indians, a powerful tribe, who had at times, as the members of the expedition learned, given a considerable amount of trouble to the Russians-in 1804 they murdered nearly the whole of the Russian grarrison-while beyond on every side were rocky shores and wooded heights. An old hulk or two, lying on the beach below the old castle, itself principally built of wood, the residence of the Governor of Russian America, then Prince Maksutoff, which had been roofed in and were used for magazines of stores, and some rather shaky pile-wharfs, made up the town.

Soon was experienced the warmth of a Russian welcome, and for a week afterwards a succession of gaieties followed, which were so very gay that they would have killed most men, unless they had been fortified with a long sea-trip just before. Every Russian seemed to wish the party to consider all that he had at their service; the sumovar be 'ed up everywhere as they approached; the little lunch-table of anchovies, and pickles, rye-bread, butter, cheese, and so forth, with the everlasting vorlka, was everywhere ready, and except duty called, no one was obliged to go off at night to the three vessels comprising the expedition to which the writer was attached, for the best bed in the house was always at his service. There was only one bar-room in the whole town, and there only a kind of lager-bier and vorlka were to be obtained. When the country was, for a consideration of $7,250,000$ dollars, transferred to the United States, there was a "rush" from Victoria and San Francisco. Keen Hebrew traders, knowing that furs up country bore a merely rominal price, and that Sitka was the great entrepot for their collectiona million dollars' worth being frequently gathered there at a time-thought they would be able to buy them for next to nothing still. Parcels of land in the town, whieh had not at
the utmost a greater value than a few hundrel dollars, now ran up to fabulons prices; 10,000 dollars was asked for a $\log$ house! Hotels, "saloons"-i.e., bar-rooms à l'Américaine -German lager-bier cellars, and barbers' shops sprang up like mushrooms; a newspaperoffice was opened, and everything reminded one of the sudden growth of mining-towns in the early days of Califoruia. Alas! everything else went up in proportion, excepting salmon, which must be a drug on that coast for many centuries to come; provisions greatly rose in price, and the competition for furs was so great that they became nearly as dear as in San Franciseo. The consequence may be imagined; there was an exodus, and the following January the whole eity could lave been bought for a song. The Russian officials, of course, left it shortly after the transfer, and most of the others as speedily as they could. The "capital" has never recovered from the shock; for, although organised fur-companies are seattered over the country, in one instance the United States Government l-esing the sole right-that of fur-sealing, on the Aleutian Islands-to a firm which has a Russian prince as a partner, Sitka is not the entrepuit it was; everything in furs is brought to San Franciseo before being consignel to all quarters of the globe. The value of Alaska to the United States is at present very small, but so little is known about it that oue can hardly form an estimate concerning its future. It possesses minerals, but these will always be worked with difficulty, on aceount of the climate. Ite grand salmon-fisheries are, however, a tangible property; the cod in Bering Sea is as plentiful as it ever was on the Newfoundland banks; and there are innumerable forests of trees, easily accessible, reaching down to the coast-of pines, firs, and cedars, of size sufficient for the tallest masts and largest spars, so that Alaska has a direet interest for the ship-builder.

By its acquisition, the United States not merely extended its seaboard for, say, 1,500 miles north, but it oltained Mount St. Elias, by far the largest peak of the North American continent, and one of the loftiest mountains of the gुlobe. "Upon Mont Blane," says an American writer, $\dagger$ "pile the loftiest summit in the British Islands, and they would not reach the altitude of Mount St. Elias. If a man conld reaeh its summit, he would be tro miles nearer the stars than any other American could be, east of the Mississippi. . . . . As a single peak it ranks among the half-lozen loftiest on the globe. Some of the Himalaya summits reach, indeed, a couple of miles nearer Orion and the Pleiades, but they rise from an elevated plateau sloping gradually upwards for hundreds of miles. As an isolated peak, St. Elias may look down upon Mont Blane and Teneriffe, and claim brotherhood with Chimborazo and Cotopaxi." It acquired also one of the four great rivers of the globe, of which the writer had the pleasture of being one of the earliest explorers. The Yukon, which renders the waters of Bering Sea fresh or semi-fresh for a dozen miles beyond its many mouths, is a sister-river to the Amazon, Mississippi, and, perhaps, the Plata; it has affluents to which the Rhine or Rhône are but brooks.

The Kalosk Indians of Sitka live in semi-eivilised wooden barns or houses, with

[^66]railroad-which, during its construction, is said to have cost the life of a Chinaman for every sleeper laid down, so fatal was the fever of the isthmus-has the dearest fares of any in the world. The distance from Panama across to Aspinwall (Colon) is about forty miles, and the fare is $\mathfrak{£ 5}$ ! An inmense amount of travel crosses the isthmus; and it is only matter of une for a canal to be cut through some protion of it, or the isthmus of Darien adjoining. Steamers of the largest kind are arriving daily at Panama from San Franeisco, Mexieo, and all parts of South Ameriea; while, on the Atlantie side, they come from Southampton, Liverpool, New York and other American ports.

Southward, with favouring breezes and usually calm seas, one soon arrives at Callaoa plaee which may yet become a great city, but which, like everything else in Peru, has been retarded by interminable dissensions in regard to government and polities, and by the ignorance and bigotry of the masses. Peru had an advantage over Chili in wealth and importanee at one (ime; but, while the latter country is tc-day one of the most satisfactory and stable republics in the world, one never knows what is going to happen ne:t in Peru. Henee distrust in commeree; and hence the sailor will not find a tithe of the shipping in Callao Roads that he will at the wharfs of Valparaiso. Lima, the eapital, is situatel behind Callao, at a distance of about six miles. When seen from the deek of a vessel in the roadstead, the eity has a most imposing appearance, with its innumeralle domes and spires rising from so elevated a situation, and wearing a strange and rather Moorish air. On nearing the eity, everything speaks eloquently of past splendour and present wretehedness; publie walks and eleguat ornamental stone seats choked with rank weeds, and all in ruins. You enter Lima through a triumphal arch, tawdry and tumbling to pieces; you find that the elurches, which looked so imposing in the distance, are principally stuceo and tinsel. Lima has a novelty in one of its theatres. It is built in a long oval, the stage cecupying nearly the whole of one long side, all the boxes being thus comparatively near it. The pit andience is men, and the galleries, women; and all help to fill the house, between the acts, with tobacco smoke from their eigarettes.

The sailor, who has been much among Spanish people or those of Spanish origin, will find the Chilians the finest race in Sonth America. Valparaiso Harbour is always full of shirping, its wharfs piled with goods; while the railroad and old road to the capitai, Santiago, bears evidence of the material prosperity of the country. The country roads are crowded with convoys of pack-mules, while t $\because$ oships are loading up with wheat, wines, and minerals, the produce of the country. Travelling is free everywhere. Libraries, schools, literary, seientifie, and artistic societies abound; the best newspapers published in South America are issued there. Santiago, the city of marble palaces-where even horses are kept in marble stalls-is one of the most delightful places in the world. The lofty Andes tower to the skies in the distanee, forming a grand background, and a fruitful, cultivated, and peaceful country surrounds it.

Valparaiso-the "Vale of Paradise"-was probably named by the early Spanish ad:enturers in this glowing style because any ccast whatever is delightful to the mariner who has been long at sea. Otherwise, the title would seem to be of an exaggerated nature. The bay is of a semi-eireular form, surrounded by steep hills, rising to the height of near 2,000 feet, sparingly covered with stunted shrubs and thinly-strewed grass. The town is

1 an for ares of about s ; and sthmus a from c side,

built along a narrow strip of land, between the cliffs and the sea; and, as this space is limited in extent, the buildings have straggled up the sides and bottoms of the numerous ravines which intersect the hills. A suburb-the Almendral, or Almond Grove-much larger than the town proper, apreads over a low sandy plain, about half a mile broad, bordering the bay. In the summer months-i.e., November to March-the anchorage is safe and pleasant; but in the wintry months, notably June and July, gales are prevalent from the north, in which direction it is open to the sea.

Captain Basil Hall, R.N., gave some interesting accounts of life in Chili in his published Journal,* and they are substantially true at the present day. He reached Valparaiso at Christmas, whieh corresponds in climate to our midsummer. Crowds thronged the streets to enjoy the cool air in the moonlight; groups of merry dancers were seen at every turn; singers were bawling out old Spanish romances to the tinkle of the guitar; wild-looking horsemen pranced about in all directions, stopping to talk with their friends, but never dismounting; and harmless bull-fights, in which the bulls were only teased, not killed, served to make the people laugh. The whole town was en carnival. "In the course of the first evening of these festivities," says Captain Hall, "while I was rambling about the streets with one of the officers of the ship, our attention was attracted, by the sound of music, to a crowded pulperia, or drinking-house. We accordingly entered, and the people immediately made way and gave us seats at the upper end of the apartment. We had not sat long before we were startled by the loud clatter of horses' feet, and in the next instant, a mounted peasant dashed into the company, followed by another horseman, who, as soon as he reached the centre of the room, adroitly wheeled his horse round, and the two strangers remained side by side, with their horses' heads in opposite directions. Neither the people of the house, nor the guests, nor the musicians, appeared in the least surprised by this visit; the lady who was playing the harp merely stopped for a moment to remove the end of the instrument a few inches further from the horses' feet, and the music and conversation went on as before. The visitors called for a glass of spirits, and having chatted with their friends around them for two minutes, stooped their heads to avoid the cross-piece of the doorway, and putting spurs to their horses' sides, shot into the streets as rapidly as they had entered; the whole being done without discomposing the company in the smallest degree." The same writer speaks of the common people as generally very temperate, while their frankness and hospitality charmed him. Brick-makers, day-labourers, and washerwomen invited him and friends into their homes, and their first anxiety was that the sailors might "feel themselves in their own house;" then some offering of milk, bread, or spirits. However wretched the cottage or poor the fare, the deficiency was never made more apparent by apologies; with untaught politeness, the best they had was placed before them, graced with a heariy welcome. Their houses are of adobes, i.e., sun-dried bricks, thatched in with broad palm-lea'es, the ends of which, by overhanging the walls, afford shade from the scorching sun and shelter from the rain. Their mud floors bave a portion raised seven or eight inches above the level of the rest, and covered with matting, which forms the couch for the invariable sies/a. In the cottages Hall saw young women grinding baked corn in

[^67]space is umerons much ordering tafe and rom the friends, teased, 'In the ambling by the ed, and urtment. in the rseman, nd, and ections. he least moment and the its, and to avoid streets ompany y very ourers, as that ead, or le more them, hed in om the ven or couch orn in
almost Seriptural mills of two stones each. From the coarse flour obtained, the poor people make a drink cailed $u / p a$. In the better class of houses he was offered Paraguay tea, or mattee, an infusion of a South American herb. The natives drink it almost boiling hot, It is drawn up into the mouth through a silver pipe: however numerous the company, all use the same tube, and to decline on this account is thought the height of rudeness. The people of Chili, generally, are polite to a degree; and Jack ashore will have no cause to complain, provided he is as polished as are they. He generally contrives, however, to make himself popular, while his little escapades of wildness are looked upon in the light of long pent-up nature bursting forth.

## CHAPTER XI.

Round the Wohld on a Man-of-War (continuelt).
from the hoin to halifax.
The dreaded Horn-The Land ef Fire-Basil Hall's Ihenomenon-A Missing Voleano-The Souih American StationFaiklanal Islands-A Free Port and Naval Station-Penguins, Peac, and Kelp--Sea Trees-The West India Station-Trinidnd-Columbus's First View of it-Fatal Gold-Charles Kingsley's Enthusiasm-The Port of Spain-A Happy-go-Jucky Peoplo-Negro Lifo-Letters from a Cottage Ornée-Tropical Vegetation-Animal Lite-Jamaica-Kingston Harbour-Sugar Cultivation-Tho Queen of the Antilles-Its laseo-Beauty of the Arehipelago-A Duteh settlement in the Heart of a Voleano-Among the Islands-The Souffrière-Historical Reminiscences-Bermuda Colony, Fortrese, and Prison-Homo of Ariel and Caliban-The Whitest Place in the Worid-Bermuda Conviets-New York Harbour -The City--First Impressions-Its fine Posilion-Splendid Harbour-Forest of Masts-The Ferry-boats, Hotels, and Bars-Offenbach's Impressions-Broadway, Fulton Market, and Central Park-New York in Winter-Frozen Ships -The great Brooklyn Bridge-Halifax and its Beautics-Importnnec of the Station-Hedford Basin-The Early Settlers-The Blue Noses-Adien to America.

And now the exigencies of the service require us to tear ourselves away from gay and pleasant Valparaiso, and voyage in spirit round the Horn to the South-East American Station, which includes the whole coast, from Terra del Fuego to Brazil and Guiana. Friendly ports, Rio and Montevideo, are open to the Royal Navy as stations for necessary repairs or supplics; but the only strictly British port on the whole station is that at the dreary Falkland Islands, to be shortly described.

Every schoolboy knows that Cape Horn is even more drended than the other "Cape of Storms," otherwise known as "The Cape," par e.recllence. In these days, the introduction of steam has reduced much of the danger and horrors of the passage round, though on occasions they are sufficiently serious. In fact, now that there is a regular tug-boat service in the Straits of Magellan, there is really no occasion to go round it at all. In 1862 the writer rounded it, in a steamer of good power, when the water was as still as a mill-pond, and the Horn itself-a barren, black, craggy, precipitous rock, towering above the utter desolation and bleakest solitudes of that forsaken spot-was plainly in sight.

Captain Basil Hall, and his officers and crew, in 1820, when rounding Cape Horn observed a remarkable phenomenon, which may account for the title of the "Land of Fire" bestowed upon it by Magellan. A brilliant light suddenly appeared in the north-western
quarter. "At first of a bright red, it beenme fainter and fainter, till it disappeared altogether. Alter the lapse of four or five minutes, its brillianey was suddenly restorel, und it seemed as if a column of burning materials hal been projected into the air. This bright nppearance lasted from ten to twenty seconds, fading by degrees as the column beeume lower, till at length only a dull red muss was distinguishable for about a minute, after which it again vanished." The sailors thought it a revolving light, others that it must be a forest on fire. All who examined it earefully through a telescope agreed in considering it a voleano, like Stromboli, emitting alternately iets of llame and red-hot stones. The light was visiblo


CAI'E HOKN.
till morning; and although during the night it appeared to be not more than eight or ten miles off, no land was to be seen. The present writer would suggest the probability of its having been an electrical phenomenon.

The naval station at the lalklands is at Port Stanley, on the eastern island, where there is a splendid land-locked harbour, with a narrow entrance. The little port is, and has been, a haven of refuge for many a storm-beaten mariner: not merely from the fury of the elements, but also because supplies of fresh meat can be obtained there, and, indeed, everything else. Wild cattlc, of old Spanish stock, roam at will over many parts of the two islands. When the writer was there, in 1862 , beef was retailed at fourpence per pound, and Port Stanley being a free port, everything was very eheap. How many boxes of cigars, pounds of tobaeco, cases of hollands, and demijohns of rum were, in consequenee,
ltogether. it seemed ppearance r, till at it again on fire. eano, like as visiblo obability d, where $t$ is, and the fury 1, indeed, $s$ of the ence per ay boxes sequence,
tuken on loard by his 300 fellow-passengers would be a serious culculation. The little town has not much to recommend it. It has, of course, a Government House and a chureh, and barracks for the marines stationed there. It is, moreover, the head-quarters of the Falkland Islands Company, a corporation mueh like the Hudson's Bay Company, trading in furs and hides, and stores for ships and native trade. The three great characteristirs of Port Stanley are the penguins, which abouad, and are to be seen waddling in troops

the zanding of colembis at tainidab.
in its immediate vicinity, and stumbling over the stones if pursued; the kelp, which is so thick and strong in the water at the edge of the bay in places, that a strong boat's crew can hardly get "way" enough on to reach the shore; and the peat-bogs, whieh would remind an Irishman of his beloved Erin. Peat is the principal fuel of the plaee; and what glorious fires it makes 1 At least, so thought a good many of the passengers who took the opportunity of living on shore during the fortnight of the vessel's stay. For about three shillings and sixpence a day one could obtain a good bed, meals of beef-steaks and joints and fresh vegetables-very welcome after the everlasting salt junk and preserved vegetables of the ship-with the addition of hot rum and water, nearly all libitum. Then the privilege of stretching one's legs is something, after five or six weeks' confinement. There is duck and
loon-shooting to he had, or an excursion to the lighthouse, a few miles from the town, where the writer found children, of several years of age, who had never even beheld the glories of Port Stanley, and yet were happy; and near which he saw on the beach .sea-trees -for "sea-weed" would be a misnomer, the trunks being several feet in circumfereneeslippery, glutinous, marine vegetation, uprooted from the depths of ocean. Some of them would create a sensation in an aquarium.

The harbour of Port Stanley is usually safe enough, but, in the extraordinary gales which often rage outside, does not always afford safe anchorage. The steamship on which the writer was a passenger lay far out in the bay, but the foree of a sudden gale made her drag her anchors, and but for the steam, which was immediately got up, sbe would have gone achore. A sailing-vessel must have been wrecked in the same position. Of course, the power of the engines was set against the wind, and she was saved. Passengers ashore could not get off: for two days, and those on board could not go ashore. No boat could have lived, even in the bay, during a large part of the time.

The West Indian Station demands our attention next. Unfortunately, it must not take the spaee it deserves, for it would occupy that required for ten books of the size of this -ay, twenty-to do it the barest justice. Why? Read Charles Kingsley's admirable work, "At Last"--one, alas! of the last tasks of a well-spent life-and one will see England's interest in those islauds, and must think also of those earlier days, when Columbus, Drake, and Raleigh sailed among the waters which divide them-days of geographical discovery worth speaking of, of grand triumphs over foes worth fighting, and of gain amounting to sometiing.

On the 31st July, l499, Columbus, on his third voyage, sighted the three hills which make the south-eastern end of Trinidad. He had determined to name the first land he should sight after the Holy Trinity, and so he did. The triple peaks probably remindel him.

Washington Irving tells us, in his "Life of Columbus," that he was astonished at the verdure and fertility of the country, having expected that it would be parched, dry, and sterile as he approached the equator; whereas, he beheld beautiful groves of palm-trees, and luxuriant forests sweeping down to the sea-side, with gurgling brooks and clear, deep streams beneath the shade. The softness and purity of the climate, and the beauty of the country, seemed, after his long sea voyage, to rival the beautiful provinee of Valencia itself. Columbns found the people a race of Indians fairer than any he had seen before, "of good stature, and of very gracefil bearing." They carried ssuare bucklers, and had bows and arrows, with which they made feehle attempts to drive off the Spaniards who landed at Punta Arenai, near Icacque, and who, linding no streams, sank holes in the sand, and so filled their casks with fresh water-as is done by sailors now-a-days in many parts of the world. "And there," says Fingsley, "that source of endless misery to these harmless creatures, a certain Cacique-so goes the tale-took off Columbus's eap of erimson velvet, and replaced it with a eircle of gold which he wore."

Alas for them! that fatal present of gold brought down on them enemies far more ruthless than the Caribs of the northern islands, who had a habit of eoming down in their camoss and carrying off the gentle Arrawaks, to eat them at their leisure-after the fashion
the town, beheld the h .sea-trees mferencee of them nary gales on which gale made she would Of course, ers ashore boat could must not ize of this admirable will see eys, when -days of hting, and
rills which $t$ land he probably red at the dry, and ralm-trees, clear, deep aty of the cia itself. " of good bows and landed at d, and so rts of the harmless on velvet,

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 in their e fashionwhich Defoe, always accurate, has immortalised in "Robinson Crusoe." Crusoe's island has been thought by many to be meant for Tobago; Man Friday haviug been stolen in Trinidad.

No scenery can be more picturesque than that afforded by the entrance to Port of Spain, the chief town it the colony of Trinidad, itself an island lying outside the delta of the great Orinoco River. "On the mainland," wrote Anthony Trollope,* "that is, the land of the main island, the coast is precipitons, but elothed to the very top with the thickest and most magnifieent foliage. With an opera-glass, one can distinctly see the treos coming forth from the sides of the roeks, as though no soil were necessary for them, and not even a shelf of stone needed for their support. And these are not shrubs, but forest trees, with grand spreading branches, huge trunks, and brilliant-colourci foliage. The small island on the other side is almost equally wooded, but is less precipitons." There, and on the main island itself, are nooks and open glades where one would not be badly off with straw hats and muslin, pigeon-pies and champagne. One narrow shady valley, into which a creek of the sea ran, made Trollope think that it must have been intended for "the less noisy joys of some Paul of Trinidad with his Creole Virgimia." The same writer, atice deseribing the Savannah, which includes a park and race-course, speaks of the Government House, then under repairs. The governor was living in a cottage, hard by. "Were I that great man," said he, "I should be tempted to wish that my great house might always be under repair, for I never saw a more perfect specimen of a pretty spacious cottage, opening, as a cottage should do, on all sides and in every direction. . . . And then the necessary freedom from boredom, etiquette, and governors' grandeur, so hated by governors themselves, which must necessarily be brought about by such a residence! I could almost wish to be a governor myself, if I might be allowed to live in such a cottage." The buildings of Port of Spain are almost invariably surrounded ly handsome flowering trees. A later writer tells us that the governors since have stuck to the cottage, and the gardens of the older building have been given to the city as a public pleasure-ground. Kingsley speaks of it as a paradise.

Jack ashore, who, after a long and perhaps stormy voyage, would look upon any land as a haven of delight, will certainly think that he has at last reached the "hapiy land." It is not merely the climate, the beauty, or the productions of the country; nor the West Indian politeness and hospitality-both proverbial; but the fact that nobody seems to do, or wants to do, anything, and yet lives ten times as well as the poorer classes of England. There are 8,000 or more human beings in Port of Spain alone, who "toil not, neither do they spin," and have no other visible means of subsistence except eating something or other-mostly fruit-all the live-long day, who are happy, very happy. The truth is, that though they will, and frequently do, eat more than a European, they can almost do without food, and can live, like the Lazzaroni, on warmth and light. "The best substitute for a dinner is a sleep under a south wall in the blazing sun; and there are plenty of south walls in Port of Spain." Has not a poor man, under these circumstances, the same right to be idle as a rich one? Every one there looks strong, healthy, and well-fed. The author
" "The West Indies and the Spanish Main."
of "Westward Ho!" was not likely to be deeeived, and says: "One meets few or none of those figures and faces-small, serofulous, squinny, and haggard-which disgrace the civilisation of a British city. Nowhere in Port of Spain will you see such human beings as in certain streets of London, Liverpool, and Glasgow. Every one plainly can live and thrive if they choose; and very pleasant it is to know that." And wonderfully well does that mixed and happy-go-lucky population assimilate. Trinidad belongs tn Great Britain;

view in Jamaica.
but there are more negroes, half-breeds, Hindoos, and Chinese there than Britons by ten times ten; and the language of the island is mainly French, not English or Spanish. Under cool porticoes and through tall doorways are seen dark shops, built on Spanish models, and filled with everything under the sun. On the doorsteps sit negresses, in flashy Manchester "prints" and stiff turbans, "all aiding in the general work of doing nothing," or offering for sale fruits, sweatmeats, or chunks of sugar-cane. These women, as well as the mer, invariably carry everything on their heads, whether it be a half-barrow load of yams, a few ounces of sugar, or a beer-bottle.

One of the regrets of an enthnsiastie writer must ever be that he cannot visit all the lovely and interesting spois which he may so easily describe. The present one, enamoured
with San Franciseo, which he kus visited, and Singapore and Sydney, which as yet he hasu't, would, if suel writers as Charles Kingsley and Anthony Trollope are to be credited, add 'Trinidad to the list. Read the former's "Letter from a West Indian Cottage Ornee," or the latter's description of a ride through the cool woods and sea-shore roads, to be convinced that Trinidad is one of the most charming islands in the whole world. Bamboos keep the cottage gravel path up, and as tubes, carry the trickling, cool water to the cottage bath; you hear a rattling as of boards or stiff paper outside your window : it is the clashingtogether of a fan-palm, with leaf-stalks ten feet long and fans more feet wide. The orange, the pinc-apple, and the "flower fence" (Poinziana) ; the cocoa-palm, the tall Guinea grass, and the "groo-groos" (a kind of palm: Acrocomia selerocarpa); the silk-cotton tree, the tamarind, and the Rosa del monte bushes - twenty feet high, and covered with crimson roses; tea shrubs, myrtles, and clove-trees intermingle with vegetation common elsewhere. Thus much for a mere chance view.

The seaman ashore will note many of these beauties; but his superior officers will see more. The coltage ornée, to which they will be invited, with its lawn and flowering shruls, tiny specimens of which we admire in hot-houses at home; the grass as green as that of England, and winding away in the cool shade of strange evergreens; the yellow cocoa-nut palms on the nearest spur of hill throwing back the tender blue of the distant mountains; groups of palms, with perhaps Erythrinus umbrosa (Bois immortelles, they eall them in Trinidad), with vermilion flowers-trees of red coral, sixty feet high-interspersed; a glimpse beyond of the bright and sleeping sea, and the islands of the Bocas "floating in the shiningwaters," and behind a luxuriously furnished cottage, where hospitality is not a mere name, but a very sound fact; what on earth can man want more?

Kingsley, in presence of the rich and luscious beanty, the vastness and repose, to befound in Trinidad, sees an understandable excuse for the tendeney to somewhat grandioselanguage which tempts perpetually those who try to describe the tropies, and know well that they can only fail. He says: "In presence of such forms and such colouring as this, one becomes painfully sensible of the poverty of words, and the futility, therefore, of all: word-painting; of the inability, too, of the senses to discern and define objects of such. vast variety; of our æsthetic barbarism, in fact, which has no choice of epithets, save suel as 'great,' and 'vast,' and 'gigantic;' between such as 'beautiful,' and 'lovely;' and 'exquisite,' and so forth: whieh are, after all, intellectually only one stage higher than the-half-brute 'Wah! wah!' with which the savage grunts his astonishment-call it not admiration; epithets which are not, perhaps, intellectually as high as the 'God is great!" of the Mussulman, who is wise enough not to attempt any analysis, either of Nature or: of his feelings about her, and wise enough, also . . . in presence of the unknown, to take refuge in God."

Monkeys of many kinds, jaguars, toucans, wild cats; wonderful ant-eaters, racoons, and lizards; and strange birds, butterties, wasps, and spiders abound, but none of those animals which resent the presence of man. Happy land!

But the gun has fired. H.M.S. Sea is getting all steam up. The privilege of leavecannot last for ever: it is "All aboard!" Whither bound? In the archipelago of the West Indies there are so many points of interest, and so many ports which the sail, of
yot he credited, Ornée,' s, to be Bamboos e cottage clashing e orange, ea grass, tree, the on roses;

This will see s shrubs, that of oooon-nut mutains ; them in glimpse shining re name, se, to be grandiosenow well as this, e, of all: of such. ave such ly,' and than the$l$ it not great!" ature or nknown,

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 of thoseof leave of the sail. of
the Royal Navy is sure to visit. There are important docks at Antigua, Jamaica, and Bermuda; while the whole station-known professionally as the "North American and West Indian "-reaches from the north of South Ameriea to beyond ivewfoundland, Kingston, and Jamaica, where England maintains a Hag-ship and a commodore, a doekyard, and a naval hospital.

Kingston Harbour is a grand lagoon, nearly shut in by a long sand-spit, or rather bank, called "The Palisades," nt the point of which is Port Royal, which, about nincty years ago, was nearly destroyed by an earthquake. Mr. Trollope says that it is on record that hardy "subs" and hardier " mids" have ridden along the Palisades, and have not died from sunstroke in the effort. But the chances were much against them. The ordinary ingress and egress, as to all parts of the island's coasts, is by water. Our naval establishment is at Port Royal.

Jamaica has picked up a good deal in these later days, but is not the thriving country it was before the abolition of slavery. Kingston is described as a formal city, with streets at right angles, and with generally ugly buildings. The fact is, that hardly any Europeans or even well-to-do Creoles live in the town, and, in consequence, there are long streets, which might almost belong to a city of the dead, where hardly a soul is to be seen: at all events, in the evenings. All the wealthier people-and there are a large number-have country seats-" pens," as they eall them, though often so eharmingly situated, and so beautifully surrounded, that the term does not seem very appropriate. The sailor's pocket-money will go a long way in Kingston, if he confines himself to native productions; but woe muto him if he will insist on imported articles! All through the island the wbite people are very English in their longings, and affect to despise the native luxuries. Thus, they will give you ox-tail soup when real turtle would be infinitely cheaper. "When yams, avocado lears, the mountain eabbage, plantains, and twenty other delicious vegetables may be had for the gathering, people will insist on eating bad English potatoes; and the desire for linglish pickles is quite a passion." All the servants are negroes or mulattoes, who are greatly averse to ridicule or patronage; while, if one orders them as is usual in England, they leave you to wait on yourself. Mr. Trollope discovered this. He ordered a lad in one of the hotels to fill his bath, calling him "old fellow." "Who you call fellor?" asked the youth; "you speak to a gen'lman gen'lmanly, and den he fill de bath."

The sugar-cane-and by consequence, sugar and rum-coffec, and of late tobacco, are the staple productions of Jamaica. There is ons district where the traveller may see an unbroken plain of 1,000 acres under canes. The road over Mount Diabolo is very tine, and the view back to Kingston very grand. Jack ashore will find that the people all ride, but that the horses always walk. There are respecta, mountains to be ascended in Jamaica: Blue Mountain Peak towers to the height of 5,000 feet. The highest inhabited house on the island, the property of a coffee-planter, is a kind of half-way house of entertainment ; and although Mr. Trollope-who provided himself with a white companion, who, in his turn, provided five negroes, beef, bread, water, brandy, and what seemed to him about ten gallons of rum-gives a doleful deseription of the clouds and mists and fogs which surrounded the Peak, others may be more fortunate.

The most important of the West Iudian Islands, Cuba-" Queen of the Antilles"-
does not, as we all know, belong to England, but is the most splendid apprnage of the Spanish crown. Havana, the capital, has a grand harbour, largc, commodious, and safe, with a fine quay, at which the vessels of all nations lie. The sailor will note one peculiarity : instead of laying alongside, the ships are fastened "end on "-usually tue bow being at the guay. The harbour is very picturesque, and the entrance to it is defended by two forts, which were taken once by England-in Albemarle's time-and now could be

knocked to pieces in a few minutes by any nation which was ready with the requisite awount of gunpowder.

Havana is a very gay city, and las some special attractions for the sailor-among others being its good cigars and cheap Spanish wine a.d fruits. Its greatest glory is the Paseo-its Hyde Park, Bois de Boulogne, Corso, Cascine, Alamèda-where the Cuban belles and beaux delight to promenade and ride. There will you see them, in brightcoloured, picturesque attire-sadly Europeanised and Americanised of late, though-seated in the volante, a kind of hanging cabriolet, between two large wheels, drawn by one or two horses, on one of which the negro servant, with enormous leggings, white breeches, red jacket, and gold lace, and broad-brimmed straw hat, rides. The volante is itself bright with
polished metal, and the whole turn-out has an air of barbaric splendour. These carriages are rever kept in a coach-house, but are usually placed in the halls, and often even in the dining-room, as a child's perambulator might with us. Havana has an ugly cathedral and a maguificent opera-house.

Slay labour is common, and many of the sugar and tobaceo planters are very wealthy. Properties of many hundred aeres under cultivation are common. Mr. Trollope found the negroes well-fed, sleek, and fat as brewers' horses, while no sign of ill-usage came before him. In crop times they sometimes work sixteen hours a day, and Sunday is not then a day of rest for them. There are many Chinese coolies, also, on the island.

Kingsley, speaking of the islands in general, says that he "was altogether unprepared for their beauty and grandeur." Day after day, the steamer took him past a shifting diorama of seenery, whieh he likened to Vesuvius and Naples, repeated again and again, with every possible variation of the same type of delicate loveliness. Under a cloudless sky, and over the blue waters, banks of light cloud turned to violet and then to green, and then disclosed grand mountains, with the surf beating white around the base of tall eliffs and isolated rocks, and the pretty country houses of settlers embowered in foliage, and gay little villages, and busy towns. "It was easy," says that charming writer, " in presenee of such scenery, to conceive the exultation which possessed the souls of the first diseoverers of the West Indies. What wonder if they seemed to themselves to have burst into fairy-land-to be at the gates of the earthly Paradise? With such a elimate, such a soil, such vegetation, such fruits, what luxury must not have seemed possible to the dwellers along those shores? What riches, too, of gold and jewels, might not be hidden among those forest-shrouded glens and peaks? And beyond, and beyond again, ever new islands, new continents, perhaps, and inexhaustible wealth of yet undiscovered worlds." *

The resemblance to Mediterranean, or, more especially, Neapolitan, scenery is very marked. "Like eauses have produced like effects; and each island is little but the peak of a voleano, down whose shoulders lava and ash have slidden toward the sea." Many carry several cones. One of them, a little island named Saba, has a most remarkable settlement half-ucay up) a volcuno. Saba rises sheer out of the sea 1,500 or more feet, and, from a little landing-place, a stair runs up 800 feet into the very bosom of the mountain, where in a hollow live some 1,200 honest Dutchmen and 800 negroes. The latter were, till of late years, nominally the slaves of the former; but it is said that, in reality, it was just the other way. The blacks went off when and whither they pleased, earned money on other islands, and expected their masters to keep them when they were out of work. The good Dutch live peaceably aloft in their voleano, grow garden crops, and sell them to vessels or to surrounding islands. They build the best boats in the West Indies up in their crater, and lower them down the eliff to the sea! They are excellent sailors and good Christians. Long may their voleano remain quiescent!

When the steamer stops at some little port, or even single settlement, the negro boats come alongside with luscious fruit and vegetables-bananas and green oranges; the sweet sop, a fruit which looks like a strawberry, and is as big as an orange; the custard-

[^68]apples-the pulp of whic:, those who have read "'Iom Cringle's Log" will remember, is fancied to have an unpleasaut resemblance to brains; the avocado, or alligator-pears, otherwise called "mideshipman's butter," which are eaten with pepper und silt; scurlet eapsicums, green and orange cocon-nuts, roots of yam, and eush-cush, help to make up baskets as varied in colour as the gaudy gowns and turbans of the women. Neither must the junks of sugar-cane be omitted, which the "coloured" gentlemen and ladies delight to gnaw, walking, sitting, and standing; increasing thereby the size of their lips, an: breaking out, often enough, their upper front teeth. Rude health is in their faces; their cheeks literally shine with fatness.

But in this happy archipelago there are drawbacks: in the Guadalonpe earthquake of $18: 3,5,000$ persons lost their lives in the one town of Point-à-T. 3 alone. The Scuffrière voleano, 5,000 feet high, rears many a peak to the sikies, and shows an ugly and uncertain humour, smoking and flaming. The writer so often quoted gives a wonderfully beautiful description of this mountain and its surroundings. "As the sun rose, level lights of golden green streamed round the peak, right and left, over the downs; but only for a while. As the sky-clouds vaiished in his blazing rays, earth-elouds rolled up from the valleys behind, wreathel and weltered about the great black teetin of the crater, and then sinking among them and below them, shrouded the whole cone in purple darkness for the day; while in the foreground blazed in the sunshine broad slopes of cane-field; below them again the town (the port of Basse 'lerre), with handsome houses, and old-fashioned churehes and convents, dating possibly from the seventeenth century, embowered in mangoes, tamarinds, and palmistes; and along the beach, a market beneath a row of trees, with canoes drawn up to be unladen, and gay dresses of every hue. The surf whispered softly on the beach. The cheerful murmur of voices came off the shore, and above it, tho tiukling of some little bell, calling good folks to early mass. A cheery, beilliant picture as man could wish to see, but marred loy two ugly elements. A mile away on the low northern cliff, marked with many a cross, was the lonely cholera cemetery, a remembrance of the fearful pestilence which, a few years sinee, swept away thousands $o^{\text {o }}$ the people: and above frowned that black giant, now asleep: but for how long?"

The richuess of the verdure which clothes these islands to their highest peaks seems a mere coat of green fur, and yet is often gigantic forest trees. The eye wanders over the green abysses, and strains over the wealth of depths and heights, compared with which fine English parks are mere shrubberies. There is every conceivable green, or rather of hues, ranging from pale yellow through all greens into cobalt; and "as the wind stirs the leaves, and sweeps the lights and shadows over hill and glen. all is ever-changing, iridescent, like a peacock's tail; till the whole island, from peak to shore, seems some glorious jevel-an emerald, with tints of sapphise and topaz, hanging between blue sea and white surf below, and blue sky and white cloud above." And yet, over all this beauty, dark shadows lang-the shadow of war and the shadow of slavery. These seas have been oft reddened with the blood of gallant sailors, and every other gully holds the skeleton of an Euglishman.

Here it was that Rodney broke De Grasse's line, took and destroyed seven Freneh ships of war, and seattered the rest: saving Jamaica, and, in sooth, the whole West

Indies, and bringing about tie honourable peace of 1783. Yon lovely roadstead of Dominiea: there Rodney enught up with the French just before, and would have beaten them so mueh the earlier but for his vessels being becalmed. In that deep buy at Martinique, now lined with gay houses, was for many years the Cul-de-sac Royal, the rendezrous and stroughold of the Yrench tlect. That isolated roek hard by, much the shape and double the size of the great Pyramids, is Sir Samuel Hood's famous Diamond Roek,* to which that brave old navigator literally tied with a hawser or two his ship, the Centuur, and turned the roek into a fortress from whenee to sweep the seas. The rock was for several months rated on the books of the Admiralty as "His Majesty's Ship, Diamonl Roch." She had at last to surrender, for want of powder, to an overwhelming foree-two seventy-fours and fourteen smaller ships of war-but did not give in till seventy poor Frenehmen were lying killed or *ounded, and three of their gun-boats destroyed, her own loss being only two men killed and one wounded. Brave old sloop of war! And, once more, those glens and forests of St. Lucia remind us of Sir John Moore and Sir Ralph Abererombie, who fought, not merely the Freneh, but the "Brigands"-negroes liberated by the Revolution of 1792 .

But the good ship must proceed; and as British naval interests are under consideration, let her bows be turned to Bermuda-a colony, a fortress and a prison, and where England owns an extersive floating dock, dock-vards, and workshops. $\dagger$ Trollope says that its geological formation is mysterious. "It seems to be made of soft white stone, composed mostly of little shells--so soft, indeed, that you might cut Bermuda up with a hand-saw. And people are entting up Bermuda with hand-saws. Ono little island, that on which the conviets are established, has been altogether so cut up already. When I visited it, two fat convicts were working away slowly at the last fragment." Bermuda is the crater of an extinct volcano, and is surrounded by little islets, of which there is one for every day of the year in a space of twenty by three miles. These are surrounded again by reefs and rocks, and navigation is risky.

Were the Bermudas the seene of Ariel's tricks? They were first diseovered, in 1522 , by Bermudez, a Spaniard; and Shakespeare seems to have heard of them, for he speaks of the

> "Still vexed Bermoothes."

Trollope says that there is more of the breed of Caliban in the islands than of Ariel. Though Caliban did not relish working for his master more than the Bermudian of to-day, there was an amount of energy about him eutirely wanting in the existing islanders.

There are two towns, St. George and Hamilton, on different islands. The former is the head-quarters of the military, and the second that of the governor. It is the summer heal-quarters of the admiral of the station. The islands are, in general, wonderfully fertile, and will, with any ordinary cultivation, give two crops of many

[^69]vegetables in the gear. It has the advantages of the tropies, plus those of more temperate climes. For tomatoes, onions, beet-root, sweet potatoes, early potatoes, as well as all kinds of fruits, from oranges, lemons, and bananas to small berries, it is not surpassed by iny place in the world; while arrowroot is one of its specialities. It is the early market-garden for New York. Ship-building is carried on, us tha islands abound in a stunted cedar,

bermida, from aibbs mill.
good for the purpose, when it can be found large enough. The working population are almost all negroes, and are lazy to a degree. But the whites are not much better; and the climate is found to produce great lassitude.

It is the sea round the Bermudas, more than the islands themselves, perhaps, that give its beanty. Everywhere the water is wonderfully clear and transparent, while the land is broken up into narrow inlets and headlands, and bays and promontories, nooks and corners, running here and there in eapricious and ever-varying forms. The oleander, with their bright blossoms, are so abundant, almost to the water's edge, that the Bermudas might be called the "Oleander Isles."

The Bermuda convict, in Trollope's time, seemed to be rather better off than most

English labourers. He had a pound of meat-good meat, too while the Bermudians were tugging at their teeth with tough morsels; he had a pound and three-quarters of bread-more than he wanted; a pound of vegetables; tea and sugar; a ghass of grog per diem; tobnceo-money allowed, and eight hours' labour. He was infinitely better off than most snilors of the merehant service.
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THE NORTH HOCK, HERMUDA.

St. George, the riilitary station of the colony, commands the only entrance among the islands suitable for the passage of large vessels, the narrow and intrieate channel which leads to its land-locked haven being defended by strong batteries. The lagoons, and passages, and sea canals between the little islands make communication by water as necessary as in Venice. Every one keeps a boat or cedar canoc. He will often do his business on one island and have his residence on a second. Mark Twain has a wonderful facility for description; and his latest articles, "Random Notes of an Idle Excursion," contain a picturesque aecount of the Bermudas, and more particularly of Hamilton, the leading port. He says that he found it a wonderfully white $t \cdot$ wn, white as marble-snow-Hour. "It was," says he, "a town eompaeted together upon the sides
and tops of a cluster of small hills. Its outlying borders fringed off and thinned awny among the cedar forests, and there was no woody distunce of curving coast or leafy inlet sleeping on the dimpled, painted sen but was flecked with shiniug white points-halfconcealed houses peeping out of the foliage. * * * There was mu ample pier of heavy masonry ; upon this, under shelter, were some thousunds of barrels, contaning that prodnet which has earried the fame of Bermudn to muny lunds-the potato. With here nul there an onion. That last sentence is facetious, for they grow at kast two onions in Bermudn to one potato. The onion is the pride and the joy of Bermudn. It is her jewel, her gem of gems. In her conversation, her pulpit, her literature, it is her most frequent and eloguent figure. In Bermudian metuphor it stands for perfection-perfection absolute.
"The Bermudian, weeping over tho departed, exhausts praise when he says, 'He was an onion!' The Bermudian, extolling the living hero, bankrupts applause when he snys, 'Ho is an onion 1' The Bermudian, setting his son upon the stage of life to dare and do for himself, elimaxes all counsel, supplication, admonition, comprelhends all ambition, when he says, ' Be an onion!'" When the steamer arrives at tho pier, the first question asked is not concerning great war or politieal news, but coneerns only the prico of omions. All the writers agree that for tomatoos, onions, und vegetables generally, the Bermudas are unequalled; they have been called, as noted before, the market-gardens of New York.

Jack who is fortunate enough to be on the West India and North American Stations must be congratulated. "The country roads," says the clever writer above quoted, "curve and wind hither and thither in the delightfulest way, unfolding pretty surprises at every turn ; billowy masses of oleander that seem to float out from behind distant projections, liko the pink cloud-banks of sunset; sudden plunges among cottnges and gardens, life and activity, followed by as sudden plunges into the sombre twilight and stillness of the woods; glittering visions of white fortresses and beacon towers pictured against the sky on remote hill-tops; glimpses of shining green sea caught for a moment through opening headlands, then lost again; more woods and solitude; and by-and-by another turn lays bare, without warning, the full sweep of the inland ocean, enriched with its bars of soft eolour, and graced with its wandering sails.
"Take any road you please, you may depend upon it you will not stay in it half a mile. Your road is everything that a road ought to be; it is bordered with trees, and with strange plants and flowers; it is shady and pleasant, or sunny and still pleasant; it carries you by the prettiest and peacefulest and most home-like of homes, and through stretehes of forest that lie in a deep hush sometines, and sometimes are alive with the music of birds; it curves always, which is a continual promise, whereas straight roads reveal everything at a glanee and kill interest. * * * There is enough of variety. Sometimes you are in the level open, with marshes, thick grown with flag-lances that are ten feet high, on the one hand, and potato and onion orehards on the other; next you are on a hill-top, with the ocean and the islands spread around you; presently the road winds through a deep cut, shut in by perpendienlar walls thirty or forty feet high, marked with the oddest and abruptest stratum lines, suggestive of sudden and eecentrie old upheavals, and garnished with, here and there, a elinging adventurous flower, and here and there
d away fy islet -hulfheavy product d there ermuch er gem int and

He was e says, are and nhition, nestion rice of lly, the of New Stations " curve t every ections, ns, life of the the sky pening rn lays of soft
half a es, and ant; it hrough ith the roads ariety. hat are you are winds d with eavals, 1 there
a dangling vine; and by-and-by, your way is along the sea edge, and yon may look down a fathom or two through the trmangurent water nuld wateh the diamond-like thash and play of the light upon the rocks und sands on the bottom until you ure tired of it-if you nre so constituted us to be uble to get tired of it."

But as there are spots in the sum, and the brightest lights throw the deepest sladows everywhere; so on the Bermula consts there are, in its rure storms, daugers of no small kind among its numerous reefs and rocks. The North Rock, in partieular, is the monument which marks the grave of many a poor sailor in ly-gone days. At the present time, however, tug-bonts, and the use of steam generally, have reduced the perils of navigation among the humdreds of islands whieh constitute the Bermuda group to a minimum.

The recent suceessful trip of Cleopatra's Needle in a vessel of unique construction will reeall thut of the Bermuda flonting-dock, which it will be remembered was towed aeross tho Athantic and placed in its present position.

Bermuda being, from a naval point of view, the most important port on the North American and West Indian Stations, it had long been felt to be an absolute necessity that a dock capable of holding the largest vessels of war should be built in some part of the island. After many futile attempts to aecomplish this object, owing to the porous uature of the rock of which the island is formel, it was determined that Messrs. Campbell, Johnstone \& Co., of North Woolwich, should construet a floating-dock aceording to their patented inventions: those built by them for Carthagena, Saigon, and Callao having been completely suceessful. The dimensions of the doek for Bernuila, which was afterwards named after that island, are as follows :-


She is divided into eight longitudinal water-tight compartments, and theso again into sets of compartments, called respectively load on and balance chambers. Several small compartments were also made for the reception of the pumps, the machinery for moving capstans, and crancs, all of which were worked by steam. She is powerful and largo enough to lift an ironclad having a displacement of 10,100 tons, and could almost dock the Great Eustern.

The building of the Bermula was begun in August, 1866; she was launched in September, 1868, and finally completed in May, 1860. For the purposes of navigation two light wooden bridges were thrown across her, on the foremost of which stood her compass, and on the after the steering apparatus. She was also supplied with three lighthouses and several semaphores for signalling to the men-of-war which had her in tow, either ly night or day. In shape she is something like a round-bottomed eanal boat with the ends cut off. From an interesting account of her voyage from Sheerness to Bermuda by "One of those on Board," we gather the following information respecting her trip. IEer crew mumbered cighty-two hands, under a Staff-Commander, R.N.; there were also on board an assistant naval surgeon, an Admiralty commissioner, and the writer
of the book from which these partienlars are taken. The first rendezvous of the Bermula was to be at the Nore.

On the afternoon of the 23 rd of June, 1869, the Bermula was towed to the Nore by four ordinary Thames tugs, accompanied by H.M.SS. Terrible, Mellusu, Buzzard, and Willifire. On arriving at the Nore off the lightship she found the Northumberlamed waiting for her. The tugs cast off, and a hawser was passed to the Northumberland,

the bermida floating jock.
which took her in tow as far as Knob Channel, the Tervible bringing up astern. The Aginconrt was now picked up, and passing a hawser on board the Northumberlamet, took the lead in the maritime tandem. A hawser was now passed to the Terrible from the stern of the Bermmula, so that by towing that vessel she might be kept from swaying from side to side. The Mellusa steamed on the quarter of the Northumberland, and the Buzzarll acted as a kind of floating outrider to clear the way. The North Foreland was passed the same evening, at a speed of four knots an hour. Everything went well until the 25 th, when she lost sight of land off the Start Point late in the afternoon of that day. On the 28th she was half-way across the Bay of Biscay, when, encountering a slight sea and a freshening wind, she showed her first tendeney to roll, an accomplishment in whieh she was
the Nore zard, and tmberland mberland,
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nul, took from the swaying and the s passed he 25 th, On the sa and a she was


ON DECK OF A MAN-OF-WAR, EIGHTEENTH CENTURY.
afterwards beaten by all her companions, although the prognostications about her talents in this direction had been of the most lugubrious description. It must be understood that the bottom of her hold, so to speak, was only some ten feet under the surfaee of the water, and that her hollow sides towered some sixty feet above it. On the top of each gunwale were wooden houses for the officers, with gardens in front and behind, in which mignonette, sweet peas, and other English garden flowers, grew and flourished, until they encountered the parehing heat of the tropics. The erew was quartered in the sides of the vessel; and the top of the gunwales, or quarter-deeks, as they might be ealled, communicated with the lower deeks by means of a ladder fifty-three feet long.

voyage of the " bermid.d."

To return, however, to the voyage. Her next rendezvous was at Porto Santo, a small island on the east coast of the island of Madeira. On July 4th, about six o'clock in the morning, land was signalled. This proved to be the island of Perto Santo; and she brought up about two miles off the prineipal town early in the afternoon, having made the voyage from Sheerness in exaetly eleven days. Here the squadron was joined by the Warrior, Black Prince, and Lapwing (gunboat), the Heïicon leaving them for Lisbon. Towards nightfail they started once more in the following order, passing to the south of Bermuda. The Black Prince and Warrior led the team, towing the Bermuda, the Terrible being towed by her in turn, to prevent yawing, and the Lapwing following close on the heels of the Terrible. All went well until the 8th, when the breeze freshened, the dock rolling as much as ten degrees. Towards eight o'clock in the evening a mighty erash was heard, and the whole squadron was brought up by signal from the lighthouses. On examination it was found that the Bermula had earried away one of the chains of
her immense rulder, which was swaying to and fro in a most dangerous manner. The officers and men, however, went to work with a will, and by one o'elock the next morningr all was made snug again, and the squadron proceeded on its voyage. During this portion of the trip, a line of communication was established between the Bermula and the Warrior, and almost daily presents of fresh meat and vegetables were sent by the officers of the ironclad to their unknown comrades on board the dock. On the 9th, the day following the disaster to the rudder, they fell in with the north-east trade winds, which formed the subject of great rejoicing. Signals were made to make all sail, and reduce the quantity of coal burned in the boilers of the four steam vessels. The next day, the Lapwing, being shorter of coal than the others, she was ordered to take the place of the Terrible, the latter ship now taking the lead by towing the Black Prince. The Lapwiny, however, proved not to be sufficiently powerful for this service. A heavy sea springing up, the dock began to yaw and behave so friskily that the squadron once more brought to, and the old order of things was resumed.

On the 25th the Lapwing was sent on ahead to Bermuda to inform the authorities of the close advent of the dock. It was now arranged that as the Terrible drew less water than any of the other ships, she should have the honour of piloting the dock through the Narrows-a narrow, tortuous, and shallow channel, forming the only practicable entrance for large ships to the harbour of Eermude. On the morning of the 28th, Bermida lighthouse was sighted, and the Spitfire was shortly afterwards picked up, having been sent by the Bermudan authorities to pilot the squadron as far as the entrance of the Narrows. She also brought the intelligence that it had been arranged that the Viper and the Viren had been ordered to pilot the dock into harbour. As they neared Bermuda, the squadron were met by the naval officer in charge of the station, who, after having had interviews with the captains of the squadron and of the Bermullu, rescinded the order respecting the Tiaen and the Viper, and the Terrible was once more deputed to tow the Bermula through the Narrows. Just off the mouth of this dangerous inlet, the Bermanla being in tow of the Terrible only, the dock became uncontrollable, and would have done her best to carry Her Majesty's ship to Halifax had not the Warrior come to her aid, after the Spitfire and Lapwing had tried ineffectually to be of assistance.

By this time, however, the water in the Narrows had become too low for the Warrior; the Bermula had, therefore, to wait until high water next morning in order to complete the last, and, as it proved, the most perilous part of her journ،y. After the Warrior and the Tervible had towed the dock through the entrance of the inlet, the firstnamed ship cast off. The dock once more became unmanageable through a sudden gust of wind striking her on the quarter. Had the gust lasted for only a few seconds longer, the dock would have stranded-perhaps for ever. She righted, however, and the Terrible steaming hard ahead, she passed the most dangerous point of the inlet, and at last rode securely in smooth water, within a few cables' length of her future berth, after a singularly successful voyage of thirty-six days.

It says much for the naval and engineering skill of all concerned in the transport of this unwieldy mass of iron, weighing 8,000 tons, over nearly 4,000 miles of ocean, without the loss of a single life, or, indeed, a solitary accident that can be called serious. The
conception, execution, and suceess of the project are wholly unparalleled in the history of naval engineering.

Leaving Bermuda, whither away? To the real capital of America, New York. It is true that English men-of-war, and, for the matter of that, vessels of the American navy, comparatively seldom visit that port, whieh otherwise is erowded by the shipping of all nations. There are reasons for this. New York has not to-day a deek worthy of the name; magnifieent steamships and palatial ferry-boats all lie alongside wharfs, or enter "slips," which are semi-enelosed wharfs. Brooklyn aná Jersey City have, however, doeks.

Who that has visited New York will ever forget his first impressions? The grand Hudson, or the great East River, itself a strait: the glorious bay, or the crowded island, alike call for and deserve enthusiastic almiration. If one arrives on a sunny day, maybe not a zephyr agitates the surface of the noble Hudson, or even the bay itself : the latter landlocked, save where lost in the broad Atlantic; the former skirted by the great Babylon of Ameriea and the wooded banks of Hoboken. Round the lofty western hills, a fleet of small craft-with rakish hulls and snowy sails-steal quietly and softly, while steamboats, that look like floating islands, almost pass them with lightning speed. Around is the shipping of every elime; enormous ferry-boats radiating in all direetions; forests of masts along the wharfs bearing the flags of all nations. And where so much is strange, there is one consoling fact: you feel yourself at home. You are among brothers, speaking the same language,


MAP OF NEW YORK HARBOLR. obeying the same laws, professing the same religion.

New York city and port of entry, New York county, State of New York, lies at the head of New York Bay, so that there is a good deal of New York about it. It is the commereial emporium of the United States, and if it ever has a rival, it will be on the other side of the continent, somewhere not far from San Francisco. Its area is, practically, the bulk of Mauhattan or New York Island, say thirteen miles long by two wide. Its separation from the mainland is caused by the Harlem River, which connects the Hudson and East Rivers, and is itself spanned by a bridge and the Croton aqueduct. New York really possesses every advantage required to build a grand emporium. It extends between two rivers, each navigable for the largest vessels, while its harbour would contain the united or disunited navies, as the case may be, of all nations. The Hudson River, in particular, is for some distance up a mile or more in width, while the East River averages over two-fifths of a mile. The population of New York, with its suburban appendages, including the eities of Brooklyn and Jersey City, is not less than that of Paris.

The harbour is surrounded with small settlements, conneeted by charmingly-situated villas and country residences. It is toward its northern end that the masts, commencing with a few stragglers, gradually thieken to a forest. In it are three fortified islands. By the strait called the "Narrows," seven miles from the lower part of the city, and
which is, for the space of a mile, about one mile wide, it communicates with the outer harbour, or bay proper, which extends thence to Sandy Hook Light, forty miles from the eity, and opens directly into the occan, forming one of the best roadsteads on the whole Atlantic coasts of America. The approach to the city, as above indicated, is very fine, the sho es of the bay being wooded down to the water's edge, and thickly studded with villages, farms, and country seats. The view of the city itself is not so prepossessing; like all large cities, it is almost impossible to find a point from which to grasp the

brogklyn bridge.
grandeur in its entirety, and the ground on which it is built is nowhere elevated. Therefore there is very little to strike the eye specially. Many a petty town makes a greater show in this respect.

Those ferry-boats! The idea in the minds of most Englishmen is associated with boats that may pass over from one or two to a dozen or so people, possibly a single horse, or a donkey-cart. There you find steamers a couple of hundred or more feet long, with, on either side of the engines, twenty or more feet space. On the true deck there is accommodation for carriages, carts, and horses by the score; above, a spacious salon for passengers. They have powerful engines, and will easily beat the average steamship. On arrival at the dock, they run into a kind of slip, or basin, with piles around stuck in the soft bottom, which yield should she strike them, and entirely do away with any fear of

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ted. Thereses a greater ociated with single horse, t long, with, deck there is as saloon for amship. On stuck in the any fear of
coneussion. "I may here add," notes an intelligent writer,* "that during my whole travels in the States, I found nothing more perfect in construction and arrangement than the ferries and their boats, the charges for which are most moderate, varying according to distances, and ranging from one halfpenny upwards."

The sailor ashore in New York-and how many, many thousands visit it usery year !will find much to note. The public buildings of the great city are not remarkable; but the one great street, Broadway, which is about eight miles long, and almost straight, is


FERRI-BOAT, NEW TORK HARBOLR.
a very special feature. Unceasing throngs of busy men and women, loungers and idlers, vehicles of all kinds, street cars, ommbuses, and carriages-there are no cabs hardly in New York-pass and re-pass from early morn to dewy eve, while the shops, always called "stores," rival those of the Boulevards or Regent Street. Some of the older streets were, no doubt, as Washington Irving tells us, laid out after the old cow-paths, as they are as narrow and tortuous as those of any European city. The crowded state of Broadway at certain points rivals Cheapside. The writer saw in 1867 a light bridge, which spanned the street, and was intended for the use of ladies and timid pedestrians. When, in 1869, he re-passed through the city it had disappeared, and on inquiry he learnt the reason. Unprincipled roughs bad stationed themselves at either end, and levied black-mail toll on old ladies and unsophisticated country-people.

[^70]So extreme is the difference between the intense heat of summer and the equally intense cold of winter in New York, that the residents regularly get thin in the former and stout in the latter. Aud what a sight are the two rivers at that time! Huge masses of ice, crashing among themselves, and making navigation perilous and sometimes impossible, deseending the stream at a rapid rate; docks and slips frozen in; the riggings and shrouds of great slips coverel with icicles, and the decks ready for immeliate use as skating-rinks. The writer crossed in the ferry-boat from Jersey City to New York, in January, 1875, and acquired a sineere respeet for the pilot, who wriggled and zig-zagged his vessel through masses of ice, against which a sharp collision would not have been a joke. When, on the following morning, he left for Liverpool, the steamship herself was a good-model for a twelfth-night cake ornament, and had quite enough to do to get out from the wharf. Five days after, in mid-Atlantie, he was sitting on deek in the open air, reading a book, so much miller at such times is it on the open ocean.

But our leave is over, and although it would be pleasant to travel in imnginative company up the beautiful Hadson, and visit one of the wonders of the world--Niagara, to-day a mere holiday excursion from New York-we must away, merely briefly noting before we go another of the wonders of the world; a triumph of engineering skill: the great Brooklyn bridge, which conneets that city with New York. Its span is about threequarters of a mile; large slips ean pass under it, while velieles and pedestrians cross in mid-air over their mast tops, between two great cities, making them one. Brooklyn is a great place for the residences of well-to-do New Yorkers, and the view from its "Heights" -an elevation covered with villas and mansions--is grand and extensive. Apart from this, Brooklyn is a considerable ci $y$, with numerous churches and chapels, public buildings, and places of amusement.

Halifax is the northernmost depôt of the whole West Iudia and North American Station, and is often a great rendezvous of the Royal Navy. It is situated on a peninsula on the south-cast coast of Nova Seotia, of which it is the capital. Its situation is very picturesque. The town stands on the declivity of a hill about 250 feet high, rising from one of the finest harbours in the world. The city front is lined with landsome wharfs, while merelants' honses, dwellings, and public edifiees arrange themselves on tiers, stretehing along and up the sides of the hill. It has fine wide streets; the principal one, which runs round the edge of the harbour, is capitally paved. The harbour opposite the town, where ships usually anchor, is rather more than a mile wide, and after narrowing to a quarter of a mile above the upper end of the town, expands into Bedford Basin, a completely land-loeked sheet of water. This grand sea-lake has an area of ten square miles, and is capable of containing any aumber of navies. Halifax possesses another advantage not common to every harbour of North America : it is aecessible at all seasons, and navigation is rarely impeded by ice. There are two fine lighthonses at Halifax ; that on an island off Sambro Head is 210 feet high. The port possesses many large ships of its own, generally employed in the Sonth Sea whale and seal fishery. It is a very prosperous fishing town in other respects.

The town of Halifax was founded in 1749. The settlers, to the number of 3,500 , largely composed of naval and military men, whose expenses out had been paid by the
 in the Huge metimes riggings te use as York, in g-zagged e been a rself was o to get k in the aginative -Niagara, Hy noting skill : the out three$s$ cross in klyn is a Heights" from this, ldings, and

Ameriean a a peninituation is igh, rising handsome nselves on reets; the he harbour and after ford Basin, ten square es another all seasons, lifax ; that se ships of prosperous
of 3,500 , aid by the

British Government to assist in the formation of the station, soon eleared the ground from stumps, \&e., and having ereeted a wooden government house and suitable warehouses for stores and provisions, the town was lnid out so as to form a number of straight and handsome streets. Planks, doors, window-frames, and other portions of houses, were imported from the New England settlements, and the more laborious portion of the work, which the settlers exeeuted themselves, was performed with great dispatch. At the approneh of winter they found themselves comfortably settled, having completed a number of houses and huts, and covared others in a manner whieh served to protect them from the rigour of the weather, there very severe. There were now assembled at Halifax about 5,000 people, whose labours were suddenly suspended by the intensity of the frost, and there was in consequence considerable enforeed idleness. Haliburton* mentions the diffieulty that the governor had to employ the settlers by sending them out on various expeditions, in palisading the town, and in other publie works.

In addition to $£ 40,000$ granted by the British Government for the embarkation and other expenses of the first settlers, Parliament continued to make annual grants for the same purpose, whieh, in 1755, amounted to the considerable sum of $£ 416,000$.

The town of Halifax was no sooner built than the Freneh colonists began to be alarmed, and although they did not think proper to make an open avowal of their jealonsy and disgust, they employed their emissaries clandestinely in exciting the Indians to harass the inhabitants with hostilities, in such a manner as should effectually hinder them from extending their plantations, or perhaps, indeed, induce them to abandon the settlement. The Indian chiefs, however, for some time took a different view of the matter, waited upon the governor, and acknowledged themselves subjects of the crown of England. The French court thereupon renewed its intrigues with the Indians, and so far sueceeded that for several years the town was frequently attacked in the night, and the English could not stir into the adjoining woods without the danger of being shot, sealped, or taken prisoners.

Among the early laws of Nova Seotia was one by which it was enacted that no debts contracted in England, or in any of the colonies prior to the settlement of Halifax, or to the arrival of the debtor, should be recoverable by law in any court in the province. As an asylum for insolvent debtors, it is natural to suppose that Halifax attracted thither the guilty as well as the unfortunate; and we may form some idea of the state of publie morals at that period from an order of Governor Cornwallis, whieh, after reeiting that the dead were usually attended to the grave by neither relatives or friends, twelve citizens should in future be summoned to attend the funeral of each deceased person.

The Nova Seotians are popularly known by Canadians and Amerieans as "Blue Noses," doubtless from the colour of their nasal appendages in bitter cold weather. It has been already mentioned that Halifax is now a thriving eity; but there must have been a period when the people were not partieularly enterprising, or else that most veracious individual, "Sam Sliek," greatly belied them. Judge Haliburton, in his immortal "Clockmaker," introduces the following conversation with Mr. Sliek:-
"' You appear,' said I to Mr. Sliek, 'to have travelled over the whole of this province,

[^71]and to have observed the country and the peoplo with much attention; pray, what is your opinion of the present state and future prospects of Halifax?' 'If you will tell me,' said he, 'when the folks there will wake up, then I can answer you; but they are fast asleep. As to the province, it's a splendid province, and calculated to go ahead; it will grow as fast as a Virginny gall-and they grow so amazing fast, if you put one of your arms round one of their neeks to kiss them, by the time you've done they've growed up into women. It's a pretty province, I tell you, good above and better below: surface

the island of ascension.
covered with pastures, meadows, woods, and a nation sight of water privileges; and under the ground full of mines. It puts me in mind of the soup at Treemont house-grod enough at top, but dip down and ycu have the riches-the coal, the iron ore, the gypsum, and what not. As for Halifax, it's well enough in itself, though no great shakes neither; a few sizeable houses, with a proper sight of small ones, like half-a-dozen old hens with their broods of young ehickens: but the people, the strange critters, they are all asleep. They walk in their sleep, and talk in their sleep, and what they say one day they forget the next; they say they were dreaming.'" This was first published in England in 1838; all accounts now speak of Halifax as a well-built, paved, and cleanly city, and of its inhabitants as enterprising.


# CH.DPTER XII. <br> Round the World on a Man-of-War (eontinuel). <br> The arieican station. 

Its Extent-Ascension-Turtle at ä Discount-Slerra Leone-An Unbealthy Station-The Cape of Good Jope-Cnpe Town-


 Natai-Inducements held out to Settlers-St. Holena and Napoleon-1)lscourt cous 'I'reatment of a Fallon Foc-Tho Home of the Caged Llon.

And now wo are off to the last of the British naval stations under consideration-that of the African coast. It is called, in naval phroseology, "'he West Coast of Africon and Cape of Good Hope Station," and embraces not merely all that the words imply, but a part of the east coast, including the important colony of Natal. Commencing at latitude $20^{\circ} \mathrm{N}$. above the Cape Verd Islands, it includes the islands of Ascension, St. Helem, Tristan d'Aemina, and others already deseribed.

Aseension, which is a British station, with dockyard, and fort garrisoned by artillery and marines, is a barren island, about eight miles long by six broad. Its fort is in lat. $70^{\circ} 20^{\prime} \mathrm{N}$.: long., $140^{\circ} 26^{\prime} \mathrm{W}$. It is of volcanic formation, and one of its hills rises to the considerable elevation of 2,870 feet. Until the imprisonment of Napoleon at St . Helena, it was utterly uninhabited. At that period it was garrisoned with a small British force; and so good use was made of their time that it has been partly cultivated and very greatly improved. Irrigation was found, as elsewhere, to work wonders, and as there are magnifieent springs, this was rendered easy. Vast numbers of turtle are taken on its shores; and, in consequence, the soldiers prefer the soup of pea, and affect to despise turtle steaks worth half a guinea apiece in London, and fit to rejoice the heart of an alderman! The writer saw the same thing in Vaneouver Island, where at the boardinghouse of a very large steam saw-mill, the hands struck against the salmon, so abundant on those coasts. They insisted upon not having it more than twiee a week for dinner, and that it should be replaced by salt pork. The climate of Aseension is remarkably healthy. The olject in oceupying it is very similar to the reason for holding the Falkland Islands-to serve as a depôt for stores, coal, and for watering ships cruising in the South Atlantic.

Sierra Leone is, perhaps, of all places in the world, the last to which the sailor would wish to go, albeit its unhealthiness has been, as is the ease with Panama, grossly exaggerated. Thus we were told that when a clergyman with some little influenee was pestering the Prime Minister for the time being for promotion, the latter would appoint him to the Bishopric of Sierra Leone, knowing well that in a year or so the said bishopric would be vacant and ready for another gentleman!

Sierra Leone is a British colony, and the capital is Free Town, situated on a peninsula lying between the broad estuary of the Sherboro and the Sierra Leone rivers, connected with the mainland by an isthmus not more than one mile and a half broad. The colony
also includes a number of ishands, among which ure many good harbours. Its history has one interesting point. When, in 1787, it becume a British colony, a company was formed, which included a seheme for making it a home for free negroes, and to prove that colonial produce could be raised profitably without resorting to slave lahour. Its prosperity was seriously affected during the Prench Revolution lay the depredations of French cruisers, and in 1808 the compnuy ceded all its righlts to the Crown. Its population inchdes negroes from 200 different African tribes, many of then liberated from slavery and slave-ships, a subject which will be treated hereafter in this work.

One of the great industries of Sierta Leone is the manufucture of cocoa-nut oil. The fuctories are extensive nffuirs. It is a very beantiful country, on the whole, and when acelimatised, Europeans find that they can live splendidly on the prolucts of the country. The fisheries, both sen and river, are wonderfully prolluctive, and employ about 1,500 natives. Boat-building is earried on to some extent, the splendid forests yielding timber so large that eanoes capmble of holding a lundred men lave been made from a single log, like those nlrealy mentioned in connection with the north-west coast of America. Many of the West Indian produets have been introluced; sugar, coffee, iudigo, ginger, cotton, and riee thrive well, as do Indian corn, the yam, phantuin, pumpkins, banama, cocoa, baobalb, pine-apple, orange, lime, guava, papaw, pomegranate, orange, aud lime. Poultry is particularly abundant. It therefore might claim attention as a fruitful and productive country but for the malaria of its swampy rivers and low lands.

And now, leaving Sierra Leone, our good ship makes for the Cape of Good Hope, passing, mostly far out at sen, down that coast along which the Portuguese mariners crept so cautiously yet so surely till Diaz and $\mathrm{Da}_{a}$ Gama reached South Africa, while the latter showed them the way to the fabled Cathaia, the Orient-India, China, and the Spice Islands.

In the year 1486 "The Cape" of eapes par e.rerllence, whieh rarely nowadays bears its full title, was discovered by Bartholomew de Diaz, a commander in the service of John II. of Portugal. Ho did not proceed to the eastward of it, and it was reserved for the grent Vaseo da Gama-afterwards the first Viceroy of India-an incident in whose career forms, by-the-by, the plot of l'afficaine, Meyerbeer's grand opera, to double it. It was called at first Cabo Tormentoso-"the Cape of Storms"-but by royal desire was changed to that of "Buon Esperanza"_-"Good Hope"-the title it still bears. Cape Colony was acquired by Great Britain in 1620), although for a long time it was practically in the hands of the Dutch, a colony having been planted by their East India Company. The Duteh held it in this way till 1795, when the territory was once more taken by our country. It was returned to the Dutch at the Peace of Amiens, only to be snatched from them again in 1806, and finally confirmed to Brituin at the general peace of 1815 .

The population, including the Boers, or farmers of Duteh deseent, Hottentots, Kaffirs, and Malays, is not probably over 600,000 , while the original territory is about 700 miles long by 400 wide, having an area of not far from 200,000 square miles. The capital of the colony is Cape Town, lying at the foot, as every sehoolboy knows, of the celebrated Table Mountain

A recent writer, Mr. Boyle,* speaks cautiously of Cape Town and its people. There are respectable, but not very noticeable, puivlic buildings. "Some old Dutch houses there are, distinguishable chiefly by a superlative flatness and an extra allowance of windows. The population is about 30,000 souls, white, black, and mixed. I should incline to think more than half fall into the third category. They seem to be hospitable and goodnatured in all classes. . . . There is complaint of slowness, indecision, and general ' want of go' about the place. Dutch blood is said to be still too apparent in business,

sierra leone.
in local government, and in society. I suppose there is sound basis for these accusations, since trade is migrating so rapidly towards the rival mart of Port Elizabeth. . . . But ken years ago the entire export of wool passed through Cape Town. Last year, as I find in the official returns, $28,000,000 \mathrm{lbs}$. were shipped at the eastern port out of the whole $37,000,000 \mathrm{lbs}$. produced in the colony. The gas-lamps, put up by a sort of coup l'état in the municipality, were not lighted until last year, owing to the opposition of the Dutch town councillors. They urged that decent people didn't want to be out at night, and the ill-disposed didn't deserve illumination. Such facts seem to show that the city is not quite up to the mark in all respects."

[^72]There ses there windows. cline to nd grodgeneral business,

ccusations, . . . But , as I find the whele coup l'état the Dutch $t$, and the ity is not

Simon's Bay, near Table Bay, where Cape Town is situated, is a great rendezvous for the navy; there are docks and soldiers there, and a small town. The bay abounds in fish. The Rev. John Milner, chaplain of the Galatea, says that during the visit of Prince Alfred, "large shoals of fish (a sort of coarse mackerel) were seen all over the bay; numbers came alongside, and several of them were harpooned with grains by some of the youngsters from the accommodation-ladder. Later in the day a seal rose, and continued fishing and rising in the most leisurely manner. At one time it was within م


CAPE TOWN.
easy rifle distance, and might have been shot from the ship."* Fish and meat are so plentiful in the colony that living is excessively cheap.

The visit of his Royal Highness the Sailor Prince, in 1867, will long be remembered in the colony. That, and the recent diamond discoveries, prove that the people cannot be accused of sloth and want of enterprise. On arrival at Simon's Bay, the first vessels made out were the Racoon, on which Prince Alfred had served lis time as lientenant, the Petret, just returned from landing poor Livingstone at the Zambesi, and the receiving-ship Seringapatam. Soon followed official visits, dinner, ball, and fireworks from the ships. - When the Prince was to proceed to Cape Town, all the ships fired a royal salute, and

[^73]the fort also, as he landed at the jetty, where he was received by a guard of honour of the 99 th Regiment. A short distance from the landing-place, at the entrance to the main street, was a pretty arch, decorated with flowering shrubs, and the leaves of the silver-tree. On his way to this his Royal Highness was met by a deputation from the inhabitants of Simon's Town and of the Malay population. "This was a very interesting sight; the chief men, dressed in Oriental costumes, with bright-coloured robes and turbans, stood in front, and two of them held short wands decorated with paper flowers of various colours. The Duke shook hands with them, and then they touched him with their wands. They seemed very much pleased, and looked at him in an earnest and affectionate manner. Several of the Malays stood round with drawn swords, apparently acting as a guard of honour. The crowd round formed a very motley group of people of all colours-negroes, brown Asiatics, Hottentots, and men, women, and children of every hue. The policemen had enough to do to keep them back as they pressed up close round the Duke." After loyal addresses had been received, and responded to, the Prince and suite drove off for Cape Town, the ride to which is graphically described by the chaplain and artist of the expedition. "The morning was very lovely. Looking to seaward was the Cape of Good Hope, Cape Hanglip, and the high, broken shores of Hottentot Holland, seen over the clear blue water of the bay. The horses, carriages, escort with their drawn swords, all dashing at a rattling pace along the sands in the bright sunshine, and the long lines of small breakers on the beach, was one of the most exhilarating sights imaginable. In places the cavalcade emerged from the sands up on to where the road skirts a rocky shore, and where at this season of the year beautiful arum lilies and other bright flowers were growing in the greatest profusion. About fourmiles from Simon's Bay, we passed a small cove, called Fish-hook Bay, where a few families of Malay fishermen reside. A whale they had killed in the bay the evening before lay anchored ready for 'cutting in.' A small flag, called by whalers a 'whiff,' was sticking up in it. We could see from the road that it was one of the usual southern 'right' whales which occasionally come into Simon's Bay, and are captured there. After crossing the last of the sands, we reached Kalk Bay, a collection of small houses where the people from Cape Town come to stay in the summer. As we proceeded, fresh carriages. of private individuals and horsemen continued to join on behind, and it was necessary to keep a bright look-out to prevent them rushing in between the two carriages containing the Duke and Governor, with their suites. Various small unpretending arches (every poor man having put up one on his own account), with flags and flowers, spanned the road in different places between Simon's Town and Farmer Peek's, a small inn about nine miles from the anchorage, which used formerly to have the following eccentric sign-board :-
' THE GENTLE SHEpHERD OF SALISBURY PLAIN.
' parmer pecks.
'Multum in Parvo! Pro bono publico: Entertainment for man or beast, all of a row, Lekher kost, as much as you please; Exeellent beds, without any fleas.

Nos patriam fugimus! now we are here, Vivamus: let us live by selling beer. On donne à boire et à manger iei ; Come in and try it, whoever you be.'

This house was decorated with evergreens, and over the door was a stuffed South African leopard springing on an antelope. A little further on, after discussing lunch at a half-way house, a goodly number of volunteer cavalry, in blue-and-white uniforms, appeared to escort the Sailor Prince into Cape Town. The road passes through pleasant country; but the thick red dust which rose as the cavalcade proceeded was overwhelming. It was a South African version of the 'Derby' on a hot summer's day. At varions places parties of school-children, arrayed along the road-side, sung the National Anthem in little piping voices, the singing being generally conducted by mild-looking men in black gloves and spectacles. At one place stood an old Malay, playing 'God Save the Queen' on a cracked clarionet, who, quite absorbed as he was in his musie, and apparently unconscious of all around him, looked exceedingly comic. There was everywhere a great scrambling crowd of Malays and black boys, running and tumbling over each other, shouting and laughing; women with children tied on their backs, old men, and girls dressed in every conceivable kind of ragged rig and picturesque colour, with head-gear of a wonderful nature, huge Malay hats, almost parasols in size, and resembling the thateh of an English corn-riek; crowns of old black hats; turbans of all proportions and colours, swelled the procession as it swept along. When the cavalry-trumpet sounded 'trot,' the cloud of dust inereased tenfold. Everybody, apparently, who could muster a horse was mounted, so that ahead and on every side the carriage in which we were following the Duke was hemmed in and surrounded, and everything became mixed up in one thick cloud of red dust, in which helmets, swords, hats, puggeries, turbans, and horses almost disappeared. The erowd hurraed louder than ever, pigs squealed, dogs howled, riders tumbled off; the excitement was irresistible. 'Oh! this is fun; stand up-never mind dignity. Whoo-whoop!' and we were rushed into the cloud of dust, to escape being utterly swamped and left astern of the Duke, standing up in the carriage, and holding on in front, to eateh what glimpses we could of what was going on. . . . Some of the arehes were very beautiful; they were all decorated with flowering shrubs, flowers (particularly the arum lily) and leaves of the silver-tree. In one the words Welcone Back* were formed with oranges. One of the most eurious had on its top a large steamship, with Galatea inscribed upon it, and a fumnel out of which real smoke was made to issue as the Duke passed under. Six little boys dressed as sailors formed the crew, and stood up singing 'Rule Britannia.'" And so they arrived in Cape Town, to have leve'es, reeeptions, entertainments, and balls by the dozen.

While at the Cape the Duke of Edinburgh laid the foundation of a grand gravingdock, an adjunct to the Table Bay Harbour Works, a most valuable and important addition to the resources of the Royal Navy, enabling the largest ironclad to be repaired at that distant point. The dock is four hundred feet long, and minety feet wide. For more than forty years previously frequent but unsuccessful efforts had been made to provide

[^74]a harbour of refuge in Table Bay; now, in addition to this splendid dock, it has a fine breakwater.

Officers of the Royal Navy may occasionally get the opportunity afforded the Prince, of attending an elephant hunt. From the neighbourhood of the Cape itself the biggest of beasts has long retired; but three hundred miles up the coast, at Featherbed Bay, where there is a settlement, it is still possible to enjoy some sport.

To leave the port or town of Knysna-where, by-the-by, the Duke was entertained at a great feed of South African oysters-was found to be difficult and perilous. The entrance to the harbour is very fine; a high cliff comes down sheer to the sea on one side, while on the other there is an angular bluff, with a cave through it. As the Petrel steamed out, a large group of the ladies of the district waved their handkerchiefs, and the elephant-hunters cheered. It was now evident, from the appearance of the bar, that the Petcel had not come out a moment too soon. A heavy sea of rollers extended nearly the whole way across the mouth of the harbour, and broke into a long thundering erest of foam, leaving only one small space on the western side clear of actual surf. For this opening the Petrel steered; but even there the swell was so great that the vessel reared and pitched fearfully, and touched the bottom as she dipped astern into the deep trough of the sea. The slightest aceident to the rudder, and nothing short of a miracle could have saved them from going on to the rocks, where a tremendous surf was breaking. Providentially, she got out safely, and soon the party was transferred to the Racoon, which returned to Simon's Bay.

On his return from the elephant hunt, the Prince gave a parting ball. A capital ballroom, 135 feet long by 44 wide, was improvised out of an open boat-house by a party of bluc-jackets, who, by means of ships' lanterns, flags, arms arranged as ornaments, and beautiful ferns and flowers, effected a transformation as wonderful as anything recorded in the "Arabian Nights," the crowning feature of the decorations being the head of one of the clephants from the Knysna, surmounting an arch of evergreens. Most of the visitors had to ecme all the way from Cape Town, and during the afternoon were to be seen flocking aiong the sands in vehicles of every description, many being conveyed to Simon's Town a part of the distance in a navy steam-tender or the Galatea's steam-launch. The ball was, of course, a grand success.

This not being a history of Cape Colony, but rather of what the sailor will find at or near its ports and harbours, the writer is relieved from any necessity of treating on past or present troubles with the Boers or the natives. Of course, everything was tinted couleur' de rose at the Prince's visit, albeit at that very time the coiony was in a bad way, with over speculation among the commercial classes, a cattle plague, disease among sheep, and a grape-disease. Mr. Frederick Boyle, whose recent work on the Diamond-fields has been already quoted, and who had to leave a steamer short of coal at Saldanha Bay, seventy or cighty miles from Cape Town, and proceed by a rather expensive ronte, presents a picture far from gratifying of some of the districts through which he passed. At Saldanha Bay. :Igriculture gave such poor returns that it did not even pay to export produce to the Cape. The settlers exist, but can hardly be said to live. They have plenty of cattle and sheep, sufficient maize and corn, but little money. Mr. Boyle describes the homestead of a Buer substantially as follows:- e biggest bed Bay, entertained lous. The one side, the Petrel chiefs, and bar, that ded nearly ering crest For this reared and of the sea. saved them lly, she got imon's Bay. capital ballby a party aments, and recorded in head of one Lost of the were to be conveyed to eam-launch.

1 find at or ing on past was tinted ad way, with - sheep, and ls has been y, seventy or ts a picture aldanha Bay duce to the f cattle and omestead of

Reaching the lome of a farmer named Vasson, he found himself in the midst of a scene quite patriarehal. All the plain before the house was white with sheep and lambs, drinkiigg at the "dam" or in long troughs. The dam is an indispensable institution in a country where springs are scarce, and where a river is a prodigy. It is the new settler's first work, even before erecting his house, to find a hollow space, and dam it up, so as to make a reservoir. He then proceeds to make the best sun-dried bricks he can, and to ereet his cottage, usually of two, and rarely more than three, rooms. Not unfrequently, there

the "galatea" passing knysna heads.
is a garden, hardly worthy of the name, where a fer potatoes and onions are raised. The farmers, more especially the Dutch, are "the heaviest and largest in the world." At an early age their drowsy habits and copious feeding run them into flesh. "Three times a day the family gorges itself upon lumps of mutton, fried in the tallowy fat of the sheep's tail, or else-their only change of diet-upon the tasteless fricadel-kneaded balls of meat and onions, likewise swimming in grease. Very few vegetables they have, and those are rarely used. Brown bread they make, but scarcely touch it. Fancy existing from birth to death upon mutton scraps, half boiled, half fried, in tallow! So doth the Boer. It is not eating, but devouring, with him. And fancy the existence! always alone with one's father, mother, brothers, and sisters; of whom not one can do more than wite his name, scarce one can read, not one has heard of any event in history, nor dicimed of such
existing things as art or science, or poetry, or aught that pertaius to civilisation." An unpleasant picture, truly, and one to which there are many exceptions. It was doubtful whether Mr. Vasson could real. His farm was several thousaud acres. The ancient law of Cape Colony gave the settice 3,000 moryen-something more than 6,000 acres. He was not obiged to take so much, but, whatever the size of his farm might be, it must be circulur in shape; and as the cireumference of a property could only touch the adjoining grants it follows that there were inmense corners or tracts of land left waste between. Clever and ambitious farmers, in these later days, have been silently absorbing said corners into their estates, greatly increasing their size.

The Cape cannot be recommended to the notiec of poor emigrants, but to capitalists it offers splendid inducements. Mr. Irons, in his work on the Cape and Natal settlements,* eites several actual eases, showing the profits on capital invested in sheep-farming. In one case $£ 1,250$ realised, in about three years, $£ 2,860$, which includes the sale of the wool. A second statement gives the profits on an outlay of $£ 2,225$, after seven years. It amounts to over $£ 8,000$. Rents in the towns are low; beef and mutton do not exceed fourpence per pound, while liread, made 'argely from imported flour, is a shilling and upwards per four-pound loaf.

So many sailors have made for the Diamond-fields, since their discovery, from the Cape, Port Elizabeth, or Natal, and so many ore will do the same, as any new deposit is found, that it will not be out of place here to give the facts concerning them. In 1571, when Mr. Boyle visited them, the ride up cost from $£ 12$ to $£ 16$, with additional expenses for meals, \&c. Of course, a majority of the $\tilde{5}^{r}, 000$ men who have been congregated at times at the various fields could not and did not afford this; but it is a tramp of 750 miles from Cape Town, or 450 from Port Elizabeth or Natal. From the Cape, a railvay, for about sixty miles, eases some of the distance. On the journey up, which reads very like Western experiences in Ameriea, two of three mules were twenty-six hours and a half in harness, and covered 110 miles! South Africa requires a society for the prevention of cruelty to animals, one would think. Mr. Boyle also saw another way by which the colonist may beeome rapidly wealthy-in ostrich-farming. Broods, purchased for $£ 5$ to $£ 9$, in three ycars gain their full plumages, and yield in feathers $£ 4$ to $\notin 6$ per amum. They become quite tame, are not delicate to rear, and are easily managed. And they also met the down coaches from the fields, on one of which a young fellow-almost a boy-had no less than 235 carats with him. At last they reached Pniel ("a camp"), a place which onee held 5,000 workers and delvers, and in November, 1872, was reduced to a few hundred, like the deserted diggings in California and Australia. It had, however, yielded largely for a time.

The words, "Here be diamonds," are to be found inseribed on an old mission-map of a part of the Colony, of the date of 1750 , or thereabouts. In 1867, a trader up country, near Hope Town, saw the children of a Boer playing with some pebles, picked up along the banks of the Orange River. An ostrich-hunter named O'Reilly was present, and the pair of them were struck with the appearance of one of the stones, and they tried it on glass, scratching the sash all over. A bargain was soon struek: O'Reilly was to take it to Cape Town; and there Sir P. E. Wodehouse soon gave him $£ 500$ for it. Then came an

[^75]ion." An s doubtful aeient law He was $t$ must be adjoining betwecn. aid corners capitalists ttlements,* g. In one the wool. It amounts 1 fourpence pwards per n the Cape, it is found, 1571, when xpenses for ed at times 750 miles y , for about ike Western in harness, cruclty to olonist may three years ecome quite own coaches a 235 carats 000 workers the deserted ime. sion-map of up country, d up along sut, and the tried it on Is to take it an came an
exeitement, of course. In 1869, a Hottentot shepherd, named Swartzboy, brought to a country store a gem of 83$\}$ carats. The shopman, in his master's absence, did not like to risk the $£ 200$ worth of goods demanded. Swartzboy passed on to the farm of one Niekirk, where he asked, and cventually got, $£ 100$. Niekirk sold it for $£ 12,000$ the same day! Now, of course, the excitement became a fevered frenzy.

Supreme among the camps around Puiel reigned Mr. President Parker, a sailor who, ; leaving the sea, had turned trader. Mr. Parker, with his counsellors, were absolute in power, and, all in all, administered justice ve:y fairly. Dueking in the river was the mildest punishnent; the naval "cat" came next; while dragging through the river was the third grade; last of all came the "sprend eagle," in which tl : culprit was extendel flat, hands and feet staked down, and so exposed to the angry sun.

In a short time, the yield from the various fields was not under $£ 300,000$ per month, and claims were sold at hundreds and thousands of pounds apiece. Then eame a time of depression, when the dealers would not buy, or only at terribly low prices. Mcantime, although meat was always cheap, everything else was very high. A cabbage, for example, often fetched 10 s., a water-melon 15s., and onions and green figs a shilling apiece. Forage for horses was half-a-crown a bundle of four pounds. To-day they are little higher on the Fields than in other parts of the Colony.

That a number of diggers have made snug little piles, ranging from two or three to eight, ten, or more thousand pounds, is undeniable, but they were very exceptional cases, after all. The dealers in diamonds, thongh, often turned over immense sums very rapidly.

And now, before taking our leave of the African station, let us pay a flying visit to Natal, which colony has been steadily rising of late years, and which offers many advantages to the visitor and settler. The climate, in spite of the hot siroceo whieh sometimes blows over it, and the severe thunderstorms, :s, all in all, superior to most of the African climates, inasmueh as the rainfall is as nearly as possible that of London, and it falls at the period when most wanted-at the time of greatest warmth and most active vegetation. The productions of Natal are even more varied than those of the Cape, while arrowroot, sugar, cotton, and Indian corn are staple articles. The great industries are caitle and sheep-rearing, and, as in all parts of South Africa, meat is excessively cheap, retailing at threepence or fourpence a pound.

Natal was discovered by Vasco da Gama, and received from him the name of Terra Natalis-"Land of the Nativity"-beeause of his arriving on Christmas Day. Until 1823 it was l:ttle known or visited. A settlement was then formed by a party of Englishmen, who were joined by a number of dissatisfied Dutchmen from the Cape. In 1838 the British Government took possesoiul. There was a squablle, the colonists being somewhat defiant for a while, and some little fighting ensued. It was proposed by the settlers to proclaim the Republic of Natalia, but on the appearance of a strong British force, they subsided quietly, and Natal was placed under the control of the Governor of the Cape. In 1856, it was erected into a separate colony.
T. moderate eapitalists it offers many advantages. Land is granted on the easiest terms, usually four shillings per acre; aud free grants are given, in proportion to a settler's capital : $£ 500$ capital receives a land order for 200 acres. An arrowroot plantation snd
factory can be started for $£ 500$ or $£ 600$, and a coffec plantation for something over $£ 1,000$. Sugar-planting, \&c., is much more expensive, and would require for plant, \&e., £5,000, or more.

And now, on the way bome from the African station, the good ship will pass close to, if indeed it does not touch at, the Island of St. Helena, a common place of refreshment for vessels sailing to the norihward. Vessels coming sonthward rarely do so; sailing ships can hardly make the island. It lies some 1,200 miles from the African coasts, in mid-ocean. St. Helena has much the appearance, seen from a distance, of the summit of some great submarine mountain, its rugged and perpendicular cliffs rising from the shore to altitudes from 300 to 1,500 feet. In a few scattered places there are deep, precipitous ravines, opening to the sea, whose embouchures form difficult but still possible landingplaces for the fishermen. In one of the largest of these, towards the north-west, the capital and port of the island, James Town, is situated. It is the residence of the authoritics. The anchorage is good and sufficiently deep, and the port is well protected from the winds. The town is entered by an arched gateway, within which is a spacions parade, lined with official residences, and faced by a handsome church. The town is in no way remarkable, but has well-supplied shops. The leading inhabitants prefer to live outside it on the higher and cooler plateaux of the island, where many of them have very fine country houses, foremost of which is a villa named Plantation House, belonging to the governor, surrounded by pleasant grounds, handsome trees and shrubs. In the garden grounds tropical and ordinary fruits and vegetables flourish; the mango, banana, tamarind, and sugar-cane; the orange, citron, grape, fig, and olive, equally with the common fruits of England. The yam and all the European vegetables abound; three crops of potatoez have been often raised from the same ground in one year. The hills are covered with the cabbage tree, and the log-wood and gum-wood trees. Cattle and sheep are scarce, but goats browse in immense herds on the lills. No beasts of prey are to be met, but there are plenty of unpleasant and poisonous insects. Game and fish are abundant, and turtles are often found. All in all, it is not a bad place for Jack after a long voyage, although not considered healthy. It has a military governor, and there are barracks.

The interior is a plateau, divided by low mountains, the former averaging 1,500 feet above the sea. The island is undoubtedly of volcanic origin. It was discovered on the 22nd May (St. Helena's Day), by Juan de Nova, a Portuguese. The Dutch first held it, and it was wrested from them first by England in 1673, Charles II. soon afterwards granting it to the East India Company, who, with the exception of the period of Napoleon's imprisonment, held the proprietorship to 1834, when it became an appanage of the Crown.

The fame of the little island rests on its having been the prison of the great disturber of Europe. Every reader knows the circumstances which preceded that event. He had gone to Rochefort with the object of embarking for America, but finding the whole coast so blockaded as to render that scheme impracticable, surrendered himself to Captain Maitland, commander of the English man-of-war Bellerophon, who immediately set sail for Torbay. No notice whatever was taken of his letter-an uncourteous proceeding, to say the least of it, towards a fallen foe-and on the 7th of August he was removed
er $£ 1,000$. ., £5,00), pass close ff refreshso ; sailing coasts, in summit of the shore precipitous le landing-h-west, the nce of the 11 protected a spacious se town is efer to live have very longing to the garden t, tamarind, nmon fruits of potatoes overed with are scarce, be met, but undant, and ong voyage, ks. ging 1,500 iscovered on Dutch first soon afterhe period of In appanage
e great disthat event. finding the himself to immediately proceeding, vas removed
to the Northumberlund, the flag-ship of Sir George Cockburn, which immediately set sail for St. Helena.

On arrival the imperial captive was at first lodged in a sort of inn. The following day the ex-emperor and suite rode out to visit longwood, the seat selected for his residence, and when returning noted a small villa with a pavilion attached to it, about two miles from the town, the residence of Mr. Balcombe, an inhabitant of the island. The spot attracted the emperor's notice, and the admiral, who had accompanied him, thought it

st. helena.
would be better for him to remain there than to go back to the town, where the sentinels at the doors and the gaping crowds in a manner confined him to his chamber. The place pleased the emperor, for the position was quiet, and commanded a fine view. The pavilion was a kind of summer-house on a pointed eminence, about fifty paces from the house, where the family were accustomed to resort in fine weather, and this was the retreat hired for the temporary abode of the emperor. It contained only one room on the ground-floor, without curtains or shutters, and searcely possessed a seat; and when Napoleon retired to rest, one of the wiudows had to be barricaded, so draughty was it, in order to exclude the night air, to which he bad become particularly sensitive. What a contrast to the gay palaces of France!

In December the emperor removed to Longwood, riding thither on a small Cape
horse, and in his uniform of a chasseur of the guards. The road was lined with spectators, and he was reeeived at the entrance to Longwood by a guard under arms, who rendered the preseribed honour to their illustrious captive. The place, which had been a farm of the last India Company, is situated on one of the highest parts of the island, and the difference between its temperature and that of the valley below is very great. It is surrounded by a level height of some extent, and is near the enstern const. It is statel that continual and frequently violent winds blow regularly from the saine quarter. The sun was rarely seen, and there were heavy raiufalls. The water, conveyed to Longwood in pipes, was found to be so unwholesome as to require boiling before it was fit for use. The surroundings were barren roeks, gloomy deep valleys, and desolate gullies, the only redeeming feature being a glimpse of the ocean on one liand. All this after La Belle France!

Longwood as a residence had not much to boast of. The building was rambling and inconveniently arranged; it had been built up by degrees, as the wants of its former inmates had increased. One or two of the suite slept in lofts, reached by ladders and trap-doors. The windows and beds were curtainless, and the furniture mean and seanty. Inhospitable and in bad taste, ye in power at the time! In front of the place, and separated by a tolerably deep ravine, the 53rd Regiment was encamped in detached bodies on the neighbouring heights. Here the eaged lion spent the last five weary years of his life till ealled away by the God of Battles.

## CHAPTER XIII.

## The Service.-Opficers' Life on Board.

Conditions of Life on Ship-board-A Model Ward-room-An Admiral's Cabin-Captains and Captains-The Sailor and his Superior Officers-A Contrast-A Commander of the Old School-Jack Larmour-Lord Cochrane's Experiences-IIts Chest Curtailed-The Stinking Ship-The First Command-Shaving under Dlfficulties-The Speedy and her PrizesThe Doctor-On Board a Gun-buat-Cabin and Dlspensary-Cockroaches and Centipedes-Other horrors-The Naval Chaplain-Hils Duties-Storics of an Amateur-The Engineer-IIis Increasing Importance-Popularity of the Navy-Nelson always a Model Commander-The Itol of his Colleagues, Offleers, and Men-Taking the Men Into hls Confidence-The Aetion between the Bellona and Courageux-Captain Falknor's Speech to the Crew-An Obsoleto Custon-Crossing the Line-Neptune's Visit to the Quarter-deek-The Navy of To-day-Its Backbone-Progressivo Increaso in the Size of Vessels-Naval Volunteers-A Noble Movement-Exeellent Resulls-The Naval Reserve.

In the previous pages we have given some aceount of the various stations visited by the Royal Navy of Great Britain. Let us next take a glanee at the ships themselves-the quarter-deck, the captain's cabin, and the ward-room. In a word, let us see how the officers of a ship live, move, and have their being on board.

Their condition depends very much on their ship, their captain, and themselves. The first point may be dismissed briefly, as the general improvement in all descriptions of vessels, including their interior arrangements, is too marked to need mentioning. The ward-room of a modern man-of-war is often as well furnished as any other dining-roomhandsomely carpeted, the sides adorned with pictures, with comfortable chairs and lounges,
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bling and ts former lders and d scanty. laee, and ad bodies ars of his
ailor and his eriences-His her Prizes -horrors-The larity of the he Men into -An Obsoleto -Progressive Reserve.
the Royal arter-deck, of a ship hemsclves. escriptions ing. The ng-roomd lounges,
and exeellent appointments at table. In the ward-room of a Russian corvette visited by the writer, he found a saloon large enough for a ball, with pinno, and gorgeous side-board, set ont as in the houses of most of the northern nations of Burope, with sundry bottles and incitives to emptying them, in the shape of salt unchovies and salmon, caviure and cheese. In a British flag-ship he found the admiral's cabin, while in port at least, a perfect little bijou of a drawing-room, with harmoniun and piano, vases of tlowers, portfolios of drawings, an elaborato stove, and all else that eould conduce to comfort and luxury. Outside of this was a more plainly-furuished cabin, used as a dining-room. Of course much of this disappears at sea. The china and glass are securely packed, and all of the smaller loose articles stowed away; the piumo covered up in eanvas and securely "tied up" to the side; likely enongh the carpet removed, and a rough canvas substituted. Still, all is ship-shape and neat as a new pin. The few "old tubs" of vessels still in the service are rarely employed beyond triffing harbour duties, or are kept for emergencies on foreign stations. They will soon disappear, to be replaced by smart and handy little gun-boats or other eraft, where, if the accommodations are limited, at least the very most is made of the room at command. How different all this is to many of the vessels of the last century and commencement of this, described by our nautical novelists as little better than colliers, pest ships, and tubs, smelling of piteh, paint, bilge-water, tar, and rum! Readers will remember Marryat's captain, who, with his wife, was so inordinately fond of pork that he turned his ship into a floating pig-sty. At his dinner there appeared mock-turtle soup (of pig's head); boiled pork and pease pudding; roast spare rib; sausages and pettitoes; and, last of all, sucking-pig. He will doubtless remember how he was eventually frightened off the ship, then about to proceed to the West Indies, by the doctor telling him that with his babit of living he would not give much for his life on that station. But although Marryat's characters were true to the life of his time, you would go far to find a similar example to-day. Captains still have their idiosyncrasies, but not of such a marked nature. There may be indolent captains, like he who was nieknamed "The Sloth;" or, less likely, prying captains, like he in "Peter Simple," who made himself so unpopular that he lost all the good sailors on board, and had to put up with a "scratch crew;" or (a comparatively harmless variety) captains who amuse their officers with, the most outrageous yarns, but who are in all else the souls of honour. Who can help laughing over that Captain Kearney, who tells the tale of the Atta of Ruses ship? He relates how she had a puncheon of the precious essence on board; it crould be smelt three miles off at sca, and the odour was so strong on board that the men fainted when they ventured ncar the hold. The timbers of the ship became so impregnated with the smell that they could never make any use of her afterwards, till they broke her up and sold her to the shopkeepers of Brighton and Tun-bridge-wells, who turued her into scented boxes and fancy articles, and then into money. The absolutely vulgar eaptain is a thing of the past, for the possibilities of entering "by the hawse-hole," the technical expression applied to the man who was occasionally in the old times promoted from the fo'castle to the quarter-deck, are very rare indeed nowadays. Still, there are gentlemen-and there are gentlemen. The perfect example is a rara avis everywhere.

The true reason why a eaptain may make his officers and men constitute an agreable happy family, or a perfect pundemonium of discontent and misery, consists in the ubnse of his absolute power. That power is necessarily bestowed on him; there must be a head; without good diseipline, no vessel can be properly handled, or the emergeneies of seumanship and warfare met. But as he can in minor matters have it all his own way, and even in many more important ones can determine absolutely, without the fear of anything or anytroly short of a court-martial, he may, and often does, become a martinet, if not a very tyrumt.

The subordinate offieer's life may be rendered a burden by a cantankerous and exacting eaptain. Every trifling omission may be magnified into a grave offence. Some euptains seem to go on the principle of the Irishman who asked, "Who'll tread on my coat tails?" or of the other, "Did you blow your nose at me, sir?" And again, that which in the captain is no offence is a very serious one on the part of the offieer or seaman. He may exhaust the vocabulary of abuse and bad language, but not a retort may be made. In the Royal Navy of to-day, though by no means in the merchant service, this is, however, nearly obsolete. However tyrannically disposed, the language of commanders and offieers is nearly sure to be free from disgraceful epithets, blasphemies, and seurrilous abuse, cursing and swearing. Officers should be, and generally are, gentlemen.

A commanding lieutenant of the old sehool-a type of offieer not to be found in the Royal Navy nowadays-is well described by Admiral Cochrane.* "My kind unele," weites he, "the Hon. Joln Cochrane, accomparid me on board the Iliuld for the purpose of introducing me to my future superior otucer, Lieutenant Larmour, or, as he was more familiarly known in the service, Jack Larmour-a specimen of the old British seaman, little caleulated to inspire exalted ideas of the gentility of the naval profession, though presenting at a glanee a personification of its efficiency. Jack was, in faet, one of a not very numerous class, whom, for their superior seamanship, the Admiralty was glad to promote from the forecastle to the quarter-deck, in order that they might mould into ship-shape the questionable materiuls supplied by parliamentary influence, even then paramount in the navy to a degree which might otherwise have led to disaster. Lueky was the commander who could secure such an officer for his quarter-deck.
"On my introduction, Jaek was dressed in the garb of a seaman, with malinspike slung round his neek, and a lump of grease in his hand, and was busily employed in setting up the rigging. His reeeption of me was anything but gracious. Indeed, a tall fellow, over six feet high, the nephew of his eaptain, and a lord to boot, were not very promising recommendations for a midshipman. It is not impossible he might have learned from my unele something about a military commission of several years' standing; and this, coupled with my age and stature, might easily have impressed him with the idea that he had caught a scapegrace with whom the family did not know what to do, and that he was hence to be saddled with a 'hard bargain.'
"After a little constrained civility on the part of the first licutenant, who was evidently not very well pleased with the interruption to his avoeation, he ordered me to

[^76]arreeablo the abuse minst be a gencies of own way, ar of anyrartinet, if 1 exacting ce eaptains oat tails?" ich in the He may le. In the s , however, 1 offieers is ise, eursing und in the cle," writes purpose of was more aman, little presenting y numerous te from the he questionhe navy to nander who marlinspike employed in deed, a tall re not very ave learned mang ; and ith the idea to do, and
, who was dered me to dmiral of tho


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'get my traps below.' Scarcely was the order complied with, and myself introduced to the midshipman's berth, than I overheard Jack grumbling at the magnitude of my equipments. 'This Lord Cochrane's chest? Does Lord Cochrane think he is going to bring a cabin aboard? Get it up on the main-deck!'
"This order being promptly obeyed, amidst a running fire of similar objurgations, the key of the chest was sent for, and shortly afterwards the sound of sawing became audible. It was now high time to follow my property, which, to my astonishment, had been turned out on the deci-Jack superintending the sawing off one end of the chest just beyond the keyhole, and accompanyirg the operation by sundry uncomplimentary observations on midshipmen in general, and on myself in particular.
"The metamorphosis being completed to the lientenant's satisfaction-though not at all to mine, for my neat chest had become an unshapely piece of lumber-he pointed out the ' lubberliness of shore-going people in not making keyholes where they could most easily be got at,' viz., at the end of a chest instead of the middle!" Lord Cochrane took it easily, and acknowledges sarmly the service Jack Larmour rendered him in teaching him his profession.

Later, Lord Cocirans, when promoted to a lieutenancy, was dining with Admiral Vandepat, and being seated near him, was asked what dish was before him. "Mentioning its nature," says he, "I asked whether he would permit me to help him. The uncourteous reply was--that whenever he wished for anything he was in the habit of asking for it. Not knowing what to make of a rebuff of this nature, it was met with an inquiry if he would allow me the honour of taking wine with him. 'I never take wine with any man, my lord,' was the unexpected reply, from which it struck me that my lot was cast among Goths, if no vorse." Subsequently he found that this apparently gruff old admiral assumed some of this roughness purposely, and that he was one of the kindest commanders living.

In 1798, when with the Mediterranean fleet, ludicrous examples, both of the not very occasional corruption of the period, and the rigid etiquette required by one's superior officer, occurred to Lord Cochrane, and got him into trouble. The first officer, Lieutenant Beaver, was one who carried the latter almost to the verge of despotism. He looked after all that was visible to the eye of the admiral, but permitted "an honest pemny to be turned elsewhere." At Yetuan they had purchased and killed bullocks on board the flagship, for the use of the whole squadron. The reason for this was that the hides, being valuable, could be stowed away in her hold or empty beef-casks, as especial perquisites to certain persons on board. The fleshy fragments on the hides soon decomposed, and rendered the hold of the vessel so intolerable that she acquired the name of the "Stinking Scotch ship." Lord Cochrane, as junior lieutenant, had much to do with these arrangements, and his unfavourable remarks on these raw-hide speculations did not render those interested very friendly towards him. One day, when at Tetuan, he was allowed to go wild-fowl shooting ashore, and became covered with mud. On arriving rather late at the ship, he thought it more respectful to don a clean uniform before reporting himself on the quarterdeck. He had scarcely made the change, when the first lieutenant came into the wardroom, and harshly demanded of Lord Cochrane the reason for not having reported himself. ing became ument, had f the chest aplimentary ted out the most easily ane took it aching him
th Admiral " Mentionhim. The it of asking an inquiry e wine with my lot was y gruff old the kindest
of the not e's superior , Lieutenant looked after pemy to be
boart the hides, being erguisites to nd rendered king Scotch rangements, e interested o wild-fowl the slip, he the quarter-
the wardted himself.

His reply was, that as the lieutenant had seen him come up by the side he must be aware that he was not in a fit condition to appear on the quarter-deck. The lieutenant replied so offensively before the ward-room officers, that he was respectful, reminded by Cochrane of a rule he had himself laid down, that "Matters connected with the serviee were not there to be spoken of." Another retort was followed by the sensible enough reply, "Lieutenant Beaver, we will, if you please, talk of this in another place." Cochrane was immediately reported to the captain by Beaver, as having challenged him: the lieutenant actually demanded a court-martial! And the court-martial was held, the decision being that Cochrane should be admonished to le "more eareful in future."

Lord Cochrane was soon after given a command. The vessel to which he was appointed was, even eighty years ago, a mere burlesque of a slip-of-war. She was about the size of an average coasting brig, her lurden being 158 tons. She was crowded rather than manned, with a erew of eighty-four men and six officers. Her armament consisted of fourteen 4-pounders! a species of gun little larger than a blunderbuss, and formerly known in the service as "minion," an appellation quite appropriate. The cabin had not so much as room for a chair, the floor being entirely occupied by a small table surrounded with lockers, answering the double purpose of store-chests and seats. The difficulty was to get seated, the ceiling being only five feet high, so that the object could only be accomplished by rolling on the lockers: a movement sometimes attended with uupleasant failure. Cochrane's only practicable way of shaving consisted in removing the skylight, and putting his head through to make a toilet-table of the quarter-deek!

On this little vessel-the Speedy-Cochrane took a number of prizes, and having on one occasion mauned a couple of them with half his crew and sent them away, was forced to tackle the Gumo, a Spanish frigate of thirty-two heavy guns and 319 men. The exploit has hardly been excelled in the history of heroic deeds. The commander's orders were not to fire a single gun till they were close to the frigate, and he ran the Speedy under her lee, so that her yards were locked among the latter's rigging. The shots from the Spanish guns passed over the little vessel, only injuring the rigging, while the Speedy's mere pop-guns could be elevated, and helped to blow up the main-deck of the enemy's ship. The Spaniards speedily found out the disadvantage under whieh they were fighting, and gave the orders to board the little English vessel; but it was avoided twice by sheering off sufficiently, then giving them a volley of musketry and a broadside before they could recover themselves. After the lapse of an hour, the loss to the Speedly was only four men killed and two wounded, but her rigging was so ent up and the sails so riddled that Cochrane told his men they must either take the frigate or be taken themselves, in which case the Spaniards would give no quarter. The doetor, Mr. Guthrie, bravely volunteered to take the helm, and leaving him for the time both commander and crew of the ship, Cochrane and his men were soon on the enemy's deck, the Speedly being put close alongside with admirable skill. A portion of the crew had been ordered to blacken their faces and board by the Gamo's head. The greater portion of the Spanish crew were prepared to repel boarders in that direction, but stood for a few moments as it were transfixed to the deck by the apparition of so many diabolical-looking figures emerging from the white smoke of the bow guns, while the other men rushed on them from behiud
before they could recover from their surprise at the unexpected phenomenon. Observing the Spanish colours still flying, Lord Cochrane ordered one of his men to haul them down, and the crew, without pausing to consider by whose orders they had been struck, and naturally believing it to be the act of their own officers, gave in. The total English loss was three men killed, and one officer and seventeen men wounded. The Gamo's loss was the captain, boatswain, and thirteen seamen killed, with forty-one wounded. It became a puzzle what to do with 263 unhurt prisoners, the Speedly having only forty-two sound men left. Promptness was necessary ; so, driving the prisoners into the hold, with their own guns pointed down the hatchway, and leaving thirty men on the prize, Cochrane shaped the vessel's course to Port Mahon, which was reached safely. Some Barcelona gun-boats, spectators of the action, did not venture to rescue the frigate.

The doctor on board a man-of-war has, perhaps, on the whole, better opportunities and, in times of peace, more leisure than the other officers for noting any circumstances of interest that may occur. Dr. Stables, in his interesting little work,* ${ }^{*}$ describes his cabin on board a small gun-boat as a miserable little box, such as at home he would have kept rabbits or guinea-pigs in, but certainly not pigeons. He says that it might do for a commodore-Commodore Nutt. It was ventilated by a small scuttle, seven inches in diameter, which could only be raised in harbour, and beneath which, when he first went to sea, he was obliged to put a leather hat-box to catch the water; unfortunately, the bottom rotted out, and he was at the marcy of the waves. This cabin was alive with scorpions, cockroaches, and other "crawling ferlies,"
"That e'en 10 name would be unlawfu'."
His dispensary was off the steerage, and sister-cabin to the pantry. To it he gained access by a species of crab-walking, squeezing himself past a large brass pump, edging in sideways. The sick would come one by one to the dispensary, and there he saw and treated each case as it arrived, dressing wounds, bruises, and putrefying sores. There was no sick berth attendant, but the lieutenant told off "a little cabin-boy" for his use. He was not a model cabin-boy, like the youngster you see in the theatres. He certainly managed at times to wash out the dispensary, in the intervals of catching cockroaches and making poultices, but in doing the first he broke half the bottles, and making the latter either let them burn or put salt into them. Finally, he smashed so much of the doctor's apparatus that he was kicked out. In both dispensary and what Dr. Stables calls his "burrow," it was difficult to prevent anything from going to utter destruction. The best portions of his uniform got eaten by cockroaches or moulded by damp, while his instruments required cleaning every morning, and even this did not keep the rust at bay.

And then, those terrible cockroaches! To find, when you awake, a couple, each two inches in length, meandering over your face, or even in bed with youl-to find one in a state of decay in the mustard-pot!-to have to remove their droppings and eggs from the edge of your plate previous to eating your soup! and so on, ad nauseam. But on small vessels stationed in the tropics-as described by the doctor-there were, and doubtless sometimes are now, other unpleasantnesses. For instance, you are looking for a book, and

[^77]Observing aul them en struck, al English 'amo's loss nded. It forty-two hold, with , Cochrane Barcelona
portunities cumstances scribes his would have ght do for 1 inches in first went nately, the alive with
aned access ng in sideand treated ere was no e. He was managed at nd making latter either ss apparatus " burrow," est portions instruments
ouple, each to find one eggs from $n$. But on d doubtless a book, and
put your hand on a full-grown sealy scorpion. Nice sensation! the animal twining round your finger, or running up your sleeve! Dénoàment: cracking him under foot-joy at escaping a sting!
"You are enjoying your dinner, but have been for some time sensible of a strange, titillating feeling about the region of your ankle; you look down at last, to find a centipede on your sock, with his fifty hind legs-you thank God not his fore-fifty!-


Naval officers and seamen, eighteentil centuri.
abutting on your shin. Tableanx: green-to-red light from the eyes of the many-legged -horror of yourself as you wait till he thinks proper to ' move on.'
"To awake in the morning, and find a large, healthy-looking tarantula squatting on your pillow, within ten inches of your r.ose, with his basilisk eyes fixed on yours, and apparently saying: 'You're awake, are jou? I've been sitting here all the morning, watehing ycu.'
"You think, if you move, he'll bite you somewhere-and if he does bite your, you'll go mad, and dance ad libitum-so you twist your month in the opposite direction, and ejaculate-'Steward!' But the steward does not come; in fact, he is forward, seeing after breakfast. Meanwhile. the gentleman on the pillow is moving his horizontal mandibles in a most threatening manner, and just as he moves for your nose, you tumble
out of your bed with a shriek, and, if a very nervous person, probably run on deek in your shirt!"

The doctor's last description oi an accumulation of these horrors is fearful to even think about. The bulkheads all around your berth are black with cock and hen-roaches, a few of which are nipping your toe, and running off with little bits of the skin of your leg; while a troop of ants are carrying a dead one over your pillow: musquitoes and flies attacking you everywhere; rats running in and rats running oui; your lamp just fliekering and dying away into darkness, with the delicious eertainty that an indefinite number of earwigs and scorpions, besides two centipedes and a tarantula, are hiding themselves somewhere in your cabin! All this is possible; still Dr. Statles describes life on other vessels under more favourable auspices.

The important addition of a chaplain to the establishment on board our ships of war seems, from the following letter of George, Duke of Buckingham, to have been first adopted in the year 1626:-
"The Deke of Buckingham to the University of Cambindae.
"After my hearty commendations. His Majesty having given order for preachers to goo in every of his ships to sea, choyec hath been mado of one Mr. Daniel Ambrose, Master of Arts and Fellow of your College, tn be one. Accordingly, upon signification to me to come hither, I thought good to intimato unto you, that His Majesty is so eareful of such scholars as aro willing to put themselves forward in so good actions, as that ho will expect-and I doubt not but that you will accordingly take order-that the said Mr. Ambrose shall suffer noe detriment in his place with you, by this his employment; but that you will rather take care that he shall have all immunities and emoluments with advantage, which have been formerly, or may bo, granted to any upon the like service. Wherein, not doubting of your affectionate care, I rest,
"Your very loving friend,
"York House, July 29th, 1626."
"G. Buckingham.
Sailors, in spite of their outbursts of recklessness, have frequently, from the very nature of their perilous ealling, an amount of seriousness underlying their character, which makes them particularly amenable to religious influences. The chaplain on a large modern ironclad or frigate has as many men in his charge, as regards spiritual matters, as the vicar of a eountry town or lerge village, whilst he has many more opportunities of reaching them directly. Many of our naval chaplains are noble fellows; and to them eome the sailors in any distress of mind, for the soothing advice so readily given. He may not dare to interfere with the powers that be when they are in danger of punishment, except in very rare cases; but he can point them ont their path of duty, and how to walk in it, making them better sailors and happier men. He can lend them an oecasional book, or write for them an oceasional letter home; induce them to refrain from dissipation when on liberty; cheer them in the hour of greatest peril, while on the watery deep, and give them an vecasional reproof, but in kindness, not in anger. To his brother officers he has even better opportunities of doing good than to the men. On the smaller classes of vessels -gun-boats and the like-the captain has to perform chaplain's duties, by reading prayers on the Sabbath. This is the case also on well-regulated steamships or passenger sailingvessels of the merchant serviẹe. The fine steamers of such lines as the Cunard, or White Star, of the Royal Mail Company, or of the P. and O., have, of course, frequently, some clergyman, minister, or missionary on board, who is willing to eelebrate divine service.

A Committee of the Lower House of Convoeation has recently collected an immer :e amount of statisties regarding the provision made by private ship-owners for the spiritual welfare of their men, and the result as regards Eugland is not at all satisfactory. In point of faet, it is rarely made at all. The committee seeks to encourage the growth of religion among sailors by providing suitable and comfortable church aecommodation at all ports, and urges owners to instruct their captains as to conducting divine service on Sundays, and to furnish Bibles, prayer-books, and instructive works of secular literature. Too much must not, however, be expected from Jack. The hardships and perils through which he passes excuse much of his exuberance ashore. It is his holiday-time; and, so long as he is only gay, and not abandoned, the most rigid must admit that he has earned the right to recreation. A distinguished French naval offieer used to say that the sailor fortunately had no memory. "Happy for him," said he, "that he is thus oblivious. Did he remember all the gales and tempests, the cold, the drenching rain, the misery, the privations, the peril to life and limb which he has endured, he would never, when he sets foot on shore, go to sea again. But he has no memory. The clouds roll away, the sea is calm, the sun shines, the boat bears him to land; the wine flows; the music strikes up; pretty girls smile: he forgets all the past, and lives only in the present."

While the chaplain may, and no doubt generally does, earn the respect and esteem of the men, woe to any example of the "Chadband" order who shall be found on board. This is, in the Royal Navy, almost impossible; but it sometimes happens that, on passenger ships, some sanctimonious and fanatical individual or other has had a very rough time of it. He is regardea as a kind of Jonah. In a recent number of that best of American magazines, the Atlautic Monthly, the woes and trials of one poor Joseph Primrose, a well-meaning minister who went out to America in 1742, are amusingly recounted. There were, aboard the Polly, the vessel in which he took passage, scveral of the crew who viewed their religious exereises askance. "These men," says he, "had been foremost in a general indignation uprising that had ensued upon the stoppage of their daily allowance of rum; which step had been taken on my earnest recommendation. For this injurious drink we liad substituted a harmless and refreshing beverage concocted of molasses, vinegar, and water, from a choice reeeipt I had come upon in a medical book aboard the vessel. The sailors, to a man, refused to touch it, egged on by these contumacious fellows, and more especially by one Springer, a daring villain, who reviled me with bitter execrations. In fine, the eaptain was obliged, for our own safety, to restore the cherished dram; and I had the mortification to find myself, from that time forth, an object of dislike and suspicion to these men, who were kept within decent bounds only by respect for their master. I became convinced, on reflection, that $I$ had gone the wrong way about this unfortunate piece of business; having, in fact, made a vury serious error in the beginning, gentle argument and good example being more apt to bring about the desired end than compulsory measures, these dulling the understanding by rousing the temper, especially among persons of the meaner sort. All my efforts-and they were not few-to place myself on a friendly footing with these men were of no avail: they had eonceived the notion that I was their enemy, and met all my advances with obstinate coldness. As Captain Hewlett exacted the daily attendance at prayers of every soul on board, these
knaves were compelled to be on hand with their fellows; but they rarely failed to conduct themsclves with such indecent levity as made me rue their presence, playing covertly at cat's-cradle, jack-straws, and what not; besides g:inning familiarly in my face, whenever they could contrive to catch my cye." This unseemly behaviour was as nothing to what followed ashore. While addressing a large assemblage, he noted the advent of a number of unmannerly fellows, who, with a great deal of clatter, ellowed their way to the front. "The moment I clapped eyes upon them," says poor Primrose, "I knew then for the sailors who had so persecuted me aboard the Polly, and my heart sank at the bate sight of them." They sung, or rather bawled, ribald words to the music of the hymns; and one of them, when rebuked by some gentleman present, whipped out his cutlass, and a general row ensued, which broke up the assembly. A little later, Primrose induced a tavern-keeper to allow him to preach on his premises. "A West Indian vessel coming into port about the middle of April, and a horde of roystering sailors gathering in the common room of the 'Sailor's Rest' to drink, I announced a discourse on the subject of 'gin-guzzling,' choosing one that I had delivered aboard the Polly, and which seemed to fit the occasion to a nicety. No sooner had the landlord seen the notice to this effect that I had attached to his door-cheek, than he sends for me to repair to the tavern without loss of time; and on my appearance, in great haste, comes blustering up to me in a most offensive manner, demanding whether I purposed the ruin of his trade, by putting forth of such a mischicvous paper; adding, with astounding audacity, that he should certainly lose all the custom I had been the means of fetching to his house, did I persist in my intent. Mark the cunning of the knave! He had encouraged my labours for none other purpose than the bringing of fresh grist to his mill; and here was $I$, blindly leading precious souls to destruction, the poor dupe of a specious villain-a wretch without bowels! My agony of mind on being thus suddenly enlightened was of such a desperate sort, that, gnashing my teeth, I leapt upon the miscreant, and, bearing him to the ground with an awful crash, beat him about the head and shoulders with the stout cane I carried; and with such good will, that I presently found myself lying in the town gaol, covered with the blood of my enemy, and every bone in my body aching from the unaccustomed exercise.

Truly was I as forlorn and friendless a creature as the world ever saw. My clothing had been rent beyond repair in the shameful struggle, and, yet worse, one of my shoes was gone-how and where I knew not; and although I promised the gaoler's little lad a penny in the event of his finding it, nothing was ever heard of it from that day to this. One thought alone cheered me in the dark abyss into which I was fallen. I had administered wholesome and righteous correction in proper season: hip and thigh had I hewed my enemy; and, to reflcet upon that, was as a healing balm to my sore bones." Mr. Primrose was at length released, and returned to England.

Another officer of the Royal Navy-the engineer-deserves particular notice, for his position is becoming daily of more and more importance. It is not merely the care and working of the engines which propel the vessel in which he is concerned; the chief and his subordinates have charge of various hydraulic arrangements often used now-a-days on large vessels, in connection with the steering apparatus; of electrical and gas-producing apparatus; the mechanical arrangements of turrets and gun-carriages; pumping machinery;

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the management of steam-launches and torpedoes. Take the great ironclad Thunderer (that on which the terrible boiler explosion oecurred) as an example: she has tuenty-six engines for various purposes, apart from the engines used to propel the vessel, which have an actual power of 0,000 horses. The Téméraire has thirty:four engines distinct from those required for propulsion. A competent authority says that, "with the exeeption of the paymaster's and surgeon's stores, he is responsible for everything in and outside the

engine-room of h.m.s. "warrion."
ship (meaning the hull, apart from the navigator's duties), to say nothing of his duties while under weigh." And yet engineers of the navy do not yet either derive the status or emoluments fairly due to them, considering the great and increasing responsibilities thrown upon them of late years. Sir Walter Scott makes Rob Roy express "his contempt of weavers and spinners, nnd sic-like mechanical persons, and their pursuits;" and in the naval service some such feeling still lingers.

The first serious introduction of steam-vessels into the Royal Navy oceurred about the year 1829, the Navy List of that year showing seven, of whieh three only were commissioned, and these for home ports. No mention is made of engineers; they were simply taken over from the contractor with the vessel, and held no rank whatever. In 1837 an Admiralty Circular conferred warrants on engineers, who were to rank immediately below
carpenters ; they were to be assisted by boys, trained by themselves. Three years later, the standard was raised, and they were divided into three classes; in 1842 a slight increase of pay was given, and they were advanced to the magnificent rank of "after captains' clerks," and were given a uniform, with buttons having a steam-engine embossed upon them. In 1847 the Government found that the increasing demands of the merchant and passenger service took all the best men (the engineers' pay, to-day, is better on first-class steamship lines than in the Navy), and they were forced to do something. The higher grades were formed into chiof engineers, and they were raised to the rank of commissioned officers, taking their place after masters. The first great revolution in regard to the use of steam in the Royal Navy took place in 1849, by means of the screv.propeller. In that year Dupay Delorme constructed the Napoleon, a secow-vessel carrying 100 guns, and with engines of 600 horsepower, and England had to follow. Then came the Russian War, the construction of ironclad batteries, and finally, the ironclad movement, which commenced in England in 1858, by the construction of the Warrior and similar vessels.

It becomes a particularly serious question, at the present time, whether the system, as regards the rank and pay of engineers, does not deter the most competent men from entering the Royal Navy. Many very serious explosions and accidents have occurred on board ironclads, which would seem to indicate that our great commercial steamship lines are far better engineered. The Admiralty has organised a system for training students at the dockyard factories, followed up by a course of study it the Naval College, Greenwich; and it is to be hoped that these efforts will lead to greater efficiency in the service. A naval engineer of the present day needs to be a man of liberal education, and of considerable scientific knowledge, both theoretical and practical, and he should then receive on board that recognition which his talents would command ashore. At present, a chief engineer, R.N., ranks with a commander, and other engineers with lieutenants. It is probable that, at some date in the not very distant future, higher ranks will be thrown open to the engineer, as his importance on boary is steadily increasing.

The seamen of all nations, it has, in effect, been said, resemble each the other more than do the nations to which they belong: "As," says a well-known writer, "the sea receives and amalgamates the waters of all the rivers which pour into it, so it tends to amalgamate the men who make its waves their home. . . . The seaman from the United States is said to carry to the forecastle a large stock of 'equality and the rights of man,' and to be unpleasantly distinguished by the inbred disrespect for authority which cleaves, perhaps inseparably, to a democrat who believes that he has whipped mankind, and that it is his mission, at due intervals, to whip them again. But, on board, he, too, tones down to the colour of blue water, and is more a seaman than anything else." The French sailor is painted, by Landelle, as the embodiment of the same frolicsome lightheartedness, carelessness of the future, abandonment to impulse, and devotion to his captain, comrades, and ship, with which we are familiar in the English sailor, on the stage. But although depicted as much more polished than, it is to be feared, the average sailor could be in truth, he finishes by saying: "Il est toujours prêt à céder le haut du pavé à tout autre qu'c̀ un soldat." It would seem, then, that the French sailor revenges the treatment of society on the soldiers of his country. Is there not a similar
feeling existing, perhaps th a more limited extent, between the sailors and soldiers of our own country? It hardly, however, extends to the officers of the "United Service."

Another trait of the British sailor's character: Jack will forgive much to the officer who is ever ready, brave, and daring, who is a true seaman in times of peace, and a sailor militant in times of war. Lord Nelson, the most heroic scaman the world ever saw, it is pleasant to remember, was equally the idol of his colleagues, of his subordinate officers, and of his men for these very reasons. After he had explained to his captains his proposed plan of attack, just prior to the commencement of the battle of Trafalgar, he took the men of the Victory into his confidence. He walked over all the decks, speaking kindly to the different classes of seamen, and encouraging them, with his usual affability, praising the manner in which they had barricaded certain parts of the ship. "All was perfect, death-like silence, till just before the action began. Three cheers were given his lordshipas he ascended the quarter-deek ladder. He had been particular in recommending cool, steady firing, in preference to a hurrying fire, without aim or precision; and the event justified his lordship's advice, as the masts of his opponents came tumbling down on their decks and over their sides."* After the fatal bullet had done its work, and Nelson was conveyed below, the surgeon came and probed the wound. The ball was extracted; but the dying hero told the medical man how sure he was that his wound was fatul, and begged, when he had dressed it, that he would attend to the other poor fellows, equal sufferers with himself. A boatswain's mate on board the Brilliant frigate, shortly afterwards, when first acquainted of the death of Nelson, paid a tribute of affection and honest feeling, which shows how clearly he had gained the hearts of all. The boatswain's mate, then doing duty as boatswain, was ordered to pipe all hands to quarters; he did not. respond, and the lieutenant on duty went to inquire the cause. The man had been celebrated for his promptness, as well as bravery, but he was found utterly unnerved, and sobbing like a child. "I can't do it," said he-"poor dear fellow, that $I$ have been in many a hard day with!-and to loso him now! I wouldn't have cared so much for my old father, mother, brothers, or sisters; but to think of parting with poor Nelson !" and he broke down utterly. The officer, honouring his feelings, let him go below. Who does not remember how, when the body of Nelson lay in state at Greenwich, a deputation of the Victory's crew paid their last loving respects, tearful and silent, and conld scarcely be removed from the scene? or how, when the two Union-Jacks and St. George's ensign were being lowered into the grave at St. Paul's-the colours shattered as was the body of the dead hero-the brave fellows who had borne them each tore off a part of the largest flag, to remind them ever after of England's greatest victory and England's greatest loss? Many an otherwise noble and brave officer has utterly failed in endearing himself to his men; and there can be no doubt of the value of being thoroughly en rapport with themthe more as it in no way need relax discipline. It is an implied compliment to a crew from their commander, to be taken, at the proper time, into his confidence. The followinganecdote will show how much an action was decided by this, and with how little loss of life.

[^78]'The Belloma, of 71 guns and 558 men, with a most vulmble freight on merehants' necount, and commanded by the cellobrated Captain R. Faulkner, and the Brilliant, a $30-\mathrm{gun}$ frigate, Captain Loggie, sniled from the Tagus in August, 1761. When off Vigo, three sail were discovered approaching the land, and the strangers continued their approach, till they found out the charncter of the English vessels, and then crowded on all sail, in flight. Upon this, the Bellowa and Brilliant pursued, coming up with them next morning, to find that they would have to engage one slip of $7 \cdot \mathrm{t}$ gmas, the Conrayecur, with 700 men, mnd two frigates of 36 grus each, the Maliciense and Ermine. After exehanging a few broadsides, the French vessels shot ahead; when Captain Loggie, seeing that he could not expect to take either of the smaller vessels, determined to maneuvre, and lead them such a wild-goose chase, that the Bellona should have to engage the Conrayeus alone. During the whole engagement, he withstood the united attacks of both the frigates, each of them with equal force to his own, and at last obliged them to sheer off, greatly damaged. Meanwhile, the Courayecus and Bellona had approaehed each other very fast. The Couraycur, when within musket-shot, fired her first broadside, and thero was muel impatience on the Bellona to return it; but they were restrained by Faulkner, who called out to them to hold harl, and not to fire till they saw the whites of the Frenchmen's eyes, adding, "Take my word for it, they will never stand the singeing of their whiskers I" His speech to the sailors just before the action is a model of sailor-like advice. "Gentlemen, I have been bred a seaman from my youth, and, consequently, am no orator; but I promise to earry yon all near enough, and then you may speak for yourselves. Nevertheless, I think it neeessary to acquaint yon with the plan I propose to pursue, in taking this ship, that you may bo the better prepared. . . . I propose to lead you close on the enemy's larboard cuarter, when wo will discharge two broadsides, and then back astern, and range upon the other quarter, and so tell your guns as you pass. I recommend you at all times to point chiefly at the quarters, with your guns slanting fore and aft; this is the principal part of a ship. If you kill tho officers, break the rudder, and snap the braces, she is yours, of course; but, for this reason, I desire you may only fire one round of shot and grape above, and two rounds, shot only, below. Take care and send them home with exactness. This is a rich ship; they will render you, in return, their weight in gold." This programme was very nearly carried out; almost every shot took effect. Tho French still kept up a very brisk fire, and in a moment the Bellona's shrouds and rigging were almost all eat to pieces, and in nine minutes her mizen-mast fell over the stern. Undamted, Faulkner managed to wear his ship round; the officers and men flew to their respective opposite guns, and carried on, from the larboard side, a tire even more terriblo than they had hitherto kept up from the starboard guns. "It was impossible for mortal beings to withstand a battery so incessantly repeated, and so fatally directed, and, in about twenty minutes from the first shot, the French colours were hauled down, and orders wero immediately given in the Bellona to cease firing, the enemy having struek. The men had left their quarters, and all the officers were on the quarter-deck, congratulating one another on their victory, when, unexpectedly, a round of shot came from the lower tier of the Courageux. It is impossible to deseribe the rage that animated the Bellona's erew on this oceasion. Without waiting for orders, they flew again to their guns, and in a moment

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 , in about rders wero men had e another er of the w on this a momentpoured in what they familiarly termed two 'comfortalle broadsides' upon the enemy, who now called out loudly for quarter, and firing at length ceased on both sides." The Courageux was a mere wreck, having nothing but her foremast and bowsprit stunding, several of her ports knoeked into one, and her deek rent in a liundred phaces. She lost 210 killed, and 110 wonuded men were put ashore at Lishon. On board the Bellona only six men were killed outright, and about twenty-eight wounded; the loss of her mizen was her only serious disaster.

One more possibility in the oflieer's existenee, although now nearly obsolete. The ceremonies formerly attendaut on "crossing the lino"-i.e., passing over the equator-so often deseribed, have, of late years, been more honoured in the breach than in the ohservanee. On merchant vessels they had become a nuisanee, as the sailors often made

them an opportunity for levying black mail on timid and nervous passengers. In the Royal Navy, they afforded the one chanee for "getting even" with unpopular offieers; and very roughly was it sometimes aceomplished. They are for this reason introduced in this ehapter, as the officers had a direet interest in them. With trifling exceptions, the programme was as follows. The men stripped to the waist, wearing only "duek" unmentionables, prepared, immediately after breakfast, for the saturualia of the day-a day when the ship was encarrival, and diseipline relaxed. Larly in the day, a man at the mastheal, peering through a teleseope, would annonnee a boat on the weather-bow, and soon after, a voice from the jibboom was heard hailing the ship, announeing that Neptune wished to come on board. The ship was aecordingly hove-to, when a sailor, in fashionable eoat, knee-breeches, and powdered hair, came aft, and announced to the commander that ho was gentleman's gentlemain to the god of the sea, who desired an interview. This aecorded, the procession of Neptune from the foreeastle at onee commenced. The triumphal car was a gun-earriage, drawn by half-a-dozen half-naked and grotesquely-painted sailors, their heads covered by wigs of sea-weed. Neptune was always masked, as were many of his
satellites, in order that the officers should not know who enacted the leading rôles. The god wore a crown, and held out a trident, on which a dolphin, supposed to have been impaled that morning, was stuck. He had a flowing wig and beard of oakum, and was, in all points, "made-up" for Neptune himself. His suite included a secretary of state, his head stuck all over with long quills; a surgeon, with lancet, pill-box, and medicines; his barber, with a razor cut from an iron hoop, and with an assistant, who carried a tub for a shaving-box. Mrs. Neptune was represented by the ugliest man on board, who, with sea-weed hair and a huge night-cap, carried a baby-one of the boys of the shipin long clothes; the latter played with a marline-spike, given it to assist in cutting its teeth. The nurse followed, with a bucketful of burgoo (thick oatmeal porridge or pudding), and fed the baby incessantly with the cook's iron ladle. Sea-nymphs, selected from the clumsiest and fattest of the crew, helped to swell the retinue. As soon as the procession balted before the captain, behind whom the steward waited, carrying a tray with a bottle of wine and glasses, Neptune and Amphitrite paid submission to the former, as representative of Great Britain, and the god presented him the dolphin. After the interview, in which Neptune not unfrequently poked fun and thrust home-truths at the officers, the captain offered the god and goddess a bumper of wine, and then the rougher part of the ceremony commenced. Neptune would address his court somewhat as follows: "Hark ye, my Tritons, you're here to shave and duck and bleed all as needs it; but you've got to be gentle, or we'll get no more fees. The first of ye as disobeys me, I'll tie to a tenton gun, and sink him ten thousand fathoms below, where he shall drink nothing but salt-water and feed on seaweed for the next hundred years." The cow-pen was usually employed for the ducking-bath; it was lined with double canvas, and boarded up, so as to hold several butts of water. Marryat, in the first naval novel he wrote, says: "Many of the officers purchased exemption from shaving and physic by a bottle of rum; but none could estape the sprinkling of salt water, which fell about in great profusion; even the captain received his share. . . . It was easy to perceive, on this occasion, who were favourites with the ship's company, by the degree of severity with which they were treated. The tyro was seated on the side of the cow-pen: he was asked the place of his nativity, and the moment he opened his mouth the shaving-brush of the barber-which was a very large paint-brush-was crammed in, with all the filthy lather, with which they covered his face and chin; this was roughly scraped off with the great razor. The doctor felt his $p \cdot 1 \mathrm{lse}$, and prescribed a pill, which was forced into his cheek; and the smellingbottle, the cork of which was armed with sharp points of pins, was so forcibly applied to. his nose as $t$, bring blood. After this, he was thrown backward into the bath, and allowed to scramble out the best way he could." The first-lieutenant, the reader may remember, dodged out of the way for some time, but at last was surrounded, and plied so effectually with buckets of salt water, that he fled down a hatchway. The buckets were pitched after him, "and he fell, like the Roman virgin, covered with the shields of the soldiers."

- Very unpopular men or officers were made to swallow half a pint of salt water. Those good old times!

Pleasant is it to read of life on board a modern first-class man-of-war. Where there are, perhaps, thirty officers in the ward-room, it would be hard indeed if one cannot
find a kindred spirit, while on such a vessel the band will discourse sweet music while you dine, and soothe you over the walnuts and wine, after the toils of the day, with selections from the best operas, waltzes, and quadrilles. Then comes the coffee, and the post-prandial cigar in the smoking-room. At sea, luncheon is dispensed with, and the regular hour is half-past two; but in port both lunch and dinner are provided, and the officers on leave ashore can return to either. Say that you have extended your ramble in the country, you will have established an appetite by half-past five, the hour when the officers' boat puts off from shore, wharf, or pier. Perhaps the most pleasant evening is the guests' night, one of which is arranged for every week, when the officer can, by notifying the mess caterer, invite a friend or two. The mess caterer is the officer selected to superintend the victualling department, as the wine caterer does the liquid refreshments. It is by no means an enviable position, for it is the Englishman's conceded right to growl, and sailors are equal to the occasion. Dr. Stables remarks on the unfairness of this under-the-table stabbing, when most probably the caterer is doing his best to please. But on a well-regulated ship, where the officers are harmonious, and either not extravagant or with private means, the dinner-hour is the most agreeable time in the day. After the cloth has been removed, and the president, with a due preliminary tap on the table to attract attention, has given the only toast of the evening-"The Queen"-the bandmaster, who has been peering in at the door for some minutes, starts the National Anthem at the right time, and the rest of the evening is devoted to pleasant intercourse, or visits ashore to the places of amusement or houses of hospitable residents.

Before leaving, for the nonce, the Royal Navy, its officers and men, a few facts may be permitted, particularly interesting at the present time. The navy, as now constituted, has for its main backbone fifty-four ironclads. There are of all classes of vessels no less than 462, but more than a fourth of these are merely hulks, doing harbour service, \&c., while quite a proportion of the remainder-varying according to the exigencies of the times-are out of commission. There are seventy-eight steam gun-boats and five fine Indian troop-ships. These numbers are drawn from the official Navy List of latest date.

It is said that since the ironclad movement commenced, not less than $£ 300,000,000$ has been disbursed (in about twenty years) by the different countries of the world. Even Japan, Peru, Venezuela, Chili, the Argentine Confederation, possess many of this class of vessel, of more or less power. The British fleet, under the command of Vice-Admiral Hornby, in the Mediterranean, \&c., though numerically not counting twenty per cent. of the fleets in the days of Nelson and Collingwood, when " $a$ hundred sail of the line" frequently assembled, has cost infinitely more. A cool half million is not an exceptional cost for an ironclad, while one of the latest of our turret-ships, the Iuffexible, has cost the nation three-quarters of a million sterling at the least. She is to carry four eightyton guns. A recent correspondent of a daily journal states that next to Great Britain, "the ironclad fleet of the Sultan ranks foremost among the navies of the world." Be that as it may, there can be little doubt that if Russia had succeeded in acquiring it, it would, with her own fleet, have constituted a very powerful rival.

The progressive augmentation in the size of naval vessels has been rapid in Great
he cannot


Britain. When Henry VIII. constructed his IIenry Graee de Dieu, of 1,000 tons,* it was, indeed, a great giant among pigmies, for a vessel of two or three hundred tons was then considered large. At the death of Elizabeth she left forty-two ships, of 17,000 tons in all, and $8,346 \mathrm{men}$; fifteen of her vessels being 600 tons and upwards. From this period the tonnages of the navy steadily increased. The first really scientific architect, Mr. Phineas Pett, remodelled the navy to good purpose in the reigns of James I. and Charles I. Previous to this time the vessels with their lofty poops and forecastles had greatly resembled Chinese junks. He launched the Sovereign of the Seas, a vessel 232 feet in length, and of a number of tons exaetly corresponding to the date, 1637, when she left the slip.s. Cromwell found a navy of fourteen two-deckers, and left one of 150 vessels, of which one-third were line-of-battle ships. He was the first to lay naval estimates before Parliament, and obtained $£ 400,000$ per annum for the service. James 11 . left 108 ships of the line, and sixty-five other vessels of 102,000 tons, with $42,000 \mathrm{men}$. Wiliam III. brought it to 272 ships, of 159,020 tons. George II. left, in 1760, 412 ships, of 321,104 tons. Twenty-two years later the navy had reached 617 vessels, and in 1813 we had the enormous number of 1,000 vessels, of which 256 were of the line, measuring 900,000 tons, carrying 146,000 seamen and marines, and costing $£ 18,000,000$ per annum to maintain. But since the peace of 1815 , the number of vessels has greatly diminished, while an entirely new era of naval construction has been inaugurated. In the seventeenth century a vessel of 1,500 tons was considered of enormous size. At the end of the eighteenth, 2,500 was the outside limit, whilst there are now many vessels of 4,000 tons, and the navy possesses frigates of 6,000 and upwards. Several of our enormous ironclads have a tonnage of ove: 11,000 tons, while the Gireat Bustern-of course a very exceptional case-has a tonnage of 22,500 .

Whilst we have efficient military volunteers enough to form a grand army, our naval volunteers do not number more than the contingents for a couple of large vessels. There are scarcely more than a thousand of the latter, and only three stations. London, Liverpool, and Brighten divide the honour between them of possessing corps. The writer believes that he will be doing a serviee to many young men-who in their turn may do good service for their country-in briefly detailing the conditions and expenses of joining. In a very short period of time the members have become wonderfully efficient, and the sailorlike appearance of the men is well illustrated by the faet, that at a recent reception at the Mansion House a number of them were taken for men-of-war's men, and so deseribed in several daily journals. Their prowess is illustrated by the prizes distributed by Lady Ashley, at the inspection of the 1st London Corps, in the West India Docks, on February 9ti last. Badges were won by the gunner making the best practice with the heavy gun at sea, and by the marksman making the greatest number of points with the rifle. The "Lord Ashley challenge prize," for the best gun's crew at sea, was won by fourteen men of No. 2 battery, who fired forty-two rounds at 1,300 yards in thirty-seven minutes, scoring 411 points out of a possible 504 points. The official report says:-"that further

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tons was ,000 tons From this architect, les I. and astles had vessel 232 637, when ne of 15 lay naval James II. 2,000 men. 1760,412 vessels, and of the line, E18,000,000 has greatly drated. In ze. At the y vessels of eral of our Busteru-of
army, our arge vessels. is. London,
The writer turn may do s of joining. ad the sailoreption at the deseribed in ed by Lady on February e heavy gun e rifle. The fourteen wen ven minutes, ' that further
comment on the men or their instructor is superfluous." The list included rifle, battery, and boating prizes.

The Royal Navy Artillery Volunteers are raised under an Act passed in 1873, and are directly subject to the authority of the Admiralty. They nay be assembled for actual employment, their duties then consisting of coast or harbour service. They are not required to go aloft, or to attend to the engine fires, but in regard to berthing and messing

the "areat harry" and "oreat eastern" in contrast.
must conform to the arrangements usual with seamen. The force is formed into brigades, each brigade consisting of four or more batteries, of from sixty to eighty men. Each brigade has a lieutenant-commander, and each buttery a sub-lieutenant, chief petty officer, first and second-class petty officers, buglers, \&e., while the staff includes a lieutenantinstructor, first-class petty officer instruetor, surgeon, bugle-major, and armourer. Those desiring to join a corps should communicate with the Secretary of the Admiralty. The annual subscription to the lst London Corps is one guinea, while each member has to provide himself with two white frocks, one blue serge frock, one pair of blue trousers, one blue cloth cap, \&c., black handkerehief, Hannel, knife, lanyard, and monkey-jacket, costing in the neighbourhood of six pounds. When on a cruise, in gunboat, the volunteer requires in addition serge trousers and jumpers, flanuel sliirt, towels, and brush and comb,
canvas bags, \&c. The officers' uniforms are the same as those of the Royal Navy, with the exception of silver, for the most part, taking the place of gold. It is more expensive to join the naval than the military volunteers, and the class composing the corps are generally well-to-do young men, a large number of them employed in shipping offices, and mercantile pursuits connected with the sea.

The drills consist of practice with great guns, rifle, pistol, and cutlass exercises. "Efficient" volunteers are entitled to a badge, while men returned five times as efficient may wear one star, and those returnid ten times two stars, above said badge. Every volunteer must attend at least two drills a month, until he has obtained the standard of an "efficient." When on actual service, the Royal Naval Artillery Volunteers will receive the same pay, akuwances, and victuals as those of relative ras.' in the navy, and when embarked on any of IIer Majesty's ships for more than forty-eight hours, in practice, will either be vietualled or receive a money compensation. The cruises in gun-boats, \&e., usually last ten days, and the vessel visits many of the Chamel ports, \&c., more especially off points where gun practice is practica. 'e. A volunteer wounded, either on drill or in actual service, is eatitled to the same compensation as any seaman in the navy would be under similar circumstances, and if killed his widow (if any) to the same gratuities out of the Greenwieh Hospital Funds as would a Royal Navy seaman's widow. Members who are able to take adivantage of the eruise in gun-boats must have attended drill regularly for three months previously. It must be remembered that each man costs the Government from $£ 8$ to $£ 10$ for the first year, in the expenses incurred in great gun and other practice; and it is therefore made a point of honour to those joining that they will devote sufficient time to their drills to make themselves thoroughly efficient.

The London Naval Artillery Volunteers have a fine vessel, the President, now in the West India Docks, on which to exereise, while to accustom them to living on board ship, the old Rainbow, off Temple Pier, is open to them, under certain conditions, as a place of residence. A number avail themselves of this: sleep on board in hammocks, and contribute their quota of the mess expenses. The writer is the last to deery other manly exercises, such an cricket, foot-ball, racing; or pedestrianism, but naval volunteering has the advantage of not merely comprising a series of manly exercises, but in being direetly practical and specially health-giving.

And to prevent the need of impressment, the Government did well in establishing the Royal Naval Reserve. The latest estimates provided $£ 140,000$ for the year; the number, which at present is abouit 20,000 men, is not to exceed 30,000 . The service is divided into two classes: the first class consisting of seamen of the merchant service, and the second, fishermen on the coasts of Great Britain and Ireland. Both divisions are practical sailors, and the valuc of their services in a time of war would be inestimable. They are required to drill twenty-eight days in each year, for which they reecive about $£ 6$ per annum, and sundry allowances for travelling, \&e. The former class ean be drilled at our stations abroad, so that a merchant seaman is not necessarily tied to lingland, or to mere coasting trade.
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## CHAPTER XIV.

Tine Reveise of tile Picture---Mutiny.


#### Abstract

Bligh's Bread-fult Expedition-Voyaze of the Bounty-Otaheite-The IIappy Islanders-First Appearance of a Mutinous Splrit-The Cutter Stolen and Recovered-The Bounty sails wlih 1,000 Trees--The Mutiny-Bligh Overpowered and Bound-Abandoned with Eighteen Others-Thelr Resources-Attacked by Natlves-A Boat Vogago of 3,618 milesViolent Gales-Miscrable Condlion of the Boat's Crew-Bread by the Ounce-Rum by tho Tea-spoonful-Noddles and Boobles-"Who shall have this?"-Off tho Barrler Recf-A Haven of Rest-Oyster and Palm-top StewsAnother Thousand Miles of Ocean-Arrival at Coupang-1 Lospitality of the Residents-Chastly Looks of the PartyDeath of Five of the Number-The Pandora Dispatehed to Catch tho Mutineers-Fourteen in Irons-Pandora's Box-The Wreek-Great Loss of Llfe-Sentenees of the Court Martial-The Last of the Mutineers-Piteairn Island -A Model Settlement-Another Example: The greatest Mutiny of History- $\mathbf{0 0 , 0 0 0}$ Disaffected Men at ono point-Causes-Legitimate Action of the Men at First--Apailiy of Government-Serious Oiganisation-The Splthead Fleet Ordered to Sea-Refusal of the Crews-Concessions : Sade, and the First Muthay Quelled-Second Outbreak-Lord Howe's Tact-The Great Mutiny of the Nore-Richard Parker-A Vile Character but Man of Talent-Wins the Men to his Side-Offleers F-ged and Ducked-Gallant Duncan's Address-Acecssions to the Mutheers-Parker practically Lord High Admiral-Hls Extravagant Behaviour-Alarm in Landon-The Movement Dies out by Degrees-Parker's Cause Lost-IIts Execution-Mutinies at Other Stations-Prompt Action of Lords St. Vineent and Macartnes.


The Royal Navy has ever been the glory of our country, but there are spots even on the bright sun. The service has been presented hitherto almost entirely under its best aspects. Example arter example of heroic bravery, unmurmuring endurance, and splendid discipline, have been cited. Nor can we err in painting it couleur de rose, for its gallant exploits have won it undying fame. But in the service at one time-thank God those times are hardly possible now-mutiny and desertion on a large scale were eventualities to be considered and dreaded; they were at least remote possibilities. In a few instances they became terrible facts. In the merchant service we still hear of painful examples: every reader will remember the case of the Lennie mutineers, who murdered the captain and mrtes in the Bay of Biscay, with the object of selling the ship in Greece, and were defeated by the brave steward, who steered for the coast of France, and was eventually snccessful in communicating with the French authorities. The example about to be related is a matter of historical fact, from which the naval service in particular may still drav most important lessons.

In the year 1787, being seventeen years after Captain Cook's memorable first voyage, a number of merchants and planters resident in London memorialised his Majesty Gcorge 1II., that the introduction of the bread-fruit tree from the southern Pacific Islands would be of great benefit to the West Indies, and the king complied with their request. A small vessel, the Bounty, was prepared, the arrangements for disposing the plants being. made by Sir Joseph Banks, long the distinguished President of the Royal Society, and one of the most eminent men of science of the day. Banks bad been with Cook ameng these very islands; indeed, it is stated that in his zeal for acquiring knowledge, he had undergone the process of tattooing himself. The ship was put under the command of Lientenant Bligh, with officers and crev numbering in all forty-four souls, to whom were added a practical botanist and assistant.

The Bounty sailed from Spithead on December 23rd, 1757, and soon encountered very
severe weather, which obliged them to refit at Teneriffe. Terrible gales were experienced near Cape Horn, "storms of wind, with hail and sleet, whieh made it neeessary to keep a constant fire night and day, and one of the wateh ulways attended to dry the people's wet clothes. This stormy weather continued for nine days; the ship reguired pumping every hour; the deeks became so leaky that the commander was obliged to allot the great eabin to those who had wet berths to hang their hammocks in."* It was at last determined,

the chew of h.m.s. " bocity" landing at otaheite.
after vainly struggling for thirty days to make headway, to bear away for the Cape of (iood Hope. The helm was aecordingly put a-weather, to the great joy and satisfaction of all on broad.

They arrived at the Cape late in May, and stopped there for thirty-cight days, refitting, replenishing provisions, and refreshing the worn-out crew. On October 26th they anchored in Matavai Bay, Otaheite, and the natives immediately came ont to the ship in great numbers. Tinah, the chief of the district, on hearing of the arrival of the Bounty, sent a small pig and a young plantain tree, as a token of friendship, and the ship was liberally supplied with provisions. Handsome presents were made to Thah, and he was told that they had been sent to him, on account of the kindness of the people to Captain Cook

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he Cape of satisfaction
s, refitting, ey anchored $p$ in great bounty, sent as liberally s told that ptain Cook


THE MUTINEERS SEIZING C.APTAIN BLIGH.
during his visit. "Will yon not, Tinal," said Bligh, "send something to King George" in return?" "Yes," he replied, "I will send him anything I have," and then enumerated the different articles in his power, among which he mentioned the bread-fruit. This was - exactly what Bligh wished, and he was told that the bread-fruit trees were what King George would greatly like, and the ehief promised that a large number should be plaeed on board.

The importance of the bread-fruit to theso people cannot be over-stated. That old navigator, Dampier, had well deseribed it a hundred years before. "The bread-fruit, as we eall it, grows on a large tree, as big and high as our largest apple-trees; it hath a spreading head, full of brane!es and dark leaves. The fruit grows on the boughs like apples; it is as big as : frany 'oaf when wheat is at five shillings the bushel; it is of a round shape, and hath : hiei, rough rind; when the fruit is ripe, it is yellow and soft, and the taste is sweet and plessot. The natives of Guam use it for bread. They gather it, when full grown, while it is green and hard; then they bake it in an oven, which seorcheth the rind and makes it blaek, but they serape off the outside black crust, and there remains a tender, thin erust; and the inside is soft, tender, and white." The fruic lasts in season cight months. During Lord Anson's two months' stay at Tinian, no ship's bread was consumed, the offieers and men all preferring the bread-fruit. Byron speaks of these South Sea Islands, where labour is the merest playwork, the earth affording: nearly spontaneously all that the natives need, as
"The happy shores withont a law,
Where all partake the earth without dispute, And bread itself is gathered as a fruit; Where none contest the fields, tho woods, the streams, The gold-less age, where gold disturbs no dreams."

The Otaheitans of those days were a most harmless, amiable, and unsophistieated peopleOne day the gudgeon of the cutter's rudder was missing, and was believed to have been stolen. "I thought," says Bligh, "it would have a good effect to punish the boat-keeperin their presence, and aceordingly I ordered him a dozen lashes. All who attended the punishment interceded very earnestly to get it mitigated; the women showed great sympathy." The intercourse between the erew and natives was very pleasant. The Otaheitans showed the most perfect ease of manner, with " $a$ eandour and sineerity about them that is quite refreshing." When they offered refreshments, for instance, if they were not accepted, they did not press them; they had not the least idea of that ceremonious. kind of refusal which expeets a second invitation. "Having one day," says Bligh, "exposed myself too much in the sun, I was taken ill, on which all the powerful people, both men and women, eollected round me, offering their assistanee." On an occasion when the Bounty had nearly gone ashore in a tremendous gale of wind, and on anotherwhen she did go aground, after all was right again, these kind-hearted people eame in crowds to congratulate the captain on her escape; many of them shed tears while the danger seemed imminent. In the evenings, the whole beach was like a parade, erowded

George merated This was at King e placed ead-fruit, t hath a ghs like it is of !low and d. They an oven, ck crust, e." The t Tinian, Byron affording have been oat-keeperended the ved great int. The ity about , if they remonious. ys Bligh,
ful people, oceasion n another e came in while the crowded
with several hundred men, women, and cbildren, all good-humoured, and affectionate to one another; their sports and games were continued till near dark, when they peaceably returned to their homes. Thoy were particularly cleanly, bathing every morning, and often twice a day.

It is sad to turn from this pleasant pieture to find the spirit of drertion and mutiny appearing among the erew. There can be no doubt that the alluren onts of the island, its eharming climate and abundant productions, the friendliness of the natives, and ease of living, were the main causes. Bligh made one fatal mistake in his long stay of over five months, during whieh the erew had all opportmities of leave ashore. Every man of them had his tayo, or friend. From the moment ho set his foot ashore he found himself in the midst of ease and indolence, all living in a state of luxury, without submitting to anything approaching real labour. Such entieements were too much for a common sailor, for must he not contrast the islander's happy lot with his own hardships on board?

One morning the small cutter was miss: $\xi$; with three of the erew. They had taken with them eight stands of arms and ammunitio: The master was dispatehed with one of the chiefs in their pursuit, but before dey las got any great distance, they met the boat with five of the natives, who were bringing her back to the ship. "For this serviee they were handsomely rewardel. The chief, promised to use every possible means to detect and bring back the deserters, which, in a few days, some of the islanders had so far aecomplished as to seize and bind $i \mathrm{~m}$, but let them loose again on a promise that they would return to their ship, which they did not exactly fulfil, but gave themselves up soon after, on, a search being made for them." A ferw days after this it was found that the cable by which the ship rode had been cut, close to the water's edge, so that it held by only a strand. Bligh considered this the act of one of his own people, who wished the ship to go ashore, so that they might remain at Otaheite. It may, however, have chafed in the natural course of affairs.

And now the Bownty, having taken on board over a thousand of the bread-fruit plants, besides other shrubs and fruits, set sail, falling in soon after with many canoes, whose owners and passengers sold them hogs, fowls, and yams, in quantities. Some of the sailing amoes would carry ninety persons. Bligh was eongratulating himself on his ship being in good condition, his plants in perfeet order, and all his men and officers in good health. On leaving deek on the evening of April ${ }_{\sim}^{2} 7$ th he had given directions as to the course and watches. Just before sunrise on the 2Sth, while he was yet asleep, Mr. Christian, officer of the wateh, with three of the men, came into his cabin, and seizing him, tied his hands behind his back, threatening him with instant death if he spoke or made the least noise. "I called, however," says Bligh, "as loud as I could, in hopes of assistance; but they had alrealy secured the officers who were not of their party, by placing sentinels at their doors. There were three men at my cabin-door besides the four within; Christian had only a cutlass in his hand, the others lad muskets and bayonets. I was hauled out of bed, and forced on deek in my shirt, suffering great pain from the tightness with which they had tied my hands." The master and master's mate, the gunner, and the gardener, were confined below, and the forecastle hatch was guarded by sentinels. The boatswain was ordered to hoist the launch out, with a threat that he had
better do it instantly, and two of the midshipmen and others were ordered into it. Bligh was simply told, "Hold your tongue, sir, or you are dead this instant!" when he remonstrated. "I continued," says he, "my endeavours to turn the tide of affairs, when Christian changed the cutlass which he had in his hand for a bayonet that was brought to him, and holding me with a strong grip by the eord that tied my hands, he threatened, with many oaths, to kill me immediately, if I would not be quiet; the villains round me had their pieces cocked and bayonets fixed." The boatswain nud

bligit cast abrift.
seamen who were to be turned adrift with Bligh were allowed to collect twine, canvas, lines, sails, cordage, and an eight-and-twenty gallon cask of water; the clerk secured one hundred and fifty pounds of bread, with a small quantity of rum and wine, also a quadrant and compass, but he was forbidden to touch the maps, observations, or any of the surveys or drawings. He did, however, secure the journals and captain's commission. The mutineers having forced those of the seamen whom they meant to get rid of into the boat, Christian directed a dram to be served to each of his own crew. Isaac Martin, one of the guard over Bligh, had an inclination to serve him, and fed him with some f:uit, his lips being quite parched. This kindness was observed, and Martin was ordered away. The same man, with three others, desired to go with the captain, but this was refused. They begged him to remember that they had no hand in the transaction. "I asked
into it. , when he of affairs, that was my hands, quiet ; the swain and
ine, canvas, lerk secured wine, also a s, or any of commission. rid of into saac Martin, with some was ordered ut this was
"I asked
for arms," says Bligh, "but they laughed at me, and said I was well aequainted with the people among whom I was going, aud therefore did not want them; four cutlasses, however, were thrown into the boat after we were veered astern.
"The oflicers and men being in the boat, they only waited for me, of which the master-at-arms informed Christian, who then said, 'Come, Captain Bligh, your officers and men are now in the boat, and you must go with them; if you attempt to make the least resistance, you will instantly be put to death;' and without further ceremony, with a tribe of armed ruffians about me, I was forced over the side, when they untied my hands." A few pieces of pork were thrown to them, and after undergoing a great deal of ridicule, and having been kept for some time to make sport for these unfeeling wretches, they were at length east adrift in the open sea. Bligh heard shouts of "Huzza for Otaheite!" among the mutineers for some considerable time after they lad parted from the vessel.

In the boat, well weighted down to the water's edge, were nineteen persons, including the commander, master, aeting-surgeon, botanist, gunner, boatswain, carpenter, and two midshipmen. On the ship were twenty-five persons, mostly able scamen, but threo midshipmen were among the number, two of whom had no choice in the matter, being detained against their will.

Lientenant Bligh, although a good seaman, was a tyrannical man, and had made himself especially odious on board by reason of his severity, and especially in regard to the issuing of provisions. He had had many disputes with Christian in particular, when his language was of the coarsest order. Still, the desire to remain among the Otaheitans, or, at all events, among these enticing islands, seems to have been the main cause of the muting.

It was shown afterwards that Christian had only the night before determined to make his escape on a kind of small raft; that he had informed four of his companions, and that they had supplied him with part of a roast pig, some nails, beads, and other tradingarticles, and that he abandoned the idea because, when he came on deck to his watch at four a.m., he found an opportunity which he had not expected. He saw Mr. Hayward, the mate of his watch, fall asleep, and the other midshipmen did not put in an appearance at all. He suddenly conceived the idea of the plot, which he disclosed to seven of the men, three of whom had "tasted the cat," and were unfavourable to Bligh. They went to the armourer, and sccured the keys of his chest, under the pretence of wanting a musket to fire at a shark, then alongside. Christian then proceeded to secure Licutenant Bligh, the master, gunner, and botanist. He stated that he had been much annoyed at the frequent abusive and insulting language of his commanding officer. Waking out of a short half-hour's disturbed sleep, to take the command of the deek-finding the mates of the watch asleep-the opportunity tempting, and the ship completely in his power, with a momentary impulse he darted down the fore-hatchway, got possession of the arm-chest, and made the hazardous experiment of arming such of the men as he deemed he could trust. It is said that he intended to send away his captain in a small, wretched boat, worm-eaten and decayed, but the remonstrances of a few of the betterhearted induced him to substitute the cutter.

And now to follow the fortunes of Lieutenant Bligh and his companions. Then first consideration was to examine their resoures. There were sixteen pieces of pork, weighing two pounds each, the bread aud water us before mentioned, six quarts of rum, und six bottles of wine. Being near the island of Tofoa, they resolved to seek a supply of breadfruit mal water, so as to preserve their other stock, mad they did obtain a small guantity of the former, but little water. The natives seeing their defenceless condition meditated their destruction, and speedily crowded the beach, knocking stones together, the prepuratory signal for an attack. With some diffieulty the seamen succeeded in getting their things together, nud got all the men, except John Norton, one of the quartermasters, into the boat, the surf rumning high. The poor man was literally stonel to death within their sight. They pushed out to sea in all haste, and were followed by volleys of big stones, some of the eamoes pursuing them. Their only expedient left to gain time was to throw overboard some of their clothing, which, fortumately, indueed tho natives to stop mud piek them up. Night coming on, the canoes returned to the shore.

The nearest place where they could expect relief was Timor, a distance of full 1,200 leagues, and the men agreed to be put on an allowance, which on calculation was found not to exceal one ounce of bread per diem, and a gill of water. Recommending them, therefore, in the most solemn manner, not to depurt from their promises, "we bore away," says Bligh, "across a sea where the navigation is but little known, in a small boat, twenty-three feet long from stem to stern, deeply laden with eighteen men. . . . It was about eight at night on the 2nd of May when we bore away under a reefed lugforesail; and having divided the people into watches, and got the boat into a little order, we returned thanks to God for our miraculons preservation, and in full confidence of His gracious support, I found my mind more at ease than it had been for some time past." Next morning the sun rose fiery and red, a sure indication of a gale, and by eight o'cloek it blew a violent storm, the waves running so high that their sail was lecalmel when between the seas. They lightened the boat by throwing overboard all supertluous articles, and removing the tools, put the bread, on which their very existence depended, in the elest. Miserably wet and cold as were all, Bligh administered a tea-spoonful of rum to each at dinner time. The sea still rose, and the fatigue of baling became very great. Next morning at daylight the men's limbs were benumbed, and another spoonful of spirit was administered. Whatever might be said of Bligh's previous conduct, there is no doubt that at this juncture he exerted himself wonderfully and very judiciously to save the lives of all. Their dinner this day consisted of five small cocoa-nuts. On the night of the 4th the gale abated, and they examined the bread, much of which was found to be damaged and rotten, but it was still preserved for use. On the bth they hooked a fish, "but," says the commander, "we were miserably disappointed by its being lost in trying to get it into the boat." They were terribly eramped for want of room on board, although Bligh did for the best by putting them wateh and wateh, so that half of them at a time could lie at the bottom of the boat. On the 7 th they passed c!ose to some rocky isles, from which two large sailing canoes eame out and pursued hotly, but gave over the chase in the afternoon. This day heavy rain fell, when everybody set to work to eatch some, with such suceess that they not merely quenched their thirst, but inereased

Theic first , weighing n , mand six $y$ of breal11 qumutity medituted prepuratory heir things s, into tho vithin their big stones, is to throw 1 and pick
full 1,200 was found ding them, bore away," small boat, . It reefed luglittle order, ence of His time past." ight o'elock alined when superthoous e depended, -spoonful of beame very her spoonful nduct, there diciously to ts. On tho $h$ was found they hooked being lost m on board, alf of them ise to some $y$, but gave set to work ut increased
their stock to thirty-five gallons. As a corresponding disadvantage they got wet throngh. On the sth the allowance issued was an ounce and a half of pork, a tea-spoonful of rum, balf a pint of cocoa-nut milk, mad an ounce of breal. Bligh constructed a pair of seales of two coeoa-nut shells, using pistol-halls for weights. The next nine days brought bad weather, and much rain, the sea breaking over the lont so much that two men were kept constantly baling, and it was necessary to keep the boat before the waves to prevent her filling. When day broke it showed a miserable set of beings, full of wants, aches, and pains, and nothing to relieve them. They found some comfort ly wringing their elothes in sea-water, by which means they found a certain limited amomnt of warmith. But though all were shivering with cold nad wet, the commander was obliged to tell them that the rum ration-one ten-spoonful-must for the present be discontinued, as it was rumuing low.
"During the whole of the afternoon of the 21 st," says Bligh, "we were so covered with rain and salt water that we could seareely see. We suffered extremo cold, and every one dreaded the approach of night. Sleep, though we louged for it, alforded no eomfort; for my own part, I almost lived without it. * * * The misery we suffered this night exceeded the preceding. The sea tlew over us with great foree, and kept us baling with horror and anxiety. At dawn of day 1 foum every one in a most distressed condition, and I began to fear that another such night would put an end to the lives of several, who seemed no longer able to support their sulferings. I served an allowance of tue tea-spoonfuls of rum; after driuking which, and having wrung our clothes, and taken our breakfast of bread and water, we became a little refreshed." On the 21 th, for the first time in fifteen dnys, they experieneed the warmth of the sun, and dried their now threallbare garments.

On the 25th, at mid-day, some noddies flew so near the boat that one was eaught by hand. This bird, about the size of a small pigeon, was divided into eighteen portions, and allotted by the method known as "Who shall have this?" in which one person, who turns his back to the caterer, is asked the question, as each piece is indicated. This system gives every one the ehanee of securing the best share. Bligh used to speak of the amusement it gave the poor half-starved people when the beak and claws fell to his lot. That and the following day two boobies, which are about as large as ducks, were also caught. The sun came out so powerfully that several of the people were seized with faintness. But the capture of two more boobies revived their spirits, and as from the birds, and other signs, Mr. Bligh had no donbt they wero near land, the feelings of all became more animated. On the morning of the 2Sth the "barrier reef" of what was then known as the eastern coast of New Holland, now Anstralia, appeared, with the surf and breakers outside, and smooth water within. The difficulty was to find a passage ; but at last a fine opening was discovered, and through this the boat passed rapidly with a strong. stream, and came immediately into smooth water. Their past 'rdships seemed all at once forgotten. The coast appeared, and in the evening they landed on the sandy point of an island, where they soon found that the roeks were coverel with oysters, and that plenty of fresh water was attainable. By help of a small sun-glass a fire was made, and soon a stew of oysters, pork, and bread was concocted, which gladdened their hearts,
each receiving a full pint. The 29th of May being the anniversary of the restoration of Charles II., the spot was not inappropriately uamed Restoration Island.

Bligh soon noted the alteration for the better in the looks of his men, which proved the value of oysters, stewed, as they sometimes were, with fresh green palm-tops. Strange to say, that the mutinous spirit, which had been satisfactorily absent before, broke out in ole or two of the men, and Bligh had, in one instance, to seize a cutlass and order the man to defend himself. The threatened outbreak ended quietly.

But although the worst of their voyage was over, their tronbles in other ways were serious. While among the islands off the coast of Australia several of them were seriously affected with weakness, dizziness, and violent pains in their bowels. Infinitesimal quantities of wine were administered, to their great benefit. A party was sent out on one of the islands to catch birds, and they returnel with a dozen noddies; these and a few clams were all they obtained. On the 3 rd of June they left Cape York, and onee more launched their little boat on the open ocean. On the 5th a booly was caught by the hand, the blood of which was divided among three of the men who were weakest, and the bird kept for next day's dinner. The following day the sea ran high, and kept breaking over the boat. Mr. Ledward, the surgeon, and Lebogue, an old hardy sailor, appeared to be breaking up fast, and no other assistance could be given them than a tea-spoonful or two of winc. On the morning of the 10 th there was a visible alteration for the worse in many of the people. Their countenanees were ghastly and hollow, their limbs swollen, and all extremely debilitated; some seeming to have lost their reason. But next day Bligh was able to announce that they had passed the meridian of Timor, and the following morning land was sighted with expressions of universal joy and satisfaction. Forty-one days had they been on the ocean in their miserable boat, and by the $\log$ they had run 3,618 nautical miles. On the 14th they arrived at Coupang Bay, where they were received with all kinds of hospitality. The party on landing presented the appearance of spectres: their bodies skin and bones, and covered with sores; their clothing in rags. But the strain had been too much for several of them. The botanist died at Coupang, three of the men at Batavia, and one on the passage home. The doctor was left behind and not afterwards heard of. Bligh arrived in England on March 14th, and received much sympathy. Ho was immediately promoted, and afterwards successfully carried the bread-fruit tree to the West Indies. Meantime the Government naturally proposed to bring the mutineers to trial, whatever it might cost.

The Pandora, a frigate of twenty-four guns, and one hundred and sixty men, was selected for the service, and was placed under the command of Captain Edward Lidwards, with orders to proceed to Otaheite, and if necessary the other islands. The voyage was destined to end in shipwreck and disaster, but the captain suceeeded in securing a part of the mutineers, of whom ten were brought to England, and four drowned on the wreek.

The Pandora reaehed Matavia Bay on the 23rd of Mareh, 1791. The armourer and two of the midshipmen, Mr. Heywood and Mr. Stewart, came off immediately, and showed their willingness to afford information. Four others soon after appeared, and from them the eaptain learned that the rest of the Bounty's people had built a sehooner, and sailed ll extremely was able to orning land ys had they 318 nautical red with all eetres : their e strain had the men at t afterwards npathy. Ho tree to the mutineers to
ty men, was rd Edwards, voyage was uring a part ned on the
rmourer and and showed from them $r$, and sailed
the day before for another part of the island. They were pursued, and the schooner seeured, but the mutineers had fied to the mountains. A day or two elapsed, when they ventured down, and when within hearing were ordered to lay down their arms, which they did, and were put in irons. Captain Edwards put them into a round-house, built on the after part of the quarter-deck, in order to isolate them from the crew. According to the statement of one of the prisoners, the midshipmen were kept ironed by the legs, separate from the men, in a kind of round-house, aptly termed "Pandora's Box," which was entered by a seuttle in the roof, about eighteen inches square. "The prisoners' wives visited the ship daily, and brought their children, who were permitted to be earried to their unhappy fathers. To see the poor captives in irons," says the only narrative


MAP OF THE ISLANDS OF THE PaCIFIC.
published of the Pandora's visit, "weeping over their tender offspring, was too moving a seene for any feeling heart. Their wives brought them ample supplies of every delicacy that the country afforied while we lay there, and behaved with the greatest fidelity and affection to them."* Stewart, the midshipman, had espoused the daughter of an old chief, and they had lived together in the greatest harmony; a beautiful little girl had been the fruit of the union. When Stewart was confined in irons, Peggy, for so her husband had named her, flew with her infant in a canoe to the arms of her husband. The interview vas so painful that Stewart begged she might not be admitted on board again. Forbidden to see him, she sank into the greatest dejection, and seemed to have lost all relish for food and existence; she pined away and died two months afterwards. $\dagger$

All the mutineers that were left on the island having been secured, the ship proceeded to other islands in search of those who had gone away in the Bounty. It must be mentioned, however, that two of the men had perished by violent deaths. They had

* "Voyage Round the World," by G. Hamilton. t "A Missionary Voyago to the Southern Pacific"
made friends with a chief, and one of them, Churehill, was his tayo, or sworn friend. The ehief died suddenly without issue, and Churehill, according to the custom of the country, succeeded to his property and dignity. The other, Thomson, murdered Churehill, probably to acquire his possessions, and was in his turn stoned to death by the natives. Captain Edwards learned that after Bligh had been set adrift, Christian had thrown overboard the greater part of the bread-fruit plants, and divided the property of those they had abandoned. They at first went to an island named Toobouai, where they intended to form a settlement, but the opposition of the natives, and their own quarrels, determined them to revisit Otaheite. There the leading natives were very curious to know what had become of Bligh and the rest, and the mutineers invented a story to the effect that they had mexpectedly fallen in with Captain Cook at an island he had just discovered, and that Lientenant Bligh was stopping with him, and had appointed Mr. Christian commander of the Bounty; and, further, he was now come for additional supplies for them. This story imposed upon the simple-minded natives, and in the course of a very few days the Bounty received on board thirty-eight goats, 312 hogs, eight dozen fowls, a bull and a cow, and large quantities of fruit. They also took with them a number of natives, male and female, intending to form a settlement at Toohouai. Skirmishes with the natives, generally brought on by their own violent conduct or robberies, and eternal biekerings among themselves, delayed the progress of their fort, and it was subsequently abandoned, sixteen of the men electing to stop at Otaheite, and the remaining nine laaving finally in the Bounty, Christian having been heard frequently to say that his object was to find some uminhabited island, in which there was no harbour, that he would rom the ship ashore, and make use of her materials to form a settlement. This was all that Captain Edwards could learn, and after a fruitless search of three months he abandoned further inquiry, and proceeded on his homeward voyage.

Off the east coast of New Holland, the Pandora ran on a reef, and was speedily a wreck. In an hour and a half after she struck, there were eight and a half feet of water in her hold, and in spite of continuous pumping and baling, it became evident that she was a doomed vessel. With all the efforts made to save the crew, thirty-one of the ship's company and four mutincers were lost with the vessel. Very little notice, indeed, seems to have been taken of the latter by the captain, who was afterwards aceused of considerable inhumanity. "Before the final catastrophe," says the surgeon of the vessel, "three of the Bounty's people, Coleman, Norman, and M‘Intosh, were now let out of irons, and sent to work at the pumps. The others offered their assistanee, and begged to be allowed a chance of saving their lives; instead of which, two additional sentinels were placed over them, with orders to shoot any who should attempt to get rid of their fetters. Secing no prospect of escape, they betook themselves to prayer, and prepared to meet their fate, every one expecting that the ship would soon go to pieces, her rudder and part of the stern-post being already beaten away." When the ship was actually sinking, it is stated that no notice was taken of the prisoners, although Captain Edwards was entreated by young Heywood, the midshipman, to have merey on them, when he passed over their prison to make his own eseape, the ship then lying on her broadside with the larboard bow completely under water. Fortunately, the master-at-arms, either by aceident, or
friend. of the hurchill, natives. thrown ff those re they quarres, rious to $y$ to the had just ted Mr . dditional 1 in the gs , eight them a kirmishes ries, and it was emaining say that , that he t. This ionths he peedily a of water that she the ship's ed, seems siderable three of rons, and e allowed re plaeed r fetters. to meet and part ing, it is entreated wer their larboard ident, ot
probably design, when slipping from the roof of "Pandora's Box" into the sea, let the keys unlocking the hand-cuffs and irons fall through the senttle, and thus enabled them to commence their own liberation, in which they were assisted by one brave seaman, William Moulter, who said he wonld set them free or go to the bottom with them. He wrenchel away, with great difficulty, the bars of the prison. Immediately after the ship went down, leaving nothing visible but the top-mast cross-trees.

More than half an hour elapsed before the survivors were all pieked up by the boats. Amongst the drowned were Mr. Stewart, the midshipman, and three others of the Bonnty's people, the whole of whom perished with the manacles on their lands. Thirtyone of the ship's company were lost. The four boat-loads whieh eseaped had seareely any provis.ons on board, the allowance being two wine-glasses of water to each man, and a very small quantity of bread, caleulated for sisteen days. Their voyage of 1,000 miles on the open ocean, and the sufferings endured, were similar to those experienced by Bligh's party, but not so severe. After staying at Coupang for about three weeks, they left on a Duteh Last Indiaman, which conveyed them to Samarang, and subsequently Batavia, whence they proceeded to Europe.

After an exhaustive court-martial had been held on the ten prisoners brought home by Captain Edwards, three of the seamen were condemned and exeeuted; Mr. Heywood, the indshipman, the boatswain's-mate, and the steward were sentenced to death, but afterwards parloned; four others were tried and acquitted. It will be remembered that four others were drowned at the wreek.

Twenty years had rolled away, and the mutiny of the Bounty was almost forgotten, when Captain Folger, of the Ameriean ship Topaz, reported to Sir Sydney Smith, at Valparaiso, that he had diseovered the last of the survivors on Pitcairn Island. This fact was transmitted to the Admiralty, and received on May 14th, 1809, but the troublons times prevented any immediate investigation. In 1814, H.M.S. Briton, commanded ly Sir Thomas Staines, and the Tagus, Captain Pipon, were cruising in the Pacific, when chey fell in with the little known island of Piteairn. He diseovered not merely that it was inhaibited, but afterwards, to his great astonishment, that every individual on the island spoke very good English. The little village was composed of neat huts, embowered in luxuriant plantations. "Presently they observed a fow natives coming down a steep descent with their canoes on their shoulders, and in a few minutes perceived one of these little vessels dashing through a heavy surf, and paddling off towards the ships; but their astonishment was extreme when, on coming alongside, they were hailed in the English language with 'Won't you heave us a rope now?'
"The first young man that sprang with extraordinary alaerity up the side and stood before them on the deek, said, in reply to the question, 'Who are you?' that his name was Thursday October Christian, son of the late Fleteher Christian, by an Otaheitan mother ; that he was the first born on the island, and that he was so called because he was brought into the world on a Thursday in October. Singularly strange as all this was to Sir Thomas Staines and Captain Pipon, this youth soon satisfied then that he was none other than the person he represented himself to be, and that he was fully acquainted with the whole listory of the Bounty; and, in short, the island before them was the retreat
of the mutineers of inat ship. Young Christian was, at this time, about twenty-four years of are, a fine tall youth, full six feet high, with dark, almost blek ha; and a mu:tenance open and extremely interesting. As be wore no clothes, exeerit a pieee of cloih round his loins, and a straw hat, ornamented with black cock's feathers, his fine figure, and well-shaped muscular limbs, were displayed to great advantage, and attracted general admiration. * * $*$ He told them that he was married to a woman much

h.m.s. "briton," at pitcairn island.
older than himself, one of those that had accompanied his father from Otaheite. His. companion was a fine, handsome youth of seventeen or eighteen years of age, of the name of George Young, the son of Young, the midshipman." In the cabin, when invited to refreshments, one of them astonished the captains by asking the blessing with much ?Dearance of devotion, "For what we are going to receive, the Lord make us truly thinikeul." The only surviving Englishman of the crew was John Adams, and when the captains landed through the surf, with no worse result than $\underset{\mathrm{a}}{\mathrm{a}}$ good wetting, the old man carre down to meet them. Both he and his aged wife were at first considerably alarmed at seeine the king's uniform, but was reassured when he was told that they had no intention of listurbing him. Adams said that he had no great share in the mutiny, that he was sr.k at the time, and was afterwards compelled to take a musket. He even
expressed his willingness to go to England, but this was sirougly opeosed by his daughter. "All the women burst into tears, and the young men stood motionless and absorbed in grief; but on their being assured that he should wo no wecotint e molested, it is impossible," says Pipon, "to deseribe the universal ju: that these poor people manifested."

When Christian had arrived at the island, he found no good anchotage, so he ran the Bounty into a small ereek against the cliff, in order to get out of her such articies as might be of use. Having stripped her, he set fire to the hull, so that afterwards she should not be seen by passing vessels, and his retreat diseovered. It is pretty clear that the misguided young man was never happy after the rash and mutinous step he hall taken, and he became sullen, morose, and tyrannieal to his companions. He was at length shot by an Otaheitan, and in a short time only two of the mutineers were left alive.

The colony at this time comprised forty-six persons, mostly grown-up young people, all of prepossessing appearance. John Adams had made up for any share he may have had in the revolt, by instrueting them in religious and moral prineiples. The girls were modest and bashiful, with bright eyes, beautifully white teeth, and every indication of health. They carried baskets of fruit over such roads and down such precipices as were searcely passable by any creatures except goats, and over which we could scarcely scramble with the help of our hands. When Captain Beechey, in his well-known voyage of diseovery on the Blossom, called there in 18:5, he found Adams, then in his sixty-fifth year, dressed in a sailor's shirt and trousers, and with all a sailor's namers, doffing his hat and smoothing down his bald forehead whenever he was addressed by the offieers of the Blossom. Many cireumstanees conneeted with the subsequent history of the happy little colony emmot be detailed here. Suffice it to say that it still thrives, and is one of the most modol settlements of the whole work, although descended from a stak so berl. Of the nine who landed on Piteairn's Island only two died a natural deatin. Of the original officers and crew of the Bounty more than half perished in various untingy ways, the whole burden of guilt resting on Christian and his fellow-conspirators.

The mutiny just deseribed sinks into insignificance before that which is about to be recounted, the greatest mutiny of English history-that of the Nore. At that one point no less than 40,000 men were coneerned, while the disaffection spread to many other stations, some of them far abroad. There can be little doubt that prior to 1797, the year of the event, our sailors had laboured under many grievances, while the navy was full of "pressed" men, a portion of whom were sure to retain a thorough dislike to the service, although so many fought and died bravely for their eountry. Some of the grievances whieh the navy suffered were probably the result of eareless and negligent legislation, rather than of deliberate injustice, but they were none the less galling on that aceount. The pay of the sailor had remained unchanged from the reign of Charles II., although the priees of the neeessaries and eommon luxuries of life had greatly risen. His pension had also remained at a stationary rate; that of the soldier had been augmented. On the score of provisions he was worse off than an ordinary pauper. He was in the hands of the purser, whose "usnal title at that time indicates his unpopularity: he was termed "Nipcheese." The provisions served were of the worst quality; fourteen instead of sixteen ounces went
eite. His. the name invited to with much us truly when the le old man bly alarmed ey had no. utiny, that He even
en 'y-four $\because$, and $a$ picce of , his fine attracted an much

to the navy pound. The purser of those days was taken from an inferior elass of men, and often obtained his position by influenee, rather than merit. He generally retired on a competeney after a life of deliberate dishonesty towards the defenders of his country, who, had they received everything to which they were entitled, would not have been too well treated, and, as it was, were eheated and robbed, without scruple and without limit. The reader will recall the many naval novels, in which poor Jack's daily allowance of grog was curtailed by the purveyor's thumb being put in the pamikin: this was the least of the evils he suffered. In those war times the discipline of the service was specially rigid and severe, and most of this was doubtless necessary. Men were not readily obtained in sufficient mumbers; consequently, when in harbour, leave ashore was very constantly refused, for fear of desertions. These and a variety of other grievances, real or fancied, nearly upset the equilibrium of oure entire navy. It is not too much to say that not merely England's naval supremacy was for a time in the greatest jeopardy through the disaffeetion of the men, but that our national existence, almost-and most certainly our existence as a first-elass power —was alarmingly threatened, the cause being nothing more nor less than a very general spirit of mutiny. To do the sailors justice, they sought at first to obtain fair play by all legitimate means in their power. It must be noted, also, that a large number of our best ofticers knew that there was very general discontent. Furthermore, it was well known on shore that numerous secret societies opposed to monarchy, and ineited by the example of the French Revolution, had been established. Here, again, the Government had made a fatal mistake. Members of these socicties had been convicted in numbers, and sent to sea as a punishment. These men almost naturally became ringleaders and partakers in the mutiny, which would, however, have occurred sooner or later, under any cirenmstances. In the case of the mutiny at Spithead, about to be recounted, the sailors exhibited an organisation and an amount of information which might have been expected from "sea-lawyers" rather than ordinary Jack Tars; while in the more serious rebellion of the Nore, the co-operation of other agents was established beyond doubt.

The first step taken by the men was perfeetly legitimate, and had it been met in a proper spirit by the authorities, this history need never have been penned. At the end of February, 1797, the crews of four line-of-battle ships at Spithead addressed separate petitions to Lord Howe, Commander-in-Chief of the Channel Fleet, asking his kind interposition with the Admiralty, to oitain from them a relief of their grievances, so that they might at length be put on a similar footing to the army and mili in, in respect both of their pay and of the provision they might be enabled to make for their wives and families. Lord Howe, being then in bad health, communicated the subject of their petitions to Lord Bridport and Sir Peter Paiker, the port admiral, who, with a want of foresight and disregard of their comntry's interest which cannot be exeused, returned answer that "the petitions were the work of some evil-disposed person or persons," and took no trouble to investigate the allegations contained it them. Lorl Howe, therefore, did nothing: and the seamen, linding theiv applications for redress not only disregarded, but treated with contempt, determined to compel the authorities to give them that relief which they had before submissively asked.

In about si: weeks they organised their plans with such secrecy that it was not till etired on a mitry, who, en too well limit. The f grog was east of the y rigid and in sufficient ed, for fear $y$ upset the y England's of the men, -class power ery general play by all - of our best 11 known on ample of the made a fatal to sea as a the mutiny, In the case misation and yers" rather co-operation
en met in a $t$ the end of ate petitions position with ey might at their pay and Lord Howe, Bridpert and pard of their ens were the vestigate the the seamen, h contempt, had before
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everything was arranged on a working basis that the first admiral, Lord Bridport, gained any knowledge of the conspiracy going on around him. He communicated his suspieions to the Lords of the Admiralty; and they, thinking a little aetive service would prove the best enre for what they simply regarded as a momentary agitation, sent down orders for the Chamel Fleet to put to sea. The orders arrived at Portsmonth on April l5th, and in obedience to them Lord Bridport signalled to the fleet to make the neeessary preparations. As might almost have been expected, it was the signal, likewise, for the outhreak of the mutiny. Not a sailor bestirred himself; not a rope was bent; but, as if by common consent, the erews of every vessel in the squadron manned the yards and rigging, and gave three cheers. They then proceeded to take the command of each ship from the officers, and appointed delegates from each vessel to corduct negotiations with the authorities of the Admiralty. No violence nor foree was used. The first-lieutenant of the London, ordered by Admiral Colpoys, one of the best-hated officers of the service, shot one of the mutineers, but his death was not avenged. They again forwarded their petition to the Admiralty, and its elosing sentences showed their temperance, and argued strongly in favour of their eause. They desired "to convince the nation at large that they knew where to cease to ask, as well as where to begin; and that they asked nothing but what was moderate, and might be granted without detriment to the nation or injury to the service." The Admiralty authorities, seeing that with the great power in their hands they had acted peaceably, only abstaining from work, yielded all the concessions asked; and a full pardon was granted in the king's name to the fleet in general, and to the ringleaders in particular. In a word, the mutiny ended for the time being.

It was resumed on May 7th. As Parliament had delayed in passing the appropriations for the increase of pay and pensions, the crews rose en masse and disarmed all their offieers, although still abstaining from actual violence. Lord Howe, always a popular offieer with the men, and their especial idol after his great vietory of June 1st, 1791 , was sent down by the Cabinet with full power to ratify all the coneessions which had been made, and to do his best to convince the men that the Government had no desire of evading them. He completely mollified the men, and even sueceeded in exaeting an expression of regret and contrition for their outbreak. He assured them that their every grievanee should be considered, and a free pardon, as before, given to all coneerned. The men again returned to duty. The fleet at Plymouth, which had followed that of Portsmouth into the mutiny, did the same ; and thus, in a month from the first outbreak, as far as these two great fleets were coneerned, all disaffection, dissatisfaction, and uscontent had passed away, through the tact and judicious behaviour of Lord Howe. There can be no doubt that the tyramy of many of the officers had a vast deal to do with the outbreak. In the list of officers whom the men considered obnoxious, and that Lord Howe agreed should be removed, there were over one hundred in one fleet of sixteen ships.

Strange to say, the very same week in which the men of the Portsmouth fleet returned to their duty, acknowledging all their grievances to be removed, the fleet at the Nore arose in a violent state of mutiny, displaying very different attributes to those shown by the former. Forty thousand men, who had fought many a battle for king and country, and in steadfast reliance upon whose bravery the people rested every night in tranquillity,
eonfident in their patriotism and loyalty, became irritated by ungrateful neglect on the one part, and by seditions advisers on the other, and turned the guns which they had so often fired in defence of the Eaglish flag against their own countrymen and their own homes.

Richard Parker, the chicf ringleader at the Nore, was a thoroughly bad man in every respect, and one utterly unworthy the title of a British satilor, of which, indeed, he had been more than onee formally deprived. He was the son of an Exeter tradesman in a fair way of business, had received a good education, and was possessed of deeided abilities. He was a remarkably bold and resolute man, or he would never have aequired the hold he had for a time over so many brave sailors. He was unmistakably
"Tho keader of the band he had undone, Who, born for better things, hal madly set His life upon a cast,"
and until overtaken by justiee, he ruled with absolute sway.
Parker had, eleven years previously, entered the navy as a midshipman on board the Culloolen, from which vessel he had been discharged for gross misconduct. A little later, he obtained, however, a similar appointment on the Leauder frigate, and was again dismissed. We next tind him passing through several ships in rotation, from which he was invariably dismissed, no captain allowing him to remain when his true character diselosed itself. It did not usually take long. At length he became mate of the Resistunce,, on which vessel, shortly after joining, he was brought to a court-martial and "broke" -i.e., his commission taken away-and declared incapable of serving again as an officer. After serving a short time as a common sailor on board the ILebe, he was either invalided or discharged, for we find him residing in Scotland; and as he could no more keep out of trouble ashore than he could afloat, he was soon in Edinburgh gaol for debt. But men were wantel for the navy, and he was eventually sent up to the flect as one of the quota of men required from Perth district. He received the parochial bounty of $£ 30$ allowed to each man. He joined the Saulwich, the flag-ship of Admiral Buckner, Commander-in-Chief at the Nore. The best authorities believe him to have been employed as an emissary of the revolutionists, as, although he had only just been discharged from gaol, he had abundance of money. His good address and general abilities, combined with the liberality and conviviality he displayed, speedily obtained him an influence amorg his messmates, which he used to the worst purpose. He had scarcely joined the fleet when, aided by disaffected parties ashore, lie began his machinations, and speedily seduced the majority of the scamen from their dety. In some respects the men followed the example of those at Portsmouth, seleeting delegates and forwarding petitions, but in other respects their conduct was disgracefully different. When mastery of the offieers had been effected, Parker became, in effect, Lord IIigh Admiral, and committed any number of excesses, even firing on those ships which had not followed the movement. Officers were flogged, and on board the flag-ship, the vessel on which Parker remained, many were half-drowned, as the following account, derived from an mimpeachable source,*

[^81]t on the y had so homes. man in indeed, he lesman in f decided e aequired
on board A littlo was again which he charaeter Resistance, l "broke" an officer. r invalided e keep out debt. But one of the ty of $£ 30$ Buckner, 2 employed arged from bined with ce among the fleet ly seduced llowed the s, but in lie officers nitted any movement. remained, le source,* nd from the


ADMHRAL DUNCAN ADDRESSING HIS CREW.
will show. Their hammocks were fastened to their backs, with an 18 -pounder bar-shot as a weight; their hands were tied together, likewise their feet. They were then made fast to a tackle suspended from a yard-arm, and hauled up almost to the block; at the word of coramand they were dropped suddenly in the sea, where they were allowed to remain a minute. They were again hoisted up, and the process repeated, until abont every sign of life had flecl. The mertumate victims were then hoisted up by the heels; this was considerately done to get rid of the water from their stomachs. They were then put to bed in their wet hammocks.

On June wth the mutinons fleet was joined by the Agamemnon, Leopard, Ardent, and Iris men-of-war, and the Ramgre sloop, which vessels basely deserted from a signadron under Admiral Duncan, sent to blockade the Texel. Shortly after, a number of vessels of the line arrived at the mouth of the Thames, and still further augmented the ranks ol the mutincers. By this means eleven vessels were added to the list. Dunean, gallant old salt as he was, when he fomud himself deserted by the greater part of his fleet, called his own ship's crew (the Tenerable, 74) together, and addressed them in the following speech:-
"My lads,-I once more call you together with a sorrowful heart, from what I have lately seen of the dissatisfaction of the flects: I call it dissatisfaction, for the crews have no grievances. To be deserted by my fleet, in the face of an enemy, is a disgrace which, $I$ believe, never before happened to a British admiral, nor eould I have supposed it possible. My greatest comfort under God is, that I have becn supported by the officers, seamen, and marines of this ship; for whieh, with a heart overflowing with gratitude, I request you to accept my sincere thanks. I flatter myself much good may result from your example, by bringing these deluded people to a sense of their duty, which they owe, not only to their king and country, but to themselves.
"The British Navy has ever been the support of that liberty which has been handed down to us by our aneestors, and which I think we shall maintain to the latest posterity; and that can only be done by unanimity and obedience. This ship's company, and others who have distinguished themselves by their loyalty and good order, deserve to be, and doubtless will be, the favourites of a grateful comntry. They will also have, from their inward feelings, a comfort which will be lasting, and not like the bloating and false confidence of those who have swerved from their duty.
"It has often been my pride with you to look into the Texel, and see a foe which dreaded coming out to meet us; my pride is now humbled indeed! my fcelings are not easily expressed! Our cup has overflowed and made us wanton. The all-wise Providence has given us this check as a warning, and I hope we shall improve by it. On Him then let us trust, where our only security may be found. I find there are many good men amongst us; for my own part, I have had full confidence of all in this ship, and once more beg to express my approbation of your conduct.
"May God, who has thus far conducted you, continue so to do; and may the British Navy, the glory and support of our country, be restored to its wonted splendour, and be not only the bulwark of Britain, but the terror of the world.
"But this can only be effected by a strict adherence to our duty and obedience; and let us pray that the Almighty God may keep us in the right way of thinking.
bur-shot made fust the word remain a $y$ sigu of this was then put 1, Arilent, ، squalron of ressels e ranks of ralliant old called his speeel :rat I have rs have no which, I it possible. anmen, and equest you r example, ot only to en handel posterity; and others to be, and from their and false foe which sis are not Providence Him then good men and once he British ar, and be

## "Gud bless you all!"

At an address so massuming and patriotie, the whole ship's erew were dissolved in tears, and one mad all declared, with every expression of warmeth they could use, their determination to stay by the admirnl in life or death. Their example wns followed by all the other ships left in the siquadron, und the brave and exeellent old admiral, notwithstanding the defection of so many of his ships, repuirel to his station, off the eoast of Hollaml, to watch the movements of the Duteh fleet. Here he employed a device to hide the sparsencss of his fleet by employing one of his frigates, comparatively close in shore, to make signals constantly to himself and to the other vessels in the ofling, many of them imaginary, and give the enemy the impression that a large sfuadron was ontside. He haul resolvel, however, not to refuse battle, if the Dutel fleet should have the eourage to come out and offer it.

But to return to the mutineers. The accession of the new vessels so elated Parker that he gave way to the wildest fits of extravagance. He talked of taking the whole Heet to sea, and selling it to our enemies. He tried to stop the navigation of the 'Thames, declaring that he would fore his way up to London, and bombard the city if the Government did not aceede to his terms. The alarm at these proceedings became general in the metropolis, and the funds fell lower than ever known before or since in the financial history of our country. An order was given to take up the buoys marking the chamel of the 'Thames, while the forts were heavily armed and garrisoned, so that should Parker attempt his vainglorious threat, the fleet might be destroyed. The Government now acted with more promptness and decision than they had previously displayed. Lord Speneer, Lord Arden, and Admiral Young hastened to Sheerness, and held a board, at which Parker and the other delegates attended, but the conduct of the mutineers was so audacious that these Lords of the Admiralty returned to town without the slightest success. The prineipal artiele of conflict on the part of the seamen's delegates was the unequal distribution of prize-money, for the omission of which matter in the recent demands, they greatly upbraided their fellow-seamen at Portsmouth. Bills were immediately passed in Parlinment inflicting the heaviest penalties on those who aided or encouraged the mutineers in any way, or even held intereourse with them, whieh speedily had the effect of damping their ardour, and by the end of the first week in June the fire which Parker had fanned iato a serious conflagration, began to dic out. The fleets at Portsmouth and Plymonth disowned all fellowship with them, and the example of one or two ships, such as the Clyde, which from the first had resisted Parker's influenec, commenced to be of effect. The ringleader himself, seeing that his influence was waning, and knowing the perilous position in which he had plaeed hinself, tried to re-open negotiations with the Admiralty, but his demands were too ridieulons to be considered; whereupon he hung Mr. Pitt and Mr. Dundas in effigy at the yarl-arm of the Sundwich. It is a curious fact, showing that the erews were simply egged on by the ringleaders, and that there was plenty of loyalty at bottom, that on June 4th, the king's birthday, the whole fleet insisted on firing a royal salute, displaying the colours as usual, and bauling down the red flagr during the ceremony. Mr. Parker, however, insisted that it should Hy on the Hag-ship.



IMAGE EVALUATION TEST TARGET (MT-3)




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Corporation


On June 10tl: two of the shipr, the Leopard and Repulse, hauled down the flag of mutiny, and sailed into the Thames; their example was soon followed by others. Parker and his cause wele lost.

On the evening of June 14th this miserable affair was at an end. The erew of the Sandwich, Parker's own ship, brought that vessel under the guns of the fort at Sheerness, and handed him as a prisoner to the authorities. Sixteen days afterwards he was hangei. His wife presented a petition to the queen in favour of her wretehed husband, and is stated to have offered a thousand guineas if his life could be spared. But he, of all men who were ever hanged, deserved his fate, for he had placed the very kingdom itself in peril. Other execotions took place, but very few, considering the heinousness of the crime committed. Still, the Government knew that the men had been in the larger proportion of cases more sinned agaiust than sinning; and when later, Dunean's victory over the Duteh fleet provided an oeeasion, an amnesty was published, and many who had been confined in prison, some of them under sentence of death, were released. Ein passant, it may be remarked that three marines were she: at Plymouth on July 6th of the same year, for endeavouring to excite a muting in the corps, while another was sentenced to receive a thousand lashes.

The mutinous spirit evinced at Portsmouth, Plymouth, and the Nore spread even to foreign stations. Had it not been for Dunean's manly and sensible appeal to his crew, where there were some disaffected spirits, our naval supremaey might have becn seriously compromised as regards the Dutch. On board the Mediterranean Flect, then lying off ${ }^{\prime}$ the coast of Portugal, the mutineers had for a time their own way. The admiral commanding, Lord St. Vineent, was, however, hardly the man to be daunted by any number of evil-disposed fellows. He had only just before added to his laurels by another victory over the enemies of his country. The ringleaders on board the flagship St. George were immediately seized, brought to trial, and hanged the uext day, although it was Sunday, a most unusual time for an execution. Still further to inerease the force of the example, he departed from the usual custom of drawing men from different ships to assist at the execution, and ordered that none but the crew of the St. George itself should touch a rope. The brave old admiral, by his energy and promptitude, soon quieted every symptom of disaffection.

The last of the mutinies broke out at the Cape of Good Hope, on October 9th of the same year, when a band of mutineers seized the flagship of Admiral Pringle, and appointed delegates in the same way as their shipmates at home, showing plainly how extended was the diseontent in the service, and how complete was the organisation of the insurgents. Lord Macartney, who commanded at the Cape, was, however, master of the oeeasion. Of the admiral the less said the better, as he showed the white feather, and was completely non-plussed. Maeartney manned the batteries with all the troops available, and ordered red-hot shot to be prepared. He then informed the fleet that if the red flag was not at once withdrawn, and a white one hoisted, he would open fire and blow up every ship, the crew of which held out. The admiral at the same time informed the delegates that all the concessions they required had already been granted to the fleets at home, and of course to them. In a quarter of an hour the red flag was hauled down, and a free pardon

## flag of

 Parker $v$ of the heerness, hanged. , and is all men itself in of the e larger victory vho had passant, he same nced to even to is crew, eriously ing off admiral by any another George it was of the o assist should d every of the pointed xtended irgents. on. Of npletely ordered not at ry ship es that and of pardon
extended to the bulk of the offenders. The ringleaders were, however, hanged, and a few others flogged. The mutinous spirit never re-asserted itself.

Since that time, thank God! no British fleet has mutinied; and as at the present day the sailors of the Royal Navy are better fed, paid, and cared for than they ever were before, there is no fear of any recurrence of disaffection. One need only look at the


LORD ST. VINCENT.

Jack Tar of the service, and compare him with the appearance of almost any sailor of any merchant marine, to be convinced that his grievances to-day are of the lightest order. The wrongs experienced by sailors in a part of the merchant service have been recently remedied in part; but it is satisfactory to be able to add that there is every probability of their condition being greatly improved in the future. On this point, however, we shall have more to say in a later chapter.

## CHAPTER XV.

## The Histohy of Sillpi and Suliping Interbits.

The Fisst Alfempts to Float-Hollowed Logs and Rafts-The Ark and ifs Dimensions-Skin Flonts and llasket-boatsMaritime Commere of Antiquity-I Mendelan Enterprlse-Did they ltound the Cupe ?-The Ships of Tyre -Curthago -Lanno's Voyage to the West Coast of Africa-Egyptian Ginleys-The Great ships of the l'tolemies-lliero's Floating Pahace-The lhomans-Thetr Repugnance to Seafaring lursuits-sea lathes whth the (urthinghansCicero's Ophions on Commerce-Consinnthophe and if Commeree-Vonice-britain-The First Invision nuder Julhis Cuesar-Dlenelts Acerulag - The Danlsh Pirates-The London of the Period-The Father of the Britash Navy - Afred and hls Victortes-Cannte's Fleet-The Norman Invaslon-The Crusades-mhehard Cceur de Lion's Fleet The Cingue t'orts and thetr Privileges-Fonndation of a Marthme Code-Letlers of Marguo-Opening of the ('oal Trade-C'hancer's Deseription of the Sailors of his Thme-A Glorlons Period-The Vhetories at Larfleur-ilenry V's Fleel of 1,300 Vessels-The Channel Maranders-The King-Maker Pirale-Sir Andrew Woolls Victory-Aetion whit Scotel l'irates-The Great Miehtel and the Great Ifurv/-Qneen Ellzabeth's Astuteness-The Nation never so weil Provided - "The Most Fortunate and Invincible Armada"-Its Sizo and Strength-Eilzabelh's Appenl to the CountryA volie liesponse-Eitingham's Appolntment-The Armada's First Disaster-Reflted, and liesails from C'ornnnaChased in the Ifear-A series of Contretemps-English Volunteer Ships in Numbers-The Fire-ships at C'alais-The Finai Actlon-Flight of the Armada-Fute of Shipwrecked Spanish in Ireland-Total Loss to Spuin - Rejoichngs and Thanksgivings in England.

It will not now be out of place to take a rapid survey of the progress of naval arehitecture, from $\log$ and coracle to wooden walls and ironclads, noting rapidly the progressive steps which led to the present epoch.

It is only from the Scriptures, and from fragmentary allusions in the writings of profane historians and poets, that we can derive any knowledge of the vessels employed by the ancients. Doubtless our first parents noticed branches of trees or fragments of wood floating upon the surface of that "river" which "went out of Eden to water the garden;" and from this to the use of logs singly, or combined in rafts, or hollowed into canoes, would be an casy transition. The first boat was probably a mere toy model; and, likely enough, great was the surprise when it was discovered that its sides, though thin, would support a considerable weight in the water. The first specimen of naval architecture of which we have any deserijtion is unquestionably the ark, built by Noal. If the eubit be taken as cighteen inciaes, she was 450 feet long, 75 in breadth, and to in depth, whilst her tonnage, according to the present system of admeasurement, would be about 15,000 tons. It is more than probable that this huge vessel was, after all, little more than a raft, or barge, with a stupenduous house reared over it, for it was constructed merely for the purpose of floating, and needed no means of propulsion. She may bave been, comparatively speaking, slightly built in her lofty upper works, her carrying eapacity being thereby largely inereased. Soon after the Flood, if not, indeed, before it, other means of Hotation must have suggested themselves, such as the inflated skins of animals; these may be seen on the ancient monuments of Assyria, discovered by insjard, where there are many representations of people erossing rivers by this means. Next came wickerwork baskets of rushes or reeds, smeared with mud or pitch, similar to the ark in which Moses was found. Mr. Layard found such boats in use on the Tigris; they were constructed of twisted reeds made water-tight by bitumen, and were often large enough for four or five persons. Pliny says, in his time, "Firen uow in British waters, vessels of vine-twigs sewn round with leather are used." The words in italies might be used were Pliny writing to-day. Basket-work coracles, covered with leather or prepared flamnel, are still found in a few parts
of Wales, where they are used for fording streams, or for fishing. Wooden canoes or loats, whether hollowed from one log or constructed of many parts, came next. The paintings and seulptures of Upper and Lower Lgypt show regularly formel boats, made of sawn planks of timber, earrying a number of rowers, and having sails. The Egyptians were averse to seafaring pursnits, having extensive overhand commeree with their neighbours.

The Phomicians were, past all cavil, the most distinguished navigators of the ancient world, their capital, Tyre, being for centuries the centre of commeree, the " mart of nations." Strange to say, this comntry, whose inhabitants were the rulers of the sea in those times, was a mere strip of land, whose average breadth never exceeled twelve miles, while its length was only 22.5 miles from Aradus in the north to Joppa in the south. Foreed by the muproduetiveness of the territory, and blessed with one or two excellent harbours, and an abundant supply of wood from the mountains of Lebanon, the Phemicians soon possessed a mumerous flect, which not only monopolised the trade of the Mediterranean, but navigated Solomon's fleets to the Persian Gulf and Indian Ocean, establishing colonies wherever they went. Herodotus states that a Phoenician flect, which was fitted out by Necho, King of Egypt, even circumnavigated Africa, and gives details which seem to place it within the eategory of the very greatest voyages. Starting from the led Sea, they are stated to have passed Ophir, generally supposed to mean part of the east coast of Afriea, to have rounded the continent, and, entering the Mediterranean by the Pillars of Hercules, our old friends the Roeks of Gibraltar and Ceuta, to have reached Egypt in the third year of their voyage. Solomon, too, dispatehed a fleet of ships from the Red Sea to feteh grold from Ophir. Diodorus gives at great length an account of the fleet said to be built by this people for the great Queen Semiramis, with whieh she invaded India. Semiramis was long believed by many to be a mythieal personage ; but Sir Henry Rawlinson's interpretations of the Assyrian inseriptions have placed the existence of this queen beyond all donht. In the Assyrian hall of the British Muscum are two statues of the god Nebo, each of which bears a cmeiform inseription saying that they were made for Queen Semiramis by a sculptor of Nineveh. The commeree of Phemicia must have been at its height when Nebuchadnezzar made his attack on Tyre. Ezekiel g:ves a description of her power about the year b.c. 5s8, when ruin was hovering around her. "Tyre," says the prophet, "was a merchant of the people for many isles." He states that her ship-boards were made of fir-trees of Senir; her masts of cedars from Lebamon; her oars of the oaks of Bashan ; and the benehes of her galleys of ivory, brought out of the isles of Chittim.

To the Tyrians also is due the colonisation of other countries, whieh, following the example of the mother-country, soon rivalled her in wealth and enterprise. The principal of these was Carthage, which in its turn founded colonies of her own, one of the first of which was Gades (Cadiz). From that port Ilamno made his eelebrated voyage to the west coast of Africa, starting with sixty ships or galleys, of fifty oars eaeh. He is said to have founded six trading-posts or colonies. About the same time Hamilco went on a voyage of discovery to the north-western shores of Europe, where, according to a poem of Festus Avienns,* he formed settlements in Britain and
*The curious in such matters will find this poem translated by Heeren in his work entitled "Asiatie Nutions."

Ireland, and found tin and lead, and people who used beats of skin or leather. Aristotlo tells us that the Carthaginians were the first to increase the size of their galleys frem three to four banks of oars.

Under the dynasty of the Ptolemies the maritime commerce of Egypt rapidly improved. The first of these kings caused the crection of the celebrated Pharos or lighthouse at Alexandria, in the upper storcy of which were windows looking seaward, and inside which fires were lighted ly night to guide mariners to the harbour. Upon its front was inscribed, "King Ptolemy to God the Savinur, for the benefit of sailors." His successor, Ptolemy Philadelphus, attempted to cut a canal a hundred cubits in width between Arsinoe, on the Red Sea, not far from Suez, to the eastern branci of the Nile. Enormous vessels were constructed at this time and during the succeeding reigns. Ptolemy, the son of Lagos, is said to have owned five hundred galleys and two thousand smaller vessels. Lucian speaks of a vessel that he saw in Dgypt that was one hundred and twenty cubits long. Anot:3er, constructed by Ptolemy Philopator, is described by Calixenus, an Alexandrian historian, as two hundred and eighty cubits, say 420 feet, in length. She is said to have had four rudders, two heads, and two sterns, and to have been manned by 4,000 sailors (meaning principally oarsmen) and 3,000 fighting-men. Calixenus also deseribes another built during the dynasty of the Ptolemies, called the Thalanegns, or "carrier of the bedchamber." This leviathan was 300 iect in length, and fitted up with every conceivable kind of luxury and magxificence-with colonnades, marble staircases, and gardens; from all which it is easy to infer that she was not intended for sea-going purposes, but was probably an immense barge, forming a kind of summer palace, moored on the Nile. Plutarch in speaking of her says that she was a mere mattel of curiosity, for she differed very little from an immovable building, and was calculated mainly for show, as she could not be put in motion without great difficulty and danger.

But the most prodigious vessel on the records of the ancients was built by order of Hiero, the second Tyrant of Syracuse, under the superintendence of Archimedes, about 230 years before Christ, the description of which would fill a small volume. Athenæus has left a description of this vast floating fabric. There was, he states, as much timber empiloyed in her as would have served for the construction of fifty galleys. It had all the varieties of apartments and conreniences necessary to a palace-such as banquetingrooms, baths, a library, a temple of Venus, gardens, fish-ponds, mills, and a spacious gymnasium. The inlaying of the floors of the middle apartment represented in various colours the stories of Homer's "Iliad;" tiere were everywhere the most beautiful paintings, and every embellishment and ornament that art could furnish were bestowed on the ceilings, windows, and every part. The inside of the temple was inlaid with cypress-wood, the statues were of ivory, and the floor was studded with precious stones. This vessel bad twenty lenches of oars, and was encompassed by an iron rampart or battery; it had also eight towers with walls and bulwarks, which were furnished with machines of war, one of which was capable of throwing a stone of 300 pounds weight, or a dart of twelve cubits long, to the distance of half a mile. To launch her, Archimedes invented a screw of great power. She had four wooden and eight iron anchors; her mainmast,

Aristotle ys from rapidly haros or seaward, Upon nefit of hundred eastern ring the hundred saw in cted by hundred rudders, (meaning er built the bednceivable is ; from oses, but 1 on the sity, for or slow,
order of pout 230 wus has timber had all quetingspaeious various nintings, on the ss-wood, is vessel tery ; it hines of dart of nvented inmast,
composed of a single tree, was proeured after mueh trouble from distant inland mountains. Hiero fitiding that he had no harbouis in Sicily capuble of containing her, and learning 1 that the:'3 was famine in Egypt, sent her loaded with corn to Alexandria. She bore an inscription of which the following is part:-"Hiero, the son of Hierocles, the Dorian, who wields the sceptre of Sielly, sends this vessel bearing in her the fruits of the earth. Do thou, O Neptune, preserve in safety this silip over the blue waves."

fleet of moman galleys.

Among the Grecian states Corinth stood high in naval matters. Her people were expert ship-builders, and claimed the invention of the trireme, or galley with three tiers of cars. Athens, with its three ports, also carried on for a long period a large trade with Egypt, Palestine, and the countries bordering the Black Sea. The Romans had little inclinstion at first for seamanship, but were forced into it by their rivals of Carthage. It was as late as b.c. 261 before they determined to build a war-fleet, and had not a Carthaginian galley, grounded on the coast of Italy, been seized by them, they would not have understood the proper construction of one. Previously they had nothing mueh above large boats rudely built of planks. The noble Romans affected to despise commerce at this period, and trusted to the Greek and other traders to supply their wants. Quintus Claudius introduced a law, which passed, that no senator or father of one should
own a vessel of a greater eapacity than just sufficient to carry the produce of their own lands to market. Hear the enlightened Cicero on the subject of commerce. He observes that, "Tralle is mean if' it hus only a small prrufit for its oljject; but it is otherwise if it has large dealings, bringing many sorts of merelandise from foreign parts, and distributing them to the public without deeeit; and if after a rensonable profit such merehants are contented with the riches they have aequired, and purchasing land with them retire into the comntry, and apply themselves to agrieulture, I cannot perceive wherein is the dishonour of that function." Mariners were not esteemed by the Romans until after the great battle of Actium, which threw the monopoly of the luerative Indian trade into their hands. Claudius, A.D. 41, decpened the Tiber, and built the port of Ostia; and about fifty years later Trajan constructed the ports of Civita Vecechia and Ancona, where commeree tlourished. The Roman fleets were often a source of trouble to them. Carausius, who was really a Duteh soldier of fortme, alout the year 250 , seized upon the fleet he commanded, and erossed from Gessoriacum (Boulogne) to Britain, where he proclaimed himself emperor. He held the reius of government for seven years, and was at length murdered by his lieutenant. He was really the first to ereate a British manned fleet. In the reign of Diocletian, the Veneti, on the const of Gaul, threw off the Roman yoke, and claimed tribute from all who appeared in their seas. The same emperor founded Constantinople, ereeted later, under Constantine, into the seat of government. This city seemed to be destined by nature as a great commereial centre; caravans placed it in direet communication with the East, and it was really the entrepôt of the world till its enpture by the Venetians, in 1201. That independent republic had been then in a flourishing condition for over two hundred years, and for more than as many after, its people were the grentest traders of the world. It was at Venice in 1202 that some of the leading pilgrims assembled to negotiate for a flect to be used in the fourth crusade. The crusaders agreed to pay the Venetians before sailing eighty-four thousand marks of silver, and to share with them all the booty taken ly land or sea. The republie undertook to supply flat-bottomed vessels enough to convey four thousard five hundred knights, and twenty thousand soldiers, provisions for nine months, and a fleet of galleys.
"Surrounded by the silver streak," our hardy forefathers often crossed to Ireland and France, prior to the first invasion of Britain by Julius Ciesar, b.c. 55, when he sailed from Boulogne with eighty vessels and 8,000 men, and with eighteen transports to carry 800 horses for the cavalry. In the second invasion he employed a fleet of 600 boats and twenty-five war-galleys, having with him five legions of infantry and 2,000 cavalry, a formidable army for the poor islanders to contend against. But their intereourse with the Romans speedily brought about commercial relations of importance. The pearl fisheries were then moit profitable, while the "native" oyster was greatly esteemed by the Roman epieures, of whom Juvenal speaks in his fourth satire. He says they

[^82]sir own observes otherwise rts, and ofit such and with pereeive Romans e Indian the port Vecehia ource of the year 3oulogne) verument the first coast of in their tine, into mmercial eally the lependent and for $t$ was at fleet to e sailing by land vey four months, land and he sailed to carry boats and avalry, a rse with

## fisheries

e Roman

British cysters were exported to Rome, as Amerienn oysters are now-a-days to Eugland. Martial also mentions another trade in one of his epigrams, that of basket-making-
"Work of lmarmaric uit, a lusket, I
From priated Brituin came; but the Romun city
Now calls the printed Briton's urt their own."
The smaller description of boats, other than galleys, employed by the Romans for transporting their troops and supplies, were the kimlie, callel by the Saxons ceol or cinl, which name has come down to us in the form of keel, and is still applied to a description of barge used in the north of lengland. Thus

## " Weel may the keel row,"

says the song, and on the "couly T'yne," a small barge carrying twenty-one tons four hundredweight is said to earry' a "keel" of coals. The Romans must also have possessed large trausport vessels, for within seventy or eighty years after they had gained a secure footing in this connitry, they received a reinforeement of $\mathbf{5}, 000$ men in seventeen ships, or about 300 men, besides stores, to each vessel.

Bede phaces the final departure of the Romans from Britain in A.b. 409, or just before the siege if Rome by Attila. Our aneestors were now rather worse off than before, for they were left a prey to the Tikings-those bold, hardy, unserupulous Seandinavian seamen of the north, who began to make piratical visits for the sake of pluader to the coasts of Seotland and lengland. They found their way to the Mediterranean, and were known and feared in every port from Ieeland to Constantinople. Their galleys were propellel mainly by means of oars, but they had also small square sails to get heip from a stern wind, and as they often sailed straight across the stormy northern scas, it is proballe that they had made considerable progress in the rigging and landling of their ships. A plank-built boat was diseovered a few years sinee in Denmark, which the antiquaries assign to the fifth century. It is a row-boat, measuring seventyseven feet from stem to stern, and proportionately broad in the middle. The construction shows that there was an abundance of material and skilled labour. It is alike at bow and stern, and the thirty rowlocks are reversible, so as to permit the boat to be navigated with either end forward. The vessel is built of heavy planks overlapping each other from the gunwale to the keel, and cut thiek at the point of juncture, so that they may be mortised into the cross-beams and gunwale, instead of being merely nailed. Very similar loats, light, swift, and strong, are still used in the Shetlands and Norway.

Little is known of the state of England from the departure of the Romans to the eighth century. The doubtful and traditionary landing of Hengist and Horsa with 1,500 men, "in three long ships," is hardly worth discussing nere. The Venerable Bede, who wrote about A.D. 750, speaks of London as "the mart of many nations, resorting to it by sea and land;" and he continues that "King Ethelbert built the chureh of St. Paul in the eity of London, where he and his suecessors should have their episcopal see." But the history of this period generally is in a hopeless fog. Still we know that London was now a thriving port. Cessar, in his "Commentaries:" distinctly states that his reason
for attempting the conques of England was on necount of the vast supplies which his Gaulish enemies received from us, in the way of trude. The exports were principally cattle, hides, corn, dogs, and sluees, the latter an important item. Strabo observes that "our internal parts at that time were on a level with the African slave coasts." "Britons never shall be slaves" could not therefore have been said in those days. London, long prior to the invasion of England by the Romans, was an existing eity, and vessels paid dues at Billingsgate long before the establishment of any custom-house. Pemnant tells us, in his famous work on London, "As carly as 079 , all the reign of Lthelred, a small vessel was to pay al Bilyngyesgute one hulfpenny as a toll; a greater, bearing sails, one penny; a keel or hulk (ecol vel hulchs), fourpence; a ship laden with wood, one piece for toll; and a boat with fish, one hallpenny; or a larger, one penny. We had even now trade with France for its wines, for mention is made of ships from Rouen, who came here and landed them, and freed them from toll-i.e., paid their duties. What they amounted to I cannot learn."

The Danes, having onee a foot-hold, were never thoroughly expelled till the Norman conquest, and as a maritime race excelled all the nations of the north of Europe. They had two prineipal classes of vessels, the Drakers and Holkers, the former named from carrying a dragon on the bows, and bearing the Danish flag of the raven. The holker was at first a small boat, hollowed out of the trunk of a tree, but the word "hulk," evidently derived from it, was used afterwards for vessels of larger dimensions. They had also another vessel called a Suckikur (serpent), strangely so named, for it was rather a short, stumpy kind of boat, not unlike the Dutch galliots of the sisteenth and seventeenth centuries. Their piratical expeditions soon increased, and Wales and the island of Anglesey were frequently pillaged by them, while in Ireland they possessed the ports of Dublin, Waterford, and Cork, a Danish king reigning in the two first cities. But a king was to arise who would change all this-Alfred the Great and Good, the "Father of the British Navy."

On the accession of Alfred the Great to the throne, he found England so over-run by the Danes, that he had, as every sehool-boy knows, to conceal limself with a few faithful followers in the forests. In his retirement he busied himself in devising sehemes for ridding his country of the pirate marauders; and without much deliberation he saw that he must first have a maritime force of his own, and meet the enemies of England on the sea, which they considered their own espeeial element. He set himself busily to study the models of the Danish ships, and, aided by his hardy followers, stirred up a spirit of maritime ambition, whieh had not existed to any great extent before. At the end of four years of unremitting labour in the prosecution of his schemes, he possessed the nucleus of a fleet in six galleys, which were double the length of any possessed by his adversaries, and which carried sixty oars, and possessed ample space for the fighting men on board. With this fleet he put to sea, taking the command in person, and routed a marauding expedition of the Danes, then about to make a descent on the coast. The foree was larger than his own; but he succeeded in capturing one and in driving off the rest. In the course of the next year or two he captured or sunk eighteen of the enemy's galleys, and they found at last that they could not have it all their own way on the sea. About this
which his rincipually erves that "Britons don, long ssels puid nant tells 1, a small sails, one one piece had even men, who

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time the eares of government oceupied necessarily much of his tias. his astute policy was to win over a number of the more friendly Danes to his eause, by giving them grants of land, and obliging them in return to assist in driving off aggressors. He was nearly the first native of England who made any efforts to extend the study of geography. According to the Saxon chronicler, Flurence of Worcester, A.D. 897, he consulted Ohther, a learned Norwegian, and other authorities, from whom he obtained much information respecting the northern seas. Ohther had not only coasted along the shores of Norway,

approach of the danish fleet.
but had rounded the North Cape-it was a feat in those days, gentle reader, but now Cook's tourists do it-and had reached the bay in which Archangel is situated. The ancient geographer gave Alfred vivid descriptions of the gigautic whales, and of the innumerable seals he had observed, not forgetting the terrible mäelstrom, the dangers of which he did not under-rate, and which it was generally believed in those days was caused by a horribly vicious old sea-dragon, who sucked the vessels under. He compared the natives to the Scythians of old, and was rather severe on them, as they brewed no ale, the poor drinking honey-mead in its stead, and the rich a liquor distilled from goats' milk. Alfred not merely sent vessels to the north on voyages of discovery, but opened communication with the Mediterranean, his galleys penetrating to the extreme east of the Levant, whereby he was enabled to carry on a direct trade with India. William of 34

Malmesbury mentions the silks, shawls, incense, spices, and aromatie gums which Alfred received from the Malabar coast in return for presents sent to the Nestorian Christians. Alfred constantly and steadily encouraged the science of navigation, and certainly earned the right of the proud title he has borne since of "Father of the British Navy."

Time passes and we conse to Caunte. On his accession to the throne as the son of a Danish conqueror, he practically put an end to the incursions and attacks of the northern pirates. The influence of his name was so great that he found it unnecessary to maintain more than forty ships at sea, and the number was subsequently reduced. So far from entertaining any fear of revolt from the English, or of any raid on his shores, he made frequent voyages to the Continent as well as to the north. He onee preceeded as far as Rome, where he met the Emperor Conrad II., from whom he obtained for all his subjects, whether merchants or pilgrims, complete exemption from the heavy tolls usually exacted on their former visits to that city. Canute was a cosmopolitan. By his conquest of Norway, not merely did he represent the English whom he had subjugated, and who had become attached to him, but the Danes, their constant and inveterate foes and rivals. He thus united under one sovereignty the principal maritiae nations of the north.

Aud still the writer exerts the privilege conceded to all who wield the pen, of passing quickly over the pages of history. "The stories," says a writer* who made maritime subjects a peculiar study, "as to the number of vessels under the order of the Conqueror on his memorable expt 'ition are very conflicting. Some writers have asserted that the total number amounted to no less than 3,000 , of which six or seven hundred were of a superior order, the remainder consisting of boats temporarily built, and of the most fragile description. Others place the whole flect at not more than 800 vessels of all sizes, and this number is more likely to be nearest the truth. There are now no means of ascertaining their size, but their form may be conjectured from the representation of these vessels on the rolls of the famous Bayeux tapestry. It is said that when William meditated his descent on England he ordered 'large ships' to be constructed for that purpose at his seaports, collecting, wherever these could be found, smaller vessels or boats, to accompany them. But even the largest must have been of little value, as the whole fleet were by his orders burned and destroyed, as soon as he landed with his army, so as to cut off all retreat, and to save the expense of their maintenauce." This would indicate that the sailors had to fight ashore, and may possibly have been intended to spur on his army to victory. Fieeman states, in his "History of the Norman Conquest," that he finds the largest number of ships in the Conqueror's expedition, as compiled from the most reliable authorities, was 3,000 , but some accounts put it as low as 693 . Most of the ships were presents from the prelates or great barons. William FitzOsborn gave 60, the Count de Mortaine, 120 ; the Bishop of Bayeux, 100 ; and the finest of all, that in which William himself embarked, was presented to him by his own duchess, Matilda, and named the Mora. Norman writers of the time state that the vessels were not much to boast of, as they were all collected between the beginning of January and the end of August, 106i\%.

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Lindsay, who thoroughly investigated the subject, says that "The Norman merchant vessels or transports were in length about three times their breadth, and were sometimes propelled by oars, but generally by sails; their galleys appear to have been of two sorts-the larger, ncasionally called galleons, carrying in some instances sixty men, well armed with iron armour, besides their oars. The smaller galleys, which are not specially described, doubtless resembled ships' launches in size, but of 'a form enabling them to be propelled at a considerable rate of speed." Boats covered with leather were even employed on the perilous Channel voyage.

The Conqueror soon added to the security of the country by the estallishment of the Cinque Ports, which, as their title denotes, were at first five, but were afterwards inereased in number so as to inelnde the following seaports:-Dover, Sandwich, Hythe, and Romsey, in Kent; and Rye, Winchelsca, Hastings, and Seaford, in Sussex. On their first establishment they were to provide fifty-two ships, with twenty-four men on each, for fifteen days each year, in case of emergency. In return they had many privileges, a part of which are enjoyed by them to-day. Their íreemen were styled barons; each of the ports returned two members of Parliament. An officer was appointed over them, who was "Lord Warden of the Cinque Ports," and also Constable of Dover Castle.
"For more than a hundred years after the Conquest," says the writer just quoted, "England's ships had rarely ventured beyond the Bay of Biscay on the one hand, and the entrance to the Baltic on the other; and there is no speeial record of long voyages by English ships until the time of the Crusades; which, whatever they might have done for the cause of the Cross, undoubtedly gave the first impetus to the shipping of the country. The number of rich and powerful princes and nobles who embarked their fortunes in these extraordinary expeditions offered the chance of lucrative employment to any nation which could supply the requisite amount of tounage, and English shipowners very naturally made great exertions to reap a share of the gains." One of the first Euglish noblemen who fitted out an expedition to the Holy Land was the Larl of Essex; and twelve years afterwards, Riehard Cceur de Lion, on ascending the throne, made vast levies on the people for the same object, joining Philip II. and other princes for the purpose of raising the Cross above the Crescent. Towards the close of 1189 two fleets had been colleeted, one at Dover, to convey Richard and his followers (among whom were the Archbishop of Canterbury, the Bishop of Salisbury, and the Lord Chief Justice of England) aeross the Channel, and a second and still larger fleet at Dartmouth, composed of numbers of vessels from Aquitaine, Brittany, Normandy, and Poitou, for the conveyance of the great bulk of the Crusaders, to join Richard at Marseilles, whither he had gone overland with the French king and his other allies. The Dartmouth fleet, under the command of Richard de Camville and Robert de Sabloil, set sail about the end of April, 1190. It had a disastrous voyage, but at length reached Lisbon, where the Crusaders behaved so badly, and committed so many outrages, that 700 were locked up. After some delay, they sailed up the Mediterranean, reaching Marseilles, where they had to stop some time to repair their unseawotthy ships, and then followed the king to the Straits of

Messina, where the fleets combined. It was not till seven months later that the fleet got under weigh for the Holy Land. It numbered 100 ships of larger kind, and fourteen smaller vessels called "busses." Each of the former carried, besides her erew of fifteen sailors, forty soldiers, forty horses, and provisions for a twelvemonth. Vinisauf, who makes the fleet much larger, mentions that it proceeded in the following order: -three large ships formed the van; the second line consistel of thirteen vessels, the lines expanding to the seventh, which consisted of sixty vessels, and immediately preceded the king and his ships. On their way they fell in with a very large ship belonging to the Saracens, manned by 1,500 men, and after a desperate engagement took her. Richard ordered that all but 200 of those not killed in the action should be thrown overboard, and thus 1,300 infidels were sacrificed at one blow. Off Etna, Sicily, they experienced a terrific gale, and the crew got "sea-sick and frightened;"

and off the island of Cyprus they were assailed by another storm, in which three ships were lost, and the Vice-Chancellor of England was drowned, his body being washed ashore with the Great Seal of England hanging round his neck. Richard did not return to England till after the eapture of Acre, and the truce with Saladin; he landed at Sandwich, as nearly as may be, four years from the date of his start. As this is neither a history of England, nor of the Crusades, excepting only as either are connected with the sea, we must pass on to a subject of some importance, whieh was the direct result of experience gained at this period.

The foundation of a maritime code, by an ordinance of Richard Cour de Lion, a most important step in the history of merchant shipping, was due to the knowledge acquired by English pilgrims, traders, and seamen at the time of the Crusades. The first code was founded on a similar set of rules then existing in France, known as the Rôles l'Oleron, and some of the articles show how loose had been the conditions of the sailor's life previously. The first article gave a master power to pledge the tackle of a ship, if in want of provisions for the crew, but forbad the sale of the hull without the owner's permission. The captain's position, as lord paramount on board, 'was defined; no one, not even part-owners or super-eargoes, must interfere; he was expected to understand thoroughly the art of navigation. The second artiele declared that if a vessel was held in port through failure of wind or stress of weather, the ship's company should be guided
hat the fleet er kind, and des her crew h. Vinisauf, owing order: vessels, the immediately y large ship engagement action should Off Etna, frightened; "
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CRUSADERS AND SARACENS.
as to the best course to adopt by the opinion of the majority. Two succeeding articles related to wrecks and salvage. The fifth article provided that no sailor in port should leave the vessel without the master's consent; if he did so, and any harm resulted to the ship or cargo, he should be punished with a year's imprisonment, on bread and water. He might also be flogged. If he deserted altogether and was retaken, he might be branded on the face with a red-hot iron, although allowance was made for such $\mathrm{\varepsilon} 3$ ran away from their ships through ill-usage. Sailors could also be compensated for unjust discharge without cause. Succeeding clauses refer to the moral conduct of the sailor, forbidding drunkenness, fighting, \&c. Article 12 provided that if any mariner should give the lie to another at a table where there was wine and bread, he should be fined four deniers; and the master himself offending in the same way should be liable to a double fine. If any sailor should impudently contradict the mate, he might be fined eight deniers; and if the master struck him with his fist or open hand he was required to bear the stroke, but if struck more than once he was entitled to defend himself. If the sailor committed the first assault he was to be fined 100 sous, or else his hand was to be chopped off. The master was required by another rule not to give his crew cause for mutiny, nor call them names, nor wrong them, nor "keep anything from them that is theirs, but to use them well, and pay them honestly what is their due." Another clause provided that the sailor might always have the option of going on shares or waras, and the master was to put the matter fairly before them. The 17th clause reiáted to food. The hardy sailors of Brittany were to have only one meal a day from the kitchen, while the lucky ones of Normandy were to have two. When the snip arrived at a wine country the master was bound to provide the crew with wine. Sailors were elsewhere forbidden to take "royal" fish, such as the sturgeon, salmon, turbot, and sea-barbel, or to take on their own account fish which yield oil. These are a part only of the clauses; many others referring to matters connected wilh rigging, masts, anchorages, pilotage, and other technical points. In bad pilotage the navigator who brought mishap on the ship was liable to lose his head. The general tenor of the first code is excellent, and the rules were laid down with an evident spirit of fairness alike to the owner and sailor.

The subject of "Letters of Marque" might occupy an entire volume, and will recur again in these pages. They were in reality nothing more than privileges granted for purposes of retaliation-legalised piracy. They were first issued by Edward I., and the very first related to an outrage committed by Portuguese on an English subject. A merchant of Bayonne, at the time a port belonging to England, in Gascony, had shipped a cargo of fruit from Malaga, which, on its voyage along the coast of Portugal, was seized and carried into Lisbon by an armed cruiser belonging to that country, then at peace with England. The King of Portugal, who had received one-tenth part of the cargo, declined to restore the ship or lading, whereupon the owner and his heirs received a licence, to remain in force five years, to seize the property of the Portuguese, and especially that of the inhabitauts of Lisbon, to the extent of the loss sustained, the expenses of recovery being allowed. How far the merchant of Bayonne recouped himself, history sayeth not.

A little later a most important mercantile trade came into existence-that in coal. From archæological remains and discoveries it is certain that the Romans excavated coal
during their reign on this island; but it was not till the reign of Edward III. that the first opening of the great Newcastle coal-fields took place, sluhough as early as 1253 there was a lane at the back of Newgate called "Sea-coal Lane." As in many other instances, even in our own days, the value of the discovery seems to have been more appreciated by foreigners than by the people of this country, and for a considerable time after it had been found, the combustion of coal was considered to be so unhealthy that a royal edict forbad its use in the city of London, while the queen resided there, in case it might prove "pernicious to her health." At the same time, while England laid her veto on the use of that very article which has since made her, or helped to make her, the most famous commercial nation of the world, France sent her ships laden with corn to Newcastle, carrying back coal in return, her merchants being the first to supply this new great article of commerce to foreign countries. In the reign of Henry V. the trade had become of such importance that a special Act was passed providing for the admeasurement of ships and barges employed in the coal trade.

King John stoutly claimed for England the sovereignty of the sea-he was not always so firm and decided-and decreed that all foreign ships, the masters of which should refuse to strike their colours to the British flag, should be seized and deemed good and lawful prizes. This monarck is stated to have fitted out no less than 500 shipe, under the Earl of Salisbury, in the year 1213, against a fleet of ships three times that number, organised by Philip of France, for the invasion of England. After a stubborn battle, the English were successful, taking 300 sail, and driving more than 100 ashore, Philip being under the necessity of destroying the remainder to prevent them falling into the hands of their enemies. Some notion may be gained of the kinds of ships of which these fleets were composed, by the account that is narrated of an action fought in the following reign with the French, who, with eighty "stout ships," threatened the coast of Kent. This fleet being discovered by Hubert de Burgh, governor of Dover Castle, he put to sea with half the number of English vessels, and having got to the windward of the enemy, and run down many of the smaller ships, he closed with the rest, and threw on board them a quantity of quick-lime-a novel expedient in warfare -which so blinded the crews that their vessels were either captured or sunk. The dominion of the sea was bravely maintained by our Edwards and Henrys in many glorious seafights. The temper of the times is strongly exemplified by the following circumstance. In the reign of Edward I. an English sailor was killed in a Norman port, in consequence of which war was declared by England against France, and the two nations agreed to decide the dispute on a certain day, with the whole of their respective naval forces. The spot of battle was to be the middle of the Channel, anarked out by anchoring there an empty ship. This strange duel of nations actually took place, for the two fleets met on April 14th, 1293, when the English obtained the victory, and carried off in triumph 250 vessels from the enemy. In an action off the harbour of Slays with the French fleet, Edward III. is said to have slain 30,000 of the enemy, and to have taken 200 large ships, "in one of which only, there were 400 dead bodies." 'The same monarch, at the siege of Calais, is stated to have blockaded that port with 730 sail, having on board 14,956 mariners. The size of the vessels employed must have been rapidly enlarging.

dubl betwben french and english ships.

Chaucer gives us a graphic description of the British sailor of the fourteenth century in his Prologue to the "Canterbury Tales." It runs as follows :-
"A schipman was ther, wonyng fer by Weste: For ought I woot, he was of Derteinouthe, He rood upon a rouncy, as he couthe, In a goun of faldying to the kne. A dagger hangyng on a laas hadde he Aboute his nekke under his arm adoun. The hoote somer had maad his hew al broun; And certainly he was a good felawe.
Ful many a draught of wyn had he drawe From Burdeux-ward, whil that the chapman sleep. Of nyee ecnscience took he no keep. If that he foughte, and hadde the aeigher hand, By wiater ho sent hem hoom to every land. But of his craft to rikne wel the tydes, His stremes and his dangers him bisides, His herbergh and his mane his lode menage, Ther was non such from Hulle to Cartage. Hardy he was, and wys to undertake; With many a tempest hadde his berd ben schake.

> He knew well alle the havens, as thei wero, From Scotland to the Cape of Fynestere, And every eryk in Bretayne and in Spayne, His barge $y$-eleped was the Nagdelayne."

Ir the reign of Henry V., the most glorious period up to that time of the British Navy, the French lost nearly all their navy to us at various times; among other victories, Henry Page, Admiral of the Cinque Ports, captured 120 merchantmen forming the Rochelle fleet, and all riehly laden. Towards the close of this reign, aloout the year 1416, England formally claimed the dominion of the sea, and a Parliamentary document recorded the fact. "It was never absolute," says Sir Walter Raleigh, "until the time of Henry VIII." That great voyager and statesman adds that, "Whoever commands the sea, commands the trade of the world; whosoever commands the trade, commands the riches of the world, and consequently the world itself."

A curious poem is included in the first volume of Hakluyt's famous collection of voyages, bearing reference to the navy of Henry. It is entitled, "The English Policie, exhorting all England to keep the Sea," \&c. It was written apparently about the year 1435. It is a long poem, and the following is an extract merely :-

> "And if I sheuld conclude all by the King, Henrie the Fift, what was his purposing, Whan at Hampton he made the great dromons, Which passed other great ships of the Commons; The Trinitie, the Grace de Dieu, the Holy Ghost, And other moe, which as nowe be lost. What hope ye was the king's great intente Of thoo shippes, nnd what in mind be meant: It is not ellis, but that he cast to bec Lord round about environ of the see. And if he had to this time lived here, He had been Prinee named witheuten pere: His great ships should have been put in preefes, Unto the endo that he ment of in ehiefes. For doubt it not but that he would have bee Lord and Master about the rand see: And kept it sure, to stoppe our ennemies henee, And wonne us good, and wisely brought it thence, That our passage should be without danger, And his lieense on see to meve and sterre."

When the king had determined, in 1415, to land an army in France, he hired ships from Holland, Zeeland, and Friesland, his own naval means not being sufficient for the transport; among his other preparations, "requisite for so high an enterprise," boats covered with leather, for the passage of rivers, are mentioned. His fleet consisted of 1,000 sail, and it left Southampton on Sunday, the 11th of August, of the above-mentioned year. When the ships had passed the Isle of Wight, "swans were seen swimming in the midst of the fleet, which was hailed as a happy auspice." Henry anchored on the following Tuesday at the mouth of the Seine, about three miles from Harfleur. A council
of the captains was summoned, and an order issued that no ont, under pain of death, should land before the king, but that all should be in readiness to go ashore the next morning. This was done, and the bulk of the army, stated to have comprised $\% 1,000$ archers, and 6,000 men of arms, was landed in small vessels, boats, and skiffs, taking up a position on the Lill nearest to Harfleur. The moment Henry landed he fell. on his knees and implored the Divine aid and proteetion to lead him on to victory, then conferriii ${ }_{e}$ : knighthood on many of his followers. At the entrance of the port a ehain hat been stretched between two large, well-armed towers, while it was farther protected by stakes and trunks of trees to prevent the vessels from approaehing. During the siege, wiieh lasted thirty-six days, the fleet blockaded the port, and at its conelusion Henry, flushed with a vietory, which is said to have cost the English oniy 1,600 and the enemy 10,000 lives, determined to mareh his army througn France to Calais. It wes on this mareh that he won the glorious battle of Agineourt. On the l6th of November he embarked for Dover, reaching that port the same day. Here a magnificent ovation awaited him. The burgesses rushed into the sea and bore hin ashore on their shoulders; the whole population was intoxicated with delight. One chronieler states that


REVERSE OF THE BEAL OF SANDWICH. the passage across had been extremely beisterous, and that the French noblemen suffered so mueh from sea-sickness that they considered the trip worse than the very battles themselves in which they had been taken prisoners! When Henry arrived near London, a great concourse of people met him at Blackheath, and he, "as one remembering from whom all victories are sent," would not allow his helmet to be carried before him, whereon the people might have seen the blows and dents that he had reeeived; "neither would he suffer any ditties to be made and sung by minstrels of his glorious vietory, for that he would have the praise and thanks altogether given to God."

Next year the Freneh attempted to retake Harfleur. 'Ienry sent a fleet of 400 sail to the reseue, under his brother John, Duke of Bedford, the upshot being that almost the whole French fleet, to the number of 500 ships, hulks, carracks, and small vessels were taken or sunk. The English vessels remained beealmed in the roadstead for three weeks afterwards. Southey, who has collated all the best authorities in his admirable naval work,* says:-"The bodies which had been thrown overboard in the action, or sunk in the enemies' ships, rose and floated about them in great numbers; and the English may have deemed it a relief from the contemplation of that ghastly sight, to be kept upon the alert by some galleys, which taking advantase of the calm, ventured as near them as they dare by day and night, and endeavoured to burn the ships with wildfire." He adds that the first mention of wildfire he had found is by Hardyng, one of the earliest of our poets, in the following passage referring to this event:-

> " With oars many about us did they wind, With wildare oft assayled us day and night, To brenne our ships in that they eould or might."

[^84]of death, e the next sed $\% 1,000$ ffs, taking fell. on his conferrins: hat been by stakes ege, wiilich ry, flushed my 10,000 his march embarked aited him. the whole states that 1 that the that they mselves in rived near heath, and nt," would the people ; " neither $r$ minstrels praise and f 400 sail hat almest all vesse's for three admirable action, or and the ght, to be entured as hips with ng , one of

Next year we read f Henry preparing to again attack France. The enemy had increased their naval force by liiring a number of Genoese and other Italian vessels. The king sent a preliminary force against them under his kinsman, the Earl of Huntingdon, who, near the mouth of the Seine, succeeded in sinking three and capturing three of the great Genoese carracks, taking the Admiral Jacques, the Bastard of Bourbon, "and as mueh moncy as would have been half a ycar's pay for the whole flect." Theso prizes were brought to Southampton, "from whence the king shortly set forth with a flect of 1,500 ships, the sails of his own vessel being of purple silk, richly embroidered with gold." The remainder of Henry's brief reign-for he died the same year-is but the history of a series of successes over his enemies.

It must never be forgotten that the navies of our early history were not permanently organ ax , but drawn from all sources. A noble, a city or port, voluntarily or otherwise, contributed according to the exigencies of the occasion. As we slall see, it is to Henry VIII. that we owe the establishment of a Royal Navy as a permanent institution. In 1546 King Henry's vessels are classified according to their "quality," thus: "ships," "galleases," "pynaces," "roe-barges." A list bearing date in 1612 exhibits the classes as follows :-" "Shipps royal," measuring downwards from 1,200 to $800^{\circ}$ tons; " middling shipps," from 800 to 600 tons; "small shipps," 350 tons; and pinnaces, from 200 to 30 tons. According to the old definition, a ship was defined to be a "large hollow building, made to pass over the seas with sails," without reference to size or quality. Before the days of the Great $H a r r y$, few, if any, English ships had more than one mast or one sail; that ship had three masts, and the Henri Grace de Dieu, which supplanted her, four. The galleas was probably a long, low, and sharp-built vessel, propelled by oars as well as by sails; the latter probably not fixed to the mast or any standing yard, but hoisted from the deck when required to be used, as in the lugger or felncea of modern days. The pinnace was a smaller description of galleas, while the row-barge is sufficiently explained by its title.

The history of the period following the reign of Henry $V$. has much to do with shipping interests of all kinds. The constant wars and turbulent times gave great opportunity for piracy in the Channel and on the high seas. Thus we read of Hannequin Leeuw, an outlaw from Ghent, who had so prospered in piratical enterprises that he got tegether a squadron of eight or ten vessels, well armed and stored. He not only infested the coast of Flanders, and Holland, and the English Channel, but scoured the coasts of Spain as far as Gibraltar, making impartial war on any or all nations, and styling himself the "Friend of God, and the enemy of all mankind." This pirate escaped the vengeance of man, but at length was punished by the elements: the greater part of his people perished in a storm, and Hannequin Leeuw disappeared from the scene. Shortly afterwards we find the Hollanders and Zeelanders uniting their forces against the Easterling pirates, then infesting the seas, and taking twenty of their ships. "This action," says Southey, "was more important in its consequences than in itself; it made the two provinces sensible, for the first time, of their maritime strength, and gave a new impulse to that spirit of maritime adventure which they had recently begun to manifest." Previously a voyage to Spain had been regarded as so perilous, that " whoever undertook it settled his
worldly and his sniritual affairs as if preparing for death, before he set forth," while now they opened up a brisk frade with that country and Portugal. Till now they had been compelled to bear the insults and injuries of the Easterlings without combined attempt at defence; now they retaliated, captured one of their admirals on the const of Norway, and hoisted a besom at the mast-head in $\cdots$ that they had swept the seas clean from their pirato enemies.

And now, in turn, some of them became pirates themselves, more particularly Hendrick ven Borselen, Lord of Veere, who assembled all the outlaws he could gather, and committed such depredations, that he was enabled to add greatly to his possessions in Walcheren, by the purchase of confiseated estates. He received others as grants from bis own duke, who feared him, and thought it prudent at any cost to retain, at least in nominal obedience, one who might render himself so obnoxious an enemy. "This did not prevent the admiral-for he held that rank under the duke-from infesting tho coast of Flanders, carrying off cattle from Cadsant, and selling them publicly in Zeeland. His excuse was that the terrible character of his men compelled him to act as he did; and the duke admitted the exculpation, being fain to overlook outrages which he could neither prevent nor punish." A statute of the reign of Heury VI. sets forth the robberies committed upon the poor merchants of this realm, not merely on the sea, but even in the rivers and ports of Britain, and how not merely they lost their goods, but their persons also were taken and imprisoned. Nor was this all, for "the king's poor subjeets dwelling nigh the sea-coasts were taken out of their own houses, with their chattels and children, and carried by the enemies where it pleased them." In consequence, the Commons begged that an armament might be provided and maintained on the sea, which was conceded, and for a time piracy on English subjects was partially quashed.

Meantime, we had pirates of our own. Warwick, the king-maker, was unserupulous in all pcints, and cared nothing for the lawfulness of the captures which he could make on the high seas. For example, when he left England for the purpose of securing Calais (then belonging to England) and the fleet for the House of York, he having fourteen well-appointed vessels, fell in with a fleet of Spaniards and Genoese. "There was a very sore and long continued battle fought betwixt them," lasting almost two days. The English lost a hundred men; one account speaks of the Spanish and Genoese loss at 1,000 men killed, and another of six-and-twenty vessels sunk or put to flight. It is certain that three of the largest vessels were taken into Calais, laden with wine, oil, iron, wax, cloth of gold, and other riches, in all amounting in value to no less than $£ 10,000$. The earl was a favourite with the sailors, probally for the license he gave them; when the Duke of Somerset was appointed by the king's party to the command of Calais, from which he was effectually shut out by Warwick, tiny carried off some of his ships and deserted with them to the latter. Not long after, when reiuforcements were lying at Sandwich waiting to cross the Channel to Somerset's aid, March and Warwick borrowed $£ 18,000$ from merchants, and dispatched John Dynham on a piratical expedition. He landed at Sandwich, surprised the town, took Lord Rivers and his son in their beds, robbed houses, took the principal ships of the king's navy, and carried them off, well furnished as they were with ordnance and arillery. For a time Warwick carried all before him, but not a few
, while now ay hal been ned attempt of Norway, clean from
rly Hendrick d committed alcheren, by n duke, who 1. obedience, prevent the of Flanders, excuse was nd the duke ther prevent 3 committed e rivers and is also were ng nigh the hildren, and nons begged onceded, and
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of his actions were most unmitigated specimens of piracy, on nations little concerned with the Houses of York and Lancaster, their quarrels or wars.

But as this is not intended to be even a sketch of the history of England, let us pass to the commencement of the reign of Henry VII,, when the "great minishment and decay of the navy, and the idleness of the mariners," were represented to his first Parliament, and led to certain enactments in regard to the use of foreign bottoms. The wines of Southern France were forbidden to be imported bither in any but English, Irish, or Welsh ships,

sir andrew wood's victory.
manned by English, Jrish, or Welsh sailors. This Act was repeated in the fourth year of Henry's reign, and made to include other articles, while it was then forbidden to freight an alien ship from or to England with "any manner of merchandise," if sufficient freight were to be had in English vessels, on pain of forfeiture, one-half to the king, the other to the seizers. "Henry," says Lord Bacon, " being a king that loved wealth, and treasure, he could not endure to have trade sick, nor any obstruction to continue in the gate-vein which disperseth that blood." How well he loved riches is proved by the fact that when a speedy and not altogether creditable peace was cstablished between England and France, and the indemnity had been paid by the latter, the money went into the king's private coffers; those who had impoverished themselves in his service, or had contributed to the general outfit by the forced "benevolence," were left out in the cold. From Calais Henry
wrote letters to the Lord Mnyor and aldermen (" which was a courtesy," says Lord Bneon, "that he sometimes used), half bragging what grent sums he had obtained for the penee, as knowing well that it was ever good news in London that the king's coffers were full; letter news it would have been if their benevolence had been but a loan."

Seotch historimus tell us that Sir Andrew Wood, of Largo, Seotland, had with his two vessels, the Plower and Cellow Cirrel, eaptured five chosen vessels of the royal navy, which had infested the Firth of Forth, and had tuken many prizes from the Seoteh previously, during this reign. Henry VII, was greatly mortified by this defeat, and offerel to put any means at the disposal of the oflicer who would undertake this serviee, and great rewarls if Wood were brought to him alive or dead. All hesitated, such was the renown of Wood, and his strength in men and artillery, and maritime and military skill. At length, Sir Stephen Bull, a man of distinguished prowess, offered himself, and three ships were placed under his command, with which he sailed for the Forth, and anehored behind the Isle of May, waiting Wood's return from a foreign voyage. Some fishermen were eaptured and detained, in order that they should point out Sir Andrew's ships when they arrived. "It was early in the morning when the aetion began; the Scots, by their skilful mancourring, obtained the weather-gage, and the battle continued in sight of innumerable spectators who thronged the const, till darkness suspended it. It was renewed at day-break; the ships grappled; and both parties were so intent upon the struggle, that the tide carried them into the mouth of the Tay, into such shoal water that the English, secing no means of extrieating themselves, surrendered. Sir Audrew brought his prizes to Dundee; the wounded :wre carefully attended there; and James, with royal magranimity is said to have sent both prisoners and ships to Henry, praising the courage which they had displayed, and saying that the contest was for honour, not for booty."

Few naval ineidents oceurred under the reign of Henry VII., but it belongs, nevertheless, to the most important age of maritime discovery. Henry had really assented to the propositions of Columbus after Portugal had refused them; had not the latter's brother, Bartholomew, been captured by pirates on his way to England, and detained as a slave at the oar, the Spaniards would not have had the honour of discovering the New World. This, and the grand discoveries of Cabot (directly encouraged by Henry), who reached Newfoundland and Florida; the varions expeditions down the African coast institutel by Dom John; the diseovery of the Cape and new route to India by Diaz and Vaseo de Gama; the discovery of the Pacific by Balbon, and Cape Horn and the Straits by Magellan, will be detailed in another seetion of this work. They belong to this and immediately succeeding reigns, and mark the grandest epoch in the history of geographical diseovery.
"The use of fire-arms," says Southey, "without which the conquests of the Spaniards in the New World must have been impossible, changed the character of naval war sooner than it did the system of naval tacties, thongh they were employed earlier by land than by sea." It is doubtful when cannon was first employed at sea; one authority* says that it was by the Venetians against the Genocse, before 1330. Their use necessitated

[^85] the peace, were full; th his two avy, which previously, red to put and great he renown skill. At three ships red behind rmen were when they , by their ght of inas renewed uggle, that te English, is prizes to agnanimity which they ted to the r's brother, a slave at Vew World. ho reached stituted by
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Spaniards war sooner land than ority* says necessitated
very material alterations in the structure of war-ships. The first port-holes are believel to have been contrived by a ship-builder at Brest, named Descharges, and their introluetion took place in 1490. They were "circular holes, eut throngh the sides of the vessel, and so small as seareely to admit of the gans being traversed in the smallest degree, or fired otherwise than straightforward." Ilitherto there had been no distinctions between the vessels used in commereo and in the king's service; the former being constantly employed for the latter; but now we find the addition of another tier, and a general enlargement of the war-vessels. Still, when any emergeney required, merchant vessels, not merely English, but Genoese, Venetian, and from the Hanse Towns, were constantly hired for warfare. So during peace the king's ships were sometimes employed in trade, or freighted to merchants. Henry was very desirous of inereasing and maintaining commercial relations with other countries. In the commission to one of his ambassadors, he says, "The earth being the common mother of all mankind, what ean be more pleasant or more humane than to communieate a portion of all her productions to all her children ly commerce?" Many speeial commercial treaties were made by him, and one concluded with the Arclduke Philip after a dispute with him, which had put a stop to the trade with the Low Countries, was called the great commereial treaty (intercursus magnus). "It was framed with the greatest eare to render the intereourse between the two countries permanent, and profitable to both."

The first incident in the naval history of the next reign, that of Henry VIII., grew out of an event which had oecurred long before. A Portuguese squadron had, in the year 1.176, seized a Seottish ship, laden with a rieh cargo, and commanded by John Barton. Letters of marque were granted him, which he had not, apparently, used to any great advantage, for they were renewed to his three sons thirty years afterwarls. The Bartons were not content with repaying themselves for their loss, but found the Portuguese captures so profitable that they became confirmed pirates, "and when they felt their own strength, they seem, with little scruple, to have considered ships of any nation as their fair prize." Complaints were lodged beforo Henry, but were almost ignored, "till the Earl of Surrey, then Treasurer and Marshal of England, declared at the couneil board, that while he had an estate that could furnish out a ship, or a son that was capable of commanding one, the narrow seas should not be so infested." Two ships, commanded ly his two sons, Sir Thomas and Sir Edward Howard, were made ready, with the king's knowledge and consent. The two brothers put to sea, but were separated by stress of weather; the same happened to the two pirate ships-the Lion, under Sir Andrew Barton's own command, and the Jenny Pervin, or Bark of Scotland. The strength of one of them is thus deseribed in an old ballad, by a merchant, one of Sir Andrew's vietims, who is supposed to relate his tale to Sir Thomas Howard:-
> " He is brass within, and steel without, With beams on his top-eastlo strong; And thirty pieces of ordnance He carries on each sido along; And he hath a pinnace dearly dight, St. Andrew's Cross it is his guide ;

His pinnace beareth nine score men,
And fifteen cannons on each side.
Were yo twenty ships, and he but one,
I swear by Kirk, and bower and hall,
He would overcome them every one
If once his beams they do down fall."

oLd deptrord dockiard.

But it wa: met so to be. Sir Thomas Howard, as he lay in the Downs, descried the former making for Scotland, and immediately gave chase, "and there was a sore battle. The Englishmen were fierce, and the Scots defended themselves manfully, and ever Andrew blew his whistle to encourage his men. Yet, for all that, Lord Howard and his men, by clean force, entered the main deck. There the English entered on all sides, and the Scots fought sore on the latches; but, in conclusion, Andrew was taken, being so sore wounded that he died there, and then the remnant of the Scots were taken, with their ship." Meantime Sir Edward Howard had encountered the other piratical ship, and though the Scots defended themselves like "hardy and well-stomached men," suceeeded in boarding it. The prizes were taken to Blackwall, and the prisoners, 150 in number, being all left alive, "so bloody had the action been," were tried at Whitehall, before the

Bishop of Winehester and a council. The bishop reminded them that "though there was peace between England and Scotland, they, contrary to that, as thieves and pirates, had robbed the king's subjects within his streams, wherefore they had deserved to die by the law, and to be hanged at the low-water mark. Then, said the Scots, 'We acknowledge our offence, and ask mercy, and not the law,' and a priest, who was also a prisoner, said, 'My lord, we appeal from the king's justice to his merey.' Then the bishop asked if he were authorised by them to say thus, and they all eried, 'Yea, yea!' 'Well, then,' said the bishop, 'you shall find the king's merey above his justice; for, where you were dead by the law, yet by his mercy he will revive you. You shall depart out of this realm within twenty days, on pain of death if ye be found after the twentieth day; and pray for the king." James subsequently required restitution from Henry, who answered "with brotherly salutation" that "it became not a prince to charge his confederate with breach of peace for doing justice upon a pirate and thief." But there is no doubt that it was regarded as a national affair in Scotland, and helped to precipitate the war which speedily ensued.

Some of the edicts of the period seem strange enough to modern ears. The Scotch Parliament had passed an Act forbidding any ship freighted with staple goods to put to sea during the three winter months, under a penalty of five pounds. In 1493, a generation after the Act was passed, another provided that all burghs and towns should provide ships and busses, the least to be of twenty tons, fitted according to the means of the said places, provided with mariners, nets, and all necessary gear for taking "great fish and small." The officers in every burgh were to make all the "stark idle men" within their bounds go on board these vessels, and serve them there for their wages, or, in case of refusal, banish them from their burgh. This was done with the idea of training a maritime force, but seems to have produced little effect. James IV. built a ship, however, which was, according to Scottish writers, larger and more powerfully armed than any then built in England or France. She was called the Great Michael, and "was of so great stature that she wasted all the oak forests of Fife, Falkland only excepted." Southey reminds us that the Scots, like the Irish of the time, were constantly in feud with each other, and consequently destroyed their forests, to prevent the danger of ambuscades, and also to cut off the means of sscape. Timber for this ship was brought from Norway, and though all the shipwrights in Scotland and many others from foreign countries were busily employed upon her, she took a year and a day to complete. The vessel is described as twelve seore feet in length, and thirty-six in breadth of beam, within the walls, which were ten feet each thick, so that no cannon-ball could go through them. She had 300 mariners on board, six score gumners, and 1,000 men-of-war, including offieers, "captains, skippers, and quarter-masters." Sir Andrew Wood and Robert Barton were two of the chief officers. "This great ship cumbered Scotland to get her to sea. From the time that she was afloat, and her masts and sails complete, with anchors offering thereto, she was counted to the king to be thirty thousand pounds expense, by her artillery, which was very costly." The Great Michael never did enough to have a single exploit recorded, nor was she unfortunate enough to meet a tragic ending.

In 1511 war was deelared against France, and Henry caused many new ships to be
made, repairing and rigging the old. After an action on the coast of Brittany, where both claimed the advantage, and where two of the largest vessels-the Cordelier, with 900 Frenchmen, and the Regent, with 700 Englishmen, were burned-nearly all on board perishing, Henry advised "a great ship to be made, such as was never before seen in England, and which was named the Henri Grace de Dieu, or popularly the Gieat Marry.* There are many ancient representations of this vessel, which is said to have cost $£ 11,000$, and to have taken 400 men four whole days to work from Erith, where she was built, to Barking Creek. "The masts," says a well-known authority, "were five in number," but he goes on clearly to show that the fifth was simply the bowsprit; they were in one piece, as had been the usual mode in all previous times, although soon to be altered by the introduction of several joints or top-masts, which could be lowered in time of need. The rigging was simple to the last degree, but there was a considerable amount of ornamentation on the hull, and small flags were disposed almost at random on different parts of the deck and gunwaic, and one at the head of each mast. The standard of England was hoisted on the principal mast; enormous pendants, or streamers, were added, though ornaments which must have been often inconvenient. The Great flarry was of 1,000 tons, and in-so far as the writer can discover-the only skirmish she was concerned in the Channel, for it could not be dignified by the name of an engagement, carried 700 men. She was burned at Woolwich, at the opening of Mary's reign, through the carelessness of the sailors.

In the reign of Hen'y VIII. a navy office was first formed, and regular arsenals were established at Portsmouth, Woolwich, and Deptford. The change in maritime warfare consequent on the use of gunpowder rendered ships of a new construction necessary, and more was done for the improvement of the navy in this reign than in any former one. Italian shipwrights, then the most expert, were engaged, and at the conclusion of Henry's reign the Royal Navy consisted of seventy-one vessels, thirty of which were ships of respectable burden, aggregating 10,550 tons. Five years later, it had dwindled to less than one-half. Six years after Henry's death, England lost Calais, a fort and town which had cost Edward III., in the height of his power, an obstinate siege of eleven months. But on Elizabeth's accession to the throne, the star of England was once more in the ascendant.

Elizabeth commenced her reign by providing in all points for war, that she " might the more quietly enjoy peace." Arms and weapons werc imported from Germany, at considerable cost, but in such quantities that the land had never before been so amply stored with "all kinds of convenient armour and weapons." And she, also, was the first to cause the manufacture of gunpowder in England, that she " might not both pray and pay for it too to her neighbours." She allowed the free exportation of herrings and all other sea-fish in English bottoms, and a partial exemption from impressment was granted to all fishermen; while to encourage their work, Wednesday and Saturday were made "fish-days;" this, it was stated, "was meant politicly, not for any superstition to be maintained in the choice of meats." The navy became her great care, so much that

[^86]"foreigners named her the restorer of the glory of shipping, and the Queen of the North Sea." She raised the pay of sailors. "The wealthier inhabitants of the sea-coast," says Camden, "in imitation of their princess, built ships of war, striving who should exceed, insomuch that the Queen's Navy, joined with her subjects' shipping, was, in short time, so puissant that it was able to bring forth 20,000 fighting men for sea service."

The greatest and most glorious event of her reigu was, without cavil, the defeat of the Spanish Armada, at one time deemed and called "The Invincible." With the political complications which preceded the invasion, we have nought to do: it was largely a religious war, inasmuch as Popish machinations were at the bottom of all. When the contest became inevitable, the Spanish Government threw off dissimulation, and showed " a disdainful disregard of secrecy as to its intentions, or rather a proud manifestation of them, which," says Southey, "if they had been successful, might have been called magnanimons." Philip had determined on putting forth his might, and accounts which were ostentatiously published in advance termed it "The most fortunate and invincible Armada." The fleet consisted of 130 ships and twenty caravels, having on board nearly 20,000 soldiers, 8,450 marines, 2,088 galley-slaves, with 2,630 great pieces of brass artillery. The names of all the saints appeared in the nomenclature of the ships, "while," says Southey, "holier appellations, which ought never to be thus applied, were strangely associated with the Great Griffin and the Sea Dog, the Cat and the White Falcon." Every noble house in Spain was represented, and there were 180 friars and Jesuits, with Cardinal Allen at their head, a prelate who had not long before published at Antwerp a gross libel on Elizabeth, calling her "heretic, rebel, and usurper, an incestuons bastard, the bane of Christendom, and firebrand of all mischief." These priests were to bring England back to the true Church the moment they landed. The galleons being above sixty in number were, " exceeding great, fair, and strong, and built high above the water, like castles, easy to be fought withal, but not so easy to board as the English and the Netherland ships; their upper decks were musket-proof, and beneath they were four or five feet thick, so that no bullet could pass them. Their masts were bound about with oakum, or pieces of fazeled ropes, and armed against all shot. The galleases were goodly great vessels, furnished with chambers, chapels, towers, pulpits, and such-like; they rowed like galleys, with exeeeding great oars, each having 300 slaves, and were able to do much harm with their great ordnance." Most severe discipline was to be preserved; blasphemy and oaths were to be punished rigidly; gaming, as provocative of these, and quarrelling, were forbidden; no one might wear a dagger; religious exercises, including the use of a special litany, in which all archangels, angels, and saints, were invoked to assist with their prayers against the English heretics and enemies of the faith, were eaijoined. "No man," says Southey, "ever set forth upon a bad cause with better will, nor under a stronger delusion of perverted faith." The gunners were instructed to have half butts filled with water and vinegar, wet elothes, old sails, \&c., ready to extinguish fire, and what seems strange now-a-days, in addition. to the regular artillery, every ship was to carry two boats'-loads of large stones, to throw on the enemy's decks, forecastles, \&c., during an encounter.

Meantime Elizabeth and her ministers were fully aware of the danger, and the appuls made to the Lords, and through the lord-lieutenants of counties were answered
nobly. The first to present himself before the queen was a Roman Catholic peer, the Viscount Montague, who brought 200 horsemen led by his own sons, and professed the resolution that "though he was very sickly, and in age, to live and die in defence of the queen and of his country, against all invaders, whether it were Pope, king, or potentate whatsoever." The city of London, when 5,000 men and fifteen ships were required, prayed the queen to accept twice the number. "In a very short time all her whole realm, and every corner, were furnished with armed men, on horseback and on foot; and those continually trained, exercised, and put into bands in warlike manner, as in no age ever was before in this realm. There was no sparing of money to provide horse, armour, weapons, powder, and all necessaries." Thousands volunteered their services personally without wages; others money for armour and weapons, and wages for soldicis. The country was never in better condition for defence.

Some urged the queen to place no reliance on maritime defence, but to receive the enemy only on shore. Elizabeth thought otherwise, and determined that the enemy should reap no more advantage on the sea than on land. She gave the command of the whole fleet to Charles Lord Howard of Effingham; Drake being vice-admiral, and Hawkins and Frobisher-all grand names in naval history-being in the western division. Lord Henry Seymour was to lie off the coast of Flanders with forty ships, Dutch and English, and prevent the Prince of Parma from forming a junetion with the Armada. The whole number of ships collected for the defence of the country was 191 , and the number of seamen 17,4.72. There was one ship in the flcet (the Triumph) of 1,100 tons, one of 1,000 , one of 900 , and two of 800 tons cach, but the larger part of the vessels were very small, and the aggregate tonnage amounted to only about half that of the Armada. For the land defence over 100,000 men were called ont, regimented, and armed, but only half of them were trained. This was exclusive of the Border and Yorkshire forces.

The Armada left the Tagus in the latter end of May, 1588, for Corunna, there to embark the remainder of the forces and stores. On the 30th of the same month, the Lord Admiral and Sir Francis Drake sailed from Plymouth. A serious storm was encountered, which dismasted some and dispersed others of the enemy's fleet, and occasioned the loss of four Portuguese galleys. One David Gwynne, a Welshman, who had been a galley-slave for eleven years, took the opportunity this storm afforded, and regained his liberty. He made himself master of one galley, captured a second, and was joined by a third, in which the wretched slaves were encouraged to rise by his example, and successfully carried the three into a French port. After this disastrous commencement, the Armada put back to Corunna, and was pursued thither by Effingham; but as he approached the coast of Spain, the wind changed, and as he was afraid the enemy might effeet the passage to the Channel unperceived, he returned to its entrance, whence the ships were withdrawn, some to the coast of Ireland, and the larger part to Plymouth, where the men were allowed to come ashore, and the officers made merry with revels, dancing, and bowling. The enemy was so long in making an appearance, that even Elizabeth was persuaded the invasion would not occur that year; and with this idea, Secretary Walsingham wrote to the admiral to send back four of his largest ships. "Happily for England, and most honourably for himself, the Lord Effingham, though he had relaxed his vigilance,
lic peer, the rofessed the a defence of or potentate re required, 1 her whole on foot; and $s$ in no age orse, armour, s personally diuss. The
) receive the nemy should of the whole nd Hawkins sion. Lord and English, The whole number of ne of 1,000 , e very small, For the land aalf of them
ma, there to month, the storm was d occasioned had been a regained his d by a third, successfully the Armada proached the $t$ effect the the ships 1, where the dancing, and izabeth was ry Walsingor England, is vigilance,
saw how perilous it was to act as if all were safe. He humbly entreated that nothing might be lightly credited in so weighty a matter, and that he might retain these ships, thongh it should be at his own cost. This was no empty show of disinterested zeal; for if the services of those ships had not been called for, there can be little doubt, that in the

the finst shot against the armada.
rigid parsimony of Elizabeth's government, he would have been called upon to pay the costs."

The Armada, now completely refitted, sailed from Corunna on July 12th, and when off the Lizard were sighted by a pirate, one Thomas Fleming, who hastened to Plymouth with the news, and not merely obtained pardon for his offences, but was awarded a pension for life. At that time the wind "blew stiflly into the harbour," but all hands were got on board, and the ships were warped out, the Lord Admiral encouraging the men, and hauling
at the ropes himself. By the following day thirty of the smaller vessels were out, and next day the Armada was descried "with lofty turrets like castles, in front like a half-moon; the wings thereof speading out about the length of seven miles, sailing very slowly though with full sails; the wind," says Camden, "being as it were weary with wafting them, and the ocean groaning under their weight." The Spaniards gave up the idea of attacking. Piymouth, and the English let them pass, that they might chase them in the rear. Next day the Lord Admiral sent the Defiance pinnace forward, and opened the attack by discharging her ordnance, and later his own ship, the Ark Royal, "thundered shick and furiously" into the Spanish vice-admiral's ship, and soon after, Drake, Hawkins, and Frobisher, gave the Admiral Recalde a very thorough peppering. That officer's ship was rendered nearly unserviceable, and he was obliged to crowd on sail to catch up with the others, who showed little disposition for fighting. After a smart action in which he had injured the enemy much, and suffered little hurt himself, Effingbam gave over, because forty of his ships had not yet come up from Plymouth. During the night the Spaniards lost one of their ships, which was set on fire, it was believed, by a Flemish gunner, whose wife and self had been ill-treated by the officer of the troops on board. The fire was quenched, after all her upper works had been consumed; but when the Spaniards left the hulk, they abandoned fifty of their countrymen, "miserably hurt." This night was remarkable for a series of disasters and contretemps. A galleon, under the command of one Valdez, ran foul of another ship, broke her foremast, and was left behind. Effingham, supposing that the men had been taken out, without tarrying to take possession of the prize, passed on with two other vessels, that he might not lose sight of the enemy. "He thought that he was following Drake's ship, which ought to have carried the lanthorn that night; it proved to be a Spanish light, and in the morning he found himself in the midst of the enemy's fleet ; " but he managed to get away unobserved, or at all events unpursued. Drake, meantime, was mistakably following in the dark and stormy night a phantom enemy, in the shape of five Easterling vessels. Meantime, the English fleet not seeing the expected light on Drake's ship, lay-to during the night. Drake, next morning, had the good fortune to fall in with Valdez, who, after a brief parley, surrendered, and the prize was sent into Plymouth. Drake and his men divided 55,000 golden ducats. among them, as part of the spoil on board. The hulk of the galleon was taken to. Weymouth, and although burned almost to the water's edge, the gunpowder in the hold remained intact and had not taken fire. The next day there was considerable mancuvring and skirmishing, but with no very memorable loss on either side. A great Venetian ship and some smaller ones were taken from the enemy, while on our side Captain Cook died with honour in the midst of the Spanish ships, in a little vessel of his own. Both sides werewary; Effingham did not think good to grapple with them, because they had an army in the fleet; while he had none; our army awaited their landing. The Spaniards meant as. much as possible to avoid fighting, and hold on till they could effect a junction with the Prince of Parma. Next morning there was little wind, and only the four great galleases were engaged, these having the advantage on account of their oars, while the English were becalmed; the latter, however, did considerable execution with chain-shot, cutting asunder their tacklings and cordage. But they were now constrained to send ashore for gunpowder,
and next alf-moon; y though ng them, attacking. r. Next $k$ by dishiek and kins, and ship was. with the :h he had r , because Spaniards er, whose fire was $s$ left the uight was nmand of ffingham, of the 1y. "He horn that the midst mpursued. phantom ot seeing morning, ered, and en dueats taken to the hold ncuvring. ship and died with ides were army in meaut as with the galleases lish were asunder inpowder,
with which they were either badly supplied, or had expended too freely. Off the Isle of Wight, the English battered the Spanish admiral with their great ordnance, and shot away his mainmast; but other ships came to his assistance, beat them off, and set upon the English admiral, who only eseaped by favour of a breeze which sprung up at the right moment. Camden relates how the English shot away the lantern from one of the Spanish ships, and the beak-head from a second, and that Frobisher escaped by the skin of his teeth from a situation of great danger. Still this was little more than skirmishing. "The Spaniards say that from that time they gave over what they call the pursuit of their enemy; and they dispatehed a fresh messenger to the Prince of Parma, urging him to effeet his junction with them as soon as possible, and withal to send them some great shot, for they had expended theirs with more prodigality than effect." On the other hand the English determined to wait till they could attack the enemy in the Straits of Dover, where they expected to be joined by the squadrons under Lord Seymour and Sir William Winter. Meantime Effingham's forces were being considerably increased by volunteers; "For the gentlemen of England hired ships from all parts at their own charge, and with one accord came floeking thither as to a set field." Among the volunteers were Sir Walter Raleigh, the Earls of Oxford, Northumberland, and Cumberland. On the evening of the 27th the Spaniards came to anehor off Calais, and the English ships, now 140 in number, "all of them ships fit for fight, good sailors, nimble and tight for tacking about which way they would, auchored within cannon-shot." A squadron of about thirty ships belonging to the States, acting in conjunction with the Admiral of Zeeland and his squadron, effectually bloekaded Dunkirk, and the poor Prince of Parma, with his pressed men constantly deserting, his flat-bottomed boats leaky, and his provisions not ready, could do nothing.

The Spanish ships were almost invulnerable to the shot and ordnance of the day, and "their height was such that our bravest seamen were against any attempt at boarding them." These faets were well understood by Elizabeth's ministers, and the Lord Admiral was instrueted to convert eight of his worst vessels into fire-ships. The orders arrived so a propos of the occasion, and were so swiftly executed, that within thirty hours after the enemy had east anchor off Calais, the ships were unloaded and dismantled, filled with combustibles and all their ordnance charged, and their sides being smeared with piteh, rosin, and wildfire, were sent, in the dead of the night, with wind and tide, against the Spanish fleet. When the Spaniards saw the whole sea glittering and shining with the reflection of the flames, the guns exploding as the fire reached them, and a heavy canopy of denise smoke overhead obscuring the heavens, they remembered those terrible fire-ships which had been used so effectively in the Scheldt, and the cry resounded through the fleet, "The fire of Antwerp!" Some of the Spanish captains let their hawsers slip, some cut their cables, and in terror and confusion put to sea; "bappiest they who could first be gone, though few or none could tell which course to take." In the midst of all this fearful excitement one of the largest of the galleases, commanded by D. Hugo de Moncada, ran foul of another ship, lost her rudder, floated about at the mercy of the tide, and at length ran upon Calais sands. Here she was assailed by the English small craft, who battered her with their guns, but dared not attempt boarding till the admiral sent
a hundred men in his boats, under Sir Amias Preston. The Spaniards fought bravely, but at length Moncada was shot through the head, and the galleas was carried by boarding. Most of the Spanish soldiers, 400 in number, jumped overboard and were drowned; the 300 galley-slaves were freed from their fctters. The vessel had 50,000 dueats on board, " $a$ booty," says Speed, "well fitting the English soldiers' affections." The English

the fire-ships attackino the almada.
were about to set the galleas on fire, but the governor of Calais prevented this by firing upon the captors, and the ship became his prize.

The Duke of Medina Sidonia, admiral of the Spanish Armada, had ordered the whole fleet to weigh anchor and stand out to sea when he perceived the approaching fire-ships; his vessels were to return to their former stations when the danger should be over. When he fired a sigual for the others to follow his example, fow of them heard it, "because they were scattered all about, and driven by fear, some of them in the wide sea, and driven among the shoals of Flanders." When they had once more congregated, they ranged themselves in order off Gravelines, where the final action was fought. Drake and Fenner were the first to assail them, followed by many brave captains, and lastly the
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admiral enme up with Lord Thomas Howard and Lord Sheftield. There were sentrely two or three and twenty among their ships whieh matched ninety of the Spanish vessels in size, but the smaller vessels were more easily handled and manconved. "Wherefore," says Hakluyt, "using their prerogative of nimble steernge, whereby they could turn and wield themselves with the wind which way they listed, they came oftentimes very near upon the Spaniards, and charged them so sore, that now and then they were but a pike's length asunder; and so continually griving them one broadside after another, they

queEn elizaibeth on her way to st. pall's.
discharged all their shot, both great and small, upon them, spending a whole day, from morning till night, in that violent kind of conflict." During this action many of the Spanish vessels were pierced through and through between wind and water; one was sunk, and it was learnt that one of her officers, having proposed to strike, was put to death by another; the brother of the slain man instantly avenged his death, and then the ship went down. Others are believed to have sunk, and many were terribly shattered. One, which leaked so fast that fifty men were employed at the pumps, tried to run aground on the Flemish coast, where her captain had to strike to a Dutch commander. Our ships at last desisted from the contest, from sheer want of ammunition; and the Armada made an effort to reach the Straits. Here a great engagement was expected, but the fighting was over, and that which the hand of man barely commenced the
hand of Gol completed. The Spaniards "were now experimentally convineed that the Luglish exeelled them in naval strength. Several of their largest ships had been lost, others were greatly damaged; there was no prort to which they could repair; and to foree their way through the victorious English fleet, then in sight, and nmounting to 140 sail, was phinly and confessedly impossible." They resolved upon returning to Spain by a northern ronte, and "having gotten more sea room for their huge-bodied bulks, spread their mainsails, and made away as fast as wind and water would give them leave." Eflingham, leaving Seymour to blockade the Prinee of Parma's foree, followed what our chroniclers now termed the Vineible Armada, and pursied them to Seotland, where they did not nttempt to land, but made for Norway, "where the English," says Drake, "thought it best to leave them to those boisterous and uneouth northern seas."

Meantime, it was still expeeted ashore that the Prince of Parma might effect a landing, and it was at this time that Elizabeth, who declared her intention to lee present wherever the battle might be fought, rode through the soldiers' ranks at 'Tilbury, and made her now historical speeeh. "Ineredible it is," says Camden, "how mueh she encouraged the hearts of her eaptains and soldiers by her presenee and her words." When a false report was brought that the prinee had landed, the news was immediately published throughout the camp, "and assuredly," says Southey, "if the enemy had set foot upon our shores they would have sped no better than they had done at sea, such was the spirit of the nation." Some time elapsed before the fate of the Armada was known. It was affirmed on the Continent that the greater part of the Eughish fleet hall been taken, and a large proportion sunk, the poor remainder having been driven into the Thames "all rent and torn." It was believed at Rome that Elizabeth was taken and England concuered! Meantime, the wretched Armada was being blown hither and thither by contending winds. The mules and horses had to be thrown overboard lest the water should fail. When they had reached a northern latitude, some 200 milis from the Scottish isles, the duke ordered them each to take the best eourse they conld for Spain, and ho himself with some five-and-twenty of his best provided ships reached it in safety. The others made for Cape Clear, hoping to water there, but a terrible storm arose, in which it is believed more than thirty of the vessels perished off the coast of Ireland. About 200 of the poor Spaniards were driven from their hiding-places and beheaded, through the inhumanity of Sir William Fitzwilliam. "Terrified at this, the other Spaniards, sick and starved as they were, committed themselves to the sea in their shattered vessels, and very many of them were swallowed up by the waves." Two of their ships were wrecked on the coasts of Norway. Some few got into the English seas; two were taken by cruisers off Rochelle. About 7.00 men were east ashore in Seotland, were humanely treated, and subsequently sent, by request of the Prince of Parma, to the Netherlands. Of the whole Armada only fifty-three vessels returned to Spain; eighty-one were lost. The enormous number of 14,000 men, of whom only 2,000 were prisoners, were inissing. By far the larger proportion were lost by shipwreck.
"Philip's behaviour," says Southey, "when the whole of this great calamity was known, should always be recorded to his honour. He received it as a dispensation of Providence, and 'gave, and commanded to be given, throughout Spain, thanks to God and the saints
al that the d been lost, ir ; and to ting to 140 to Spain by ulks, spreat Effingham, : chroniclers rey did not ught it best Fht effect a , be present Tilbury, and - much she ds." When ly published $t$ foot upon is the spirit n. It was taken, aut Thames "all 1 conquered! contending should fail. h isles, the imself with others made : is believed of the poor humanity of starved as ry many of 2 the coasts ff Rochelle. subsequently rmada only number of the larger was known, Providence, the saints
that it was no greater." In England, a solemn thankggiving was celebrated at St. Paul's, where the Spanish ensigns which had been tuken were displayed, and the sanue flags were shown on London Bridge the following thy, it being Southwark Fair. Many of the arms and instruments of torture taken are still to be seen in the Tower. Another great thanksgiving-thy was celebrated on the anniversary of the queen's accession, aud one of great solemnity, two days later, throughout the realm. On the Sunday following, the gucen went "ns in puiblie, but Christimn triumph," to St. Paul's, in a chariot "made in the form of a throne with four pillars," and drawn by four white horses; alighting from which at the west door, she knelt and "andibly praised God, aeknowlelging llim her only Definder, who hal thus telivered the land from the rage of the enemy." Her Privy Council, the nobility, the French ambassador, the judges, and the heralds, accompanied her. The streets were hung with blue eloth and flags, "the several companies, in their liveries, being drawn up both sides of the way, with their banners in becoming aud gallant order." Thus ended this most serious attempt at the invasion of Eugland.

## CHAPTER XVI.

## The Histoify of Silips and Shippiva Interests (eontinued).

Noble Adventurers-The Earl of Cumberiand as a Pirate-Itich Prizes-Action whth the Madre de Dios-Cipture of the Great Carrack-A Cargo worth $£ 150,000-13$ urning of the Cineo Chagets-Hut Fifteen saved out of Bieven Itundred souls-The Scourfe of Matice-Estabilshment of the Siave Trade-Sir John Itawking' Ventures-High-handed Proceedings-The Spanlurds foreed to Purchase-a Fieet of Shavers - ILawkins sanctioned by "Good Queen liess "-Jolns in ai Negro War -A Disastrous Voyage-Sir Francis Drake-His First Loss-The Treasure at Nombre do Dios-Drake's First Sight of the Puciffe-Tons of Sllver Captured-John Oxenham's Voyage-The First Englishman on the Pauifle-His Disasters and Death-Drake's Voyage Itound the World-Biood-fetthg at the Equator-Arrival at Port Jultun-Trouble with the Natives-Execution of a Mutineer-Passage of the Stralts of Magelian-Vessels separated in u Gale-Loss of the Marigold-Traglo Fate of Eight Men-Drako Driven to Cape IIorn-l'roceedings at Valparaiso-l'rizes faken-Capture of the great Treasure Ship-Drake's Itesolve to change his Course Ilome-Vessel reftted at Nlearagia-stay in the Hay of San Franclsco-The Natives wership the Engish-Grand Reception at Ternate-Drake's Ship neariy wrecked -Iteturn to Engiand-Honours aecorded Drake-His Charaeter and Influence-Sir Humphrey Gilbert's Disasters and Death-Ilaleigh's Virginia Settiements.
Tue spirit of adventure, fostered by the grand diseoverics which were constantly being made, the rich returns derived from trading expeditions, and from the pillage of our enemies, was at its zenith in the reign of Queen Elizabeth. Nor was it confined to mere soldiers of fortune, for we find distinguished noblemen of ample fortumes taking to the seas as though their daily bread depended thereupon. Among these naval adventurers "there was no one," says Southey, "who took to the seas so mueh in the spirit of a northern sea king as the Earl of Cumberland." He had borne his part in the defeat of the Armada, while still a young man, and the queen was so well satisfied with him, that she gave him a commission to go the same year to the Spanish coast as general, lending him the Gollen Lion, one of the ships royal, he vietualling and furnishing it at his own expense. After some fighting he took a prize, but soon after had to cut away his mainmast in a storm, and return to England. "His spirit remaining, nevertheless, higher than the winds, and more resolutely by storms compact and united in itself," we find him
shortly afterwards again on the high seas with the Victory, one of the queen's ships, and three smaller vessels. The earl was not very serupulous as regards prize-taking, and captured two Frenel ships, whieh belonged to the party of the League. A little later he fell in with eleven ships from Hamburg and the Baltic, and fired on them till the captains came on hoard and showed their passports; these were respected, but not so the property of a Lisbon Jew, which they confessed to have on their ships, and which was valued at $£ 4,500$. Off the Azores, he hoisted Spanish colours, and suceeeded in robbing some Spanish vessels. The homeward-bound Portugnese fleet from the Last Indies narrowly escaped him; when near Tercera some English prisoners stole ont in a small boat, having' no other yard for their mainsail than two pipe-staves, and informed him that the Portuguese ships had left the island a week before. This induced him to return to Fayal, and the terror inspired by the English name in those days is indicated by the fact that the town of about 500 houses was found to be completely empty; the inhabitants had abindoned it. He set a guard over the churehes and monasteries, and then ealmly waited till a ransom of 2,000 dueats was brought him. He helped himself to fifty-eight pieces of iron ordnance, and the Governor of Graciosa, to keep on grood terms with the carl, sent him sixty loutts of wine. While there a Weymouth privateer came in with a Spanish prize worth $\mathfrak{£ 1 6 , 0 0 0}$. Next we find the earl at St. Mary's, where he captured a Brazilian sugar ship. In bringing out their prize they were detained on the harbour bar, exposed to the enemy. Eighty of Cumberland's men were killed, and he himself was wounded; "his head also was broken with stones, so that the blood covered his face," and both his face and legs were burnt with fire-balls. The prize, however, was secured and forwarded to England.

Cumberland himself held on his course to Spain, and soon fell in with a ship of 400 tons, from Mexico, laden with hides, cochineal, sugar, and silver, "and the captain had with him a venture to the amount of 25,000 ducats," which was taken. They now resolved to return home, but "sea fortunes are variable, having two inconstant parents, air and water," and as one of the adventurers* concisely pat it, "these summer services and ships of sugar proved not so sweet and pleasant as the winter was afterwards sharp and painful." Lister, the earl's captain, was sent in the Mexican prize for England, and was wreeked off Cornwall, everything being lost in her, and all the crew, save five or six men. On the earl's ship, contrary winds and gales delayed them so greatly that their water failed; they were reduced to three spoonfuls of vinegar apiece at ench meal; this state of affairs lasting. fourteen days, except what water they could collect from rain and hail-storms. "Yet was, that rain so intermingled with the spray of the foaming sea, in that extreme storm, that it could not be healthful: yea, some in their extremity of thirst drank themselves to death with their cans of salt water in their hands." Some ten or twelve perished on each of as many consecutive nights, and the storm was at one time so violent that the ship was almost torn to pieces; "his lordship's eabin, the dining-room, and the half deek became all. one," and he was obliged to seek a lodging in the hold. The earl, however, constantly encouraged the men, and the small stock of provisions was distributed with the greatest

[^87]I's ships, and e-taking, and little later he 1 the captains the property 1 was valucd robbing some dies narrowly boat, having im that the urn to Fayal, fact that the habitants had calmly waited $y$-eight pieces the earl, sent Spunish prize razilian sugar xposed to the sunded; "his both his face forwarded to
ship of 400 tain had with w resolved to ir and water," and slips of and painful." s wreeked off hen. On the - failed; they affairs lasting.
" Yet was. e storm, that elves to death d on each of the ship was. ck became all er, constantly the greatest
equality; so at last they reached a haven on the west coast of Ireland, where their sufferings ended. On this voyage they had taken thirteen prizes. The Mexican prize whieh had been wrecked would have added $£ 100,000$ to the profits of the venture, but even with this great deduction, the earl had been donbly repaid for his outlay.

The earl's third expedition was a failure, but the fourth resulted in the capture of the Madice de Dios, one of the largest earracks belonging to the Portuguese crown. In this, however, some of Raleigh's and Hawkins' ships had a share. Captain Thomson, who came up with her first, "again and again delivered his peals as fast as he could fire and fall astern to load :again, thus hindering her way, though somewhat to his own cost, till the others could come up" Several others worried the carrack, until the earl's ships came up about eleven at night. Captain Norton had no intention of boarding the enemy


TIE EARL OF CUMBERLAND AND THE " MADRE DE DIOs."
till daylight, if there had not been a ery from one of the ships royal, then in danger, "An you be men, save the queen's ship!" Upon this the carrack was boarded on both sides. A desperate struggle ensued, and it took an hour and a half before the attaeking parties suzceeded in getting possession of the high forecastle, "so brave a booty making the men fight like dragons." The ship won, the boarders turned to pillage, and while searching about with eandles, managed to set fire to a cabin containing some hundreds of cartridges, very nearly blowins; up the ship. The hotness of the action was evidenced by the number of dead and dying who strewed the carrack's decks, "especially," says the chronicler, "about the helm; for the greatness of the stecrage requiring the labour of twelve or fourteen men at once, and some of our ships beating her in at the stern with their ordnance, oftentimes with one shot slew four or five labouring on either side of the helm; whose room being still furnished with fresh supplies, and our artillery still playing. upon them with continual volleys, it could not he but that much blood should be shed in that place." For the times, the prisoners were treated with great humanity, and surgeons were sent on board to dress their wounds. The eaptain, Don Fernando de Mendoza, was
"a gentleman of noble birth, well stricken in years, well spoken, of comely personage, of good stature, but of hard fortune. Twice he had been taken prisoner by the Moors and ransomed by the king; and he had been wreeked on the coast of Sofala, in a carraek which he commanded, and laving escaped the sea danger, fell into the hands of iufidels ashore, who kept him under long and grievous servitude." The prisoners were allowed to carry off their own valuables, put on board one of Cumberland's ships, and sent to their own country. Unfortumately for them, they again fell in with other English cruisers, who robbed them without merey, taking from them 900 diamonds and other valuable things. About 800 negroes on board were landed on the island of Corvo. Her cargo consisted of jewels, spices, drugs, silks, calicoes, carpets, canopies, ivory, porcelain, and innumerable curiosities; it was estimated to amount to $£ 150,000$ in value, and there was considerable haggling over its division, and no little embezzlement; the queen had a large share of it, and Cumberland netted $£ 36,000$. The carrack created great astonishment at Dartmouth by her dimensions, which for those days were enormous. She was of about 1,600 tons burden, and 165 feet long; she was of "seven several stories, one main orlop, three close decks, one forecastle (of great height) and a spar deek of two floors apiece." Her mainmast was 125 feet in height, and her main-yard 105 feet long. "Being so huge and unwieldy a ship," says Purchas, "she was never removed from Dartmouth, but there laid up her bones."

In 1591 the earl set forth on his eighth voyage, with three ships, a caravel, and a pinnace, furnished at his own expense, with the help of some adventurers. Early in the voyage they descried a great Indian ship, whose burden they estimated at 2,000 tons. Her name was the Cinco Chagas (the Five Wounds), and her fate was as tragical as lier name. She had on board a number of persons who had been shipwrecked in three vessels, which, like herself, had been returning from the Indies. When she left Mozambique for Europe, she had on board 1,400 persons, an enormous number for those days; on the voyage she had encountered terrible gales, and after putting in at Loanda for water and supplies, and shipping many slaves, a fatal pestilence known by the name of the "mal de Loanda," carried off about half the crew. The eaptain wished to avoid the Azores, but a mutiny had arisen among the soldiers on board, and he was foreed to stand by them, and by this means came into contaet with the Earl of Cumberland's squadron off Fayal. The Portuguese had pledged themselves to the ship at all hazards, and to perish with her in the sea, or in the flames, rather than yield so rich a prize to the heretics. Cumberland's ships, after harassing the carrack on all sides, ranged up against her; twice was she boarded, and twice were the assailants driven out. A third time the privateers boarded her, one of them bearing a white flag; he was the first of the party killed, and when a second hoisted another flag at the prop it was immediately thrown overboard. The English suffered considerably, more especially among the officers. Cumberland's vice-admiral, Antony, was killed; Downton, the rear-admiral, crippled for life; and Cave, who commanded the earl's ship, mortally wounded. The privateers seem, in the heat of action, almost to have forgotten the valuable eargo on board, and to have aimed only at destroying her. "After many bickerings," says the chronicler, "fireworks flew about interehingeably; at last the viceadmiral, with a culverin shot at hand, fired the carrack in her stern, and the rear-admiral
sonage, of Moors and a carrack of infidels allowed to it to their uisers, who ble thiugs. o consisted numerable onsiderable hare of it, Dartmouth 1,600 tons three close Her mainhuge and there laid vel, and a urly in the ,000 tons. ical as her ree vessels, mbique for s; on the water and e"mal de pres, but a them, and yal. The her in the nd's ships, e boarded, her, one of nd hoisted fiered convas killed; arl's ship, forgotten fter many the viee-ar-admiral
her foreeastle, * * * * then flying and maintaining their fires so well with their small shot that many which came to quench them were slain." The fire made rapid headway, and P. Frey Antonio, a Franciscan, was seen with a crucifix in his hand, enconraging the poor sailors to commit themselves to the waves and to God's mercy, rather than perish in the flames. A large number threw themselves overboard, elinging to such things as were cast into the sea. It is said that the English boats, with one honourable exception, made no efforts to save any of them; it is even stated that they butchered many in the water. According to the English account there were more than 1,100 on board the carrack, when she left Loanda, of whom only fifteen were saved! Two ladies of high rank, mother and daughter-the latter of whom was going home to Spain to take possession of some entailed property-when they saw there was no help to be expected from the privateers, fastened themselves together with a cord, and committed themselves to the waves; their bodies were afterwards east ashore on layal, still united, though in the bonds of death.

The earl afterwards built the Scourge of Malice, a ship of 800 tons, and the largest yet constructed by an English subject, and in 1597 obtained letters patent authorising him to levy sea and land forces. Without royal assistance, he gathered cighteen sail. This expedition, although it worried and impoverished the Spaniards, was not partieularly profitable to the earl. He took Puerto Rico, and then abandoned it, and did not, as he expected, intercept either the outward-bound East Indiamen, who, indeed, were too frightened to venture out of the Tagus that year, or the homeward-bound Mexiean fleet. This was Cumberland's last expedition, and no other subject ever undertook so many at his own cost.

The Elizabethan age was othervise so glorious that it is painful to bave to record the establishment of the slave-trade-a serious blot on the reign-one which no Englishman of to-day would defend, but which was then looked upon as perfeetly legitimate. John Hawkius (afterwards Sir John) was born at Plymouth, and his father bad long been a well-esteemed sea-captain, the first Englishman, it is believed, who ever traded to the Brazils. The young man had gained much renown by trips to Spain, Portugal, and the Canaries, and having "grown in love and favour" with the Canarians, by good and upright dealing, began to think of more extended enterprises. Learning that "negroes were very good merchandise in Hispaniola, and that store of them might easily be had upon the coast of Guinea," he communicated with several London ship-owners, who liked his schemes, and provided him in large part with the necessary outfit. Three small vessels were provided-the Solomon, of 120 tons, the Swallow, of 100 , and the Jonas, of forty. Hawkins left England in October, 1562, and proceeding to Sierra Leone, "got into his possession, partly by the sword and partly by other means, to the number of 300 negroes at the least, besides other merchandise which that country yieldeth." At the port of Isabella, Puerto de Plata, and Monte Christo, he made sale of the slaves to the Spaniards, trusting them "no farther than by his own strength he was ahle to master them." He received in exchange, pearls, ginger, sugar, and hides enough, not merely to freight his own vessels, but. two other hulks, and thus "with prosperons success, and much gain to himself and the aforesaid adventurers, he came home, and arrived in September, 1563."

The second expedition was on a larger seale, and ineluded a queen's ship of 700 tons. Hawkins arriving off the Rio Grande, could not enter it for want of a pilot, but he proceeded to Sambula, one of the islands near its mouth, where he "went every day on shore to take the inhabitants, with burning and spoiling their towns," and got a number of slaves. Flushed with easy suceess, Hawkins was persuaded by some Portuguese to attack a negro town called Bymeba, where he was informed there was much gold. Fortyof his men were landed, and they dispersing, to seeure what booty they could for themselves, beeame an easy prey to the negroes, who killed seven, including one of the captains, and wounded twenty-seven. After a visit to Sierra Leone, which he left quiekly on account of the illness and death of some of his men, he proceeded to the West Indies, where he carried matters with a high hand at the small Spanish settlements, at which very generally the poor inhabitants had been forbidden to trade with him ly the vieeroy, then stationed at St. Domingo. To this he replied at Borburata, that he was in need of refreshment and money also, "without which he could not depart. Their princes were in amity one with another; the English had free traffie in Spain and llanders; and he knew no reason why they should not have the like in the King of Spain's dominions. Upon this the Spaniards said they would send to their governor, who was three-score leagnes off; ten days must elapse before his determination could arrive; meantime he might bring his ships into the harbour, and they would supply him with any victuals he might require." The ships sailed in and were supplied, but Hawkins, "advising himself that to remain there ten days idle, spending victuals and men's wages, and perhaps, in the end, receive no grood answer from the governor, it were mere folly," requested liceneo to sell certain lean and sick negroes, for whom he had little or no food, but who would recover with proper treatment ashore. This request, he said, he was foreed to make, as he had not otherwise wherewith to pay for necessaries supplied to him. He reeeived : licence to sell thirty slaves, but now few showed a disposition to buy, and where they did, came to haggle and cheapen. Hawkins made a feint to go, when the Spaniards bought some of his poorer negroes, "but when the purchasers paid the duty and required the customary receipt, the offieer refused to give it, and instead of carrying the money to the king's account, distributed it to the poor 'for the love of God.'" The purchasers feared that they might have to pay the duty a second time, and the trade was suspended till the governor arrived, on the fourteenth day. To him Hawkins told a long-winded story, coneluding by saying that, "it would be taken well at the governor's hand if he granted a licence in this case, seeing that there was a great amity between their princes, and that the thing pertained to our queen's highness." The petition was taken under consideration in council, and at last granted. The lieence of thirty dueats demanded for each slave sold did not, however, meet Hawkins' views, and he therefore landed 100 men well armed, and marched toward the town. The poor townspeople sent out messengers to know his demands, and he requested that the duty should be $7 \frac{1}{2}$ per cent., and mildly threatened that if they would not accede to this "he would displease them." Everything was conceded, and Hawkins obtained the prices he wanted. Faney a modern merchant standing with an armed guard, pistol in hand, over his customers, insisting that be would sell what he liked and at his own price!
f 700 tons. lot, but he cry day on t a number rtuguese to old. Forty could for one of the left quickly Vest Indies, s , at which the viceroy; in need of rinces were ers ; and he dominions. three-score ceantime he victuals he ing himself perhaps, in isted lieenes who would to make, as received where they c Spaniards and required the money e purchasers s suspended long-winded hand if he neir princes, taken under manded for ed 100 men messengers and mildly Everything n merchant at he would

But all this is nothing to what happened at Rio de la IIacha. There he spoke of his quiet traffic (!) at Borburata, and requesteil permission to trade there in the same manner. He was told that the viecroy had forbidden it, whereupon he threatened them that he must either have the lience or they "stand to their owa defence." The lienence was granted, but they offered half the prices which he had obtained at Borburata, wherenpon he told them, insultingly, that "seeing they had sent him this to his supper, he would in the morning bring them as good a breakfast."* Aecordingly, early next day he fired off a eulverin, and prepared to land with 100 men, "having light ordnance in his great boat, and in the other boais double bases in their noses." The townsmen


ON THE COAST OF CORNWALL.
marched out in battle array, but when the guns were fired fell flat on their faces, and soon dispersed. Still, about thirty horsemen made a show of resistance, their white leather targets in one hand and their javelins in the other, but as soon as Hawkins marched towards them they sent a flag of truee, and the treasurer, "in a cautious interview with this ugly merehant," granted all he asked, and the trade proceeded. They parted with a show of friendship, and saluted each other with their guns, the townspeople "glad to be sped of such traders."

On the return voyage, contrary winds prevailed, "till vietuals seanted, so that they were in despair of ever reaching home, had not God provided for them better than their deserving." They arrived at Padstow, in Cornwall, "with the loss," says the narrative printed in Hakluyt's collection, "of twenty persons in all the voyage, and with great profit to the venturers, as also to the whole realm, in bringing home both gold,

[^88]silver, pearls, and other jewels in great store. His name, therefore, be praised for evermore. Amen!" They did not consider that they had been engaged in a most iniquitons traffic, nor was it, indeed, the opinion of the times. "Hawkins," says Southey, "then, is not individually to be condemued, if he looked upon dealing in negroes to be as lawful as any calher trade, and thonght that foree or artifice might be employed for taking them with as little compunction as in hunting, fishing, or fowling." He had a coat of arms and crest bestowed upon him and his posterity. Among other devices it bore "a demi-Moor, in his proper colonr, bound and captive, with amulets on his arms," \&c.

On his next expedition for slaving purposes he had six vessels. Herrera* says that two Portuguese had offered to conduct this flect to a place where they might load their vessels with gold and other riches, and that the queen had been so taken with the idea that she had supplied IIawkins with two ships, he and his brother fitting out four others and a pinnace. The foree on board amounted of 1,500 soldiers and sailors, who were to receive a third of the profits. When the expedition was ready, the Portuguese deserted from Plymouth, and went to France, but as the cost of the outfit had been incurred, it was thought proper to procead. Hawkins obtained, after a great deal of trouble, less than 150 slaves between the Rio Grande and Sierra Leone. At this juncture a negro king, just going to war with a neig' ' ouring tribe, sent to the commander asking his aid, promising him all the prisoners wi.u should be taken. This was a tempting bait, and 120 men were sent to assist the colourel warrior. 'they assaulted a town containing 8,000 inhalitants, strongly paled and well lefended, and the English losing six men, and having a fourth of their number wounded, sent for more help; "whereupon," says Hawkins, "considering that the good success of this enterprise might highly further the commodity of our voyage, I went myself; and with the help of the king of our side, assaulted the town both by land and sea, and very hardly, with fire (their houses being covered with dry palm-leaves), obtained the town, and put the inhabitants to flight, where we took 250 persons, men, women, and children. And by our friend, the king of our side, there were taken 600 prisoners, whereof we hoped to have had our choice; but the negro (in which nation is seldom or never found truth) meant nothing less, for that night he removed his camp and prisoners, so that we were fain to content us with those few that we had gotten ourselves." They had obtained between 400 and 500 , a part of which were speedily sold as soon as he reached the West Indies. At Rio de la Hacha, "from whenee came all the pearls," the treasurer would by no means allow them to trade, or even to water the ships, and had fortified the town with additional bulwarks, well mamed by harquebusiers. Hawkins again enforced trade, by landing 200 men , who stormed their fortifications, at which the Spaniards fled. "Thus having the town," says Hawkins, "with some circumstance, as partly by the Spaniards' desire of negroes, and partly by friendship of the treasurer, we obtained a secret trade, wherenpon the Spaniards resorted to us by night, and bought of us to the number of 200 negroes."

This voyage ended most disastronsly. Passing by the west end of Cuba, they

[^89]praised for in a most sins," says in negroes e employed He had deviecs it ets on his
says that load their h the idea four others ho were to se deserted neurred, it ouble, less e a negro gh his aid, bait, and containing six men, pon," says arther the our side, uses being rlit, where our side, the negro night he few that of which a, " from trade, or 11 manned med their Hawkins, partly by - resorted iba, they
encountered a terrific storm, which lasted four days, and they had to cut down all the "higher buildiugs" of the Jesus, their largest ship; her rudder, too, was nearly disabled, and she leaked badly. Chey made for the coast of Florida, but could find no suitable haven. "Thus, being in great despair, and taken with a new storm, which continued other three days," Hawkins made for St. Juan de Ulloa, a port of the eity of Mexico. They took on their way three ships, having on board 100 passengers, and soon reached the harbour. The Spaniards mistook them for a fleet from Spain, which was expected about that time, and the chief officers came aboard to receive the despatches. "Being deceived of their expectation," they were somewhat alarmed, but finding that Hawkins wanted nothing but provisions, "were recomforted." "I found in the same port," says Hawkins, "twelve ships, which had in them, by report, $£ 200,000$ in gold and silver; all of which being in my possession, with the king's island, as also tue passengers before in my way thitherward stayed, I set at liberty, without the taking from them the weight of a groat." This savours rather of impudent presumption, for he was certainly not in good condition to fight at that period. Next day the Spanish fleet arrived outside, when Hawkins again rode the high horse, by giving notice to the general that he would not suffer them to enter the port until conditions had been made for their safe-being, and for the maintenance of peace. The fleet had on board a new viceroy, who answered amicably, and desired him to propose his conditions. Hawkius required not merely vistuals and trade, and hostages to be given on both sides, but that the island should be in lis possession during his stay, with such ordnance as was planted there, and that no Spaniard might land on the island with any kiud of weapon. These terms the viceroy "somewhat disliked" at first, nor is it very surprising that he did; but at length he pretended to consent, and the Spanish ships entered the port. In a few days it became evident that treachery was intended, as men and weapons in quantities were being transferred from and to the Spanish ships, and new ordnance landed on the island. Hawkins sent to inquire what was meant, and was answered with fair words; still unsatistied, he sent the master of the Jesus, who spoke Spanish, to the viceroy, and "required to be satisfied if any such thing were or not." The viceroy, now seeing that the treason must be discovered, retained the master, blew his trumpet, and it became cvident that a general attack was intended. A number of the English crews ashore were immediately massacred. They attempted to board the Minion and Jesus, but were lept out, with great loss on both sides. "Now," says Hawkins, "when the Jesus and the Minion were gotten about two ships' lengths from the "panish fleet, the fight began so hot on all sides, that, within one hour, the admiral of the Spaniards was supposed to be sunk, their vice-admiral burnt, and one other of their principal ships supposed to be sunk. The Spaniards used their shore artillery to such effect that it eut all the masts and yards of the Jesus, and sunk Hawkins' smaller ships, the Judith only excepted." It had been determined, as there was little hopo to get the Jesus away, that she should be placed as a target or defence for the Minion till night, when they would remose such of the stores and valr zbles as was possible, and then abandon her. "As we were thus determining," says Hawkins, "and had placed the Minion from the shot of the land, suddenly the Spaniards fired two great ships which were coming direetly with us; and having no means to avoid the fire, it bred among the men a
marvellous fear, so that some said, 'Let us depart with the Minion;' others said, 'Let us see whether the wind will earry the fire from us.' But, to be short, the Minion's men, which had always their sails in readiness, thought to make sure work, and so, without either consent of the captain or master, cut their sail." Hawkins was "very hardly"

received on board, and many of the men of the Jesus were left to their fate and the mercy of the Spaniards, "which," he says, "I doubt was very little." Only the Minion and the Judith escapel, and the latter deserted that same night. Beaten about in unknownseas for the next fourteen days, hunger at last enforeed them to seek the land; "for hides were thought very good meat; rats, cats, mice, and dogs, none eseaped that mightbe gotten; parrots and monkeys, that were had in great price, were thought then very ?rofitable if they served the turn of one dinner." So starved and worn out were they,
said, 'Let ${ }^{3}$ Minion's 30, without y hardly"
e mercy iion and anknown d; "for" t might hen very re they,

that about a hundred of his people desired to be left on the coast of Tubasco, and Hawkins determined to water there, and then, "with his little remain of victuals," to attempt the voyage home. During this time, while on shore with fifty of his men, a gale arose, which prevented them regaining the ship; indeed, they expected to see it wreeked before their eyes. At last the storm abated, and they sailed for England, the men dying off daily from sheer exhaustion, the pitiful remainder being searcely able to work the ship. They at last reached the coast of Galicia, where they obtained fresh meat, and putting into Vigo, were assisted by some English ships lying there. Hawkins concludes his narrative as follows:-"If all the miseries and troublesome affairs of this sorrowful voyage should be perfectly and thoroughly written, there should need a painful man with his pen, and as great a time as he had that wrote the lives and deaths of the martyrs."

The Jullith, whieh made one of Hawkins's last fleet, was commanded by Franeis Drake, a name that was destined to become one of the most famous of the day, and very terrible to the Spaniards. In this last venture he lost all that he had accumulated by earlier voyages," "but a divine, belonging to the fleet, comforted him with the assurance, that having been so treacherously used by the Spaniards, he might lawfully recover in value of the King of Spain, and repair his losses upon him wherever he could." This comfortable doctrine consoled him. "The case," says Fuller, "was clear in sea divinity." Two or three miuor voyages he made to gain knowledge of the field of - operation, and in the West Indies made some little money "by playing the seaman and the pirate." On May 21th, 1572, he sailed from Plymouth, in the Pascha, of seventy tons, his brother accompanying him in the Swan, of only twenty-five tons; they had three pinnaces on boarl, taken to pieces and stowed away. The force with which he was to revenge himself on the Spanish menarch, numbered seventy-three men and boys, all told. In the Indies he was joined by Captain Rowse, of an Isle of Wight bark, with thirty-eight men on board. Let us see how they sped.

It was known that there was great treasure at Nombre de Dios, and thither the little squadron shaped its course. The town was unwalled, and they eutered without difficulty, but the Spaniards received them in the market-place with a volley of shot. Drake returned the greeting with a flight of arrows, "the best ancient English complement, but in the attack reeeived a wound in his leg, which he dissembled, "knowing that if the general's heart stoop, the men's will fall." He arrived at the treasury-house, which was full of silver bars, and while in the act of ordering his men to break it open, fainted from the loss of blood, and his men, binding up the wound, forcibly took him to his pinnace. It was time, for the Spaniards had discovered their weakness, and could have overcome them. Rather disappointed here, Drake made for Carthagena, and took several vessels on his way. He learned from some eseaped negro slaves, settled on the isthmus of Darien, that the treasure was brought from Panama to Nombre de Dios upon mules, a party of which he might intereept. Drake's leg having healed, he was led to an eminence on that isthmus, where, from a great tree, both the Pacific and Atlantic might be seen. Steps had been cut in the trunk of this huge tree, and at the top " $a$ ennvenient arbour had been made, wherein twelve men might sit." Drake saw from its summit that great Southern Oeean (the Paeific Ocean) of which he had heard something already, and "being inflamed with

1 Hawkius tempt the rale arose, ked before dying off the ship. d putting cludes his ful voyage h his pen, y Franeis ', and very zulated by assuranee, recover in d." This divinity." on, and in ate." On is brother innaces on ge himself the Indies $t$ men on the little diffieulty, e returned put in the general's as full of the loss of was time,

Rather vay. He e treasure he might as, where, en cut in , wherein cean (the ned with
ambition of glory and hopes of wealth, was so vehemently transported with desire to navigate that sea, that falling down there npon his knees, he implored the divine assistimee, that he might at some time or other sail thither, and make a perfect discovery of the same.": Drake was the first Englishman to gaze on its waters.

On the isthmus, Drake enconntered an armed party of Spaniards, but put them to flight, and destroyed merchandise to the value of 200,000 dueats. Soon after he heard "the sweet musie of the mules coming with a great noise of bells," and when the trains eame up, he found they had no one but the muleteers to protect them. It was easy work to take as muel silver as they would, but more diffieult to transport it to the coast. They, in consequence, buried several tons, but one of his men, who fell into the hands of the Spaniards, was compelled by torture to reveal the place, and when Drake's people returned for a second loal it was nearly all gone. When they returned to the coast where the pimaces should have met them, they were not to be seen, but in place, seven Spanish pinnaces which had been searehing the const. Drake eseaped their notice, and eonstructing a raft of the trees which the river brought down, mounted a bisenit sack for sail, and steered it with an oar made from a sapling, out to sea, where they were constantly up to their waists in water. At last they eaught sight of their own pinnaces, ran the raft ashore, and travelled by land round to the point off which they were laying. They then embarked their comrades with the trasure, and rejoined the ship. One of their negro allies took a great faney to Drake's sword, and when it was presented to him, desired the commander to aceep ${ }^{4}$ four wedges of gold. "Drake aceepted them as courteously as they were proffered, but threw then into the common stoek, saying, it was just that they who bore part of the charge in setting him to sea, should enjoy their full proportion of the advantage at his return." Drake made the passage home to the Seilly Isles in the wonderfully short period of twenty-three days. Arriving at Plymouth on a Sunday, the news was carried into the church during sermon time, and "there remained few or no people with the preacher," for Drake was already a great man and a hero in the eyes of all Devon.

John Oxenham, who had served with Drake in the varied eapacities of soldier, sailor, and cook, was very much in the latter's confidence. Drake had particularly spoken of his desire to explore the Pacifie, and Oxenham in reply, had protested that "he would follow him by God's grace." The latter, who "had gotten among the seamen the name of cantain for his valour, and had privily serapel together good store of money," beeoming impatient, determined $\omega$ attempt the enterprise his late master had projected. He reached the isthmus to find that the mule trains conveying the silver were now protected by a convoy of soldiers, and he determined on a bold and novel adventure. "He drew his ship aground in a retired and woody creek, covered it up with boughs, buried his provisions and his great guns, and taking with him two small pieces of ordnance, went with all his men and six Maroon guides about twelve leagues into the interior, to a river which discharges itself into the Sonth Sea. There he cut wood and built a pinnace, 'which was five-and-forty feet by the keel;'" embarked in it, and secured for himself the honour of

[^90]having been the first Englishman to sail over the waters of the blue Pucific. In this pinnace he went to the Pearl Islands, and lay in wait for vessels. He was successful in capturing a small bark, bringing gold from Quito, and scarcely a week later, another with silver from Lima. He also obtained a few pearls on the islands.

So fur, fortune had followed Oxenham, and to his own want of caution is due the fact that this prosperous state of affairs was soon reversed. He had dismissed his prizes

oxeniham embarino on the pacific.
when near the mouth of the river, and had allowed them to perceive where he was entering. The alarm was soon given; first, indeed, by some negroes who hastoned to Panama. Juan de Ortega was immediately dispatched with 100 men , besides negro rowers, in four barks. After entering the river, a four days' search rewarded him by the discovery of the pinnace with six Englishmen on board, who leaped ashore and ran for dear life; one only was killed at this juncture. Ortega diseovered in the woods the hut in which Oxenham had concealed the treasure, and removed it to his barks. Meantime, Oxenham, whose men had been disputing over the division of spoils, had been to a distance for the purpose of indueing some of the Maroon negroes to aet as carriers, and returning with them, met the men who had escaped from the pinnace, and those who were fleeing from the hut. "The loss of their booty at onee completed their reconcilement; he promised larger shares if they

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He was week later, is due the 1 his prizes
*itinss as entering. to Panama. yers, in four pery of the ; one only h Oxenham whose men purpose of em, met the nut. "The ares if they
dhould suceed in re-capturing it; and marehed resolutely in quest of the Spaniards, relying nuon the Muroons as well us upon his own people." But Ortega and his men were experienced in bush-fighting, and they suceceded in killing eleven Englishmen, und five mugroes, and took seven of Oxenham's purty prisoners. He, with the remuant of his party, went back to search for his hidden ship; it had been removed by the Spaniards. And now the lutter sent 150 men to hunt the Englishnen out, while those whom they fuiled to take were delivered up by the natives. Oxenham and two of his officers were taken to Limu and executed; the remainder suffered death at Panama.

The greatest semi-commercial und piratical voyage of this epoch is undoubtedly that of Drake, who reached the South Seas* riat the Straits of Magellun-the third recorded attenpt, and the first made ly an Englishman-and was the first English subjeet to circumnavigate the globe. Mlizabeth gave it her secret sanetion, and when Druke was introduced to her court hy Sir Christopher Hatton, presented him a sword, with this remarkable speceh : "We do account that he which striketh at thee, Drake, striketh at us!" The expedition, fittel at his own cost, and that of various adventurers, comprised five vessels; the largest, his own ship, the P'elican, being only 100 tons. His whole forec consisted of " 164 men, gentlemen, and sailors; and was furnished with such plentiful provision of all things neeessary as so long and dangerous a voyage seemed to require." The frames of four piunaces were taken, to be put together as occasion might require. "Neither did he omit, it is said, to make provision for ornament and delight ; earrying to this purpose with him expert musicians, rich furniture (all the vessels for his table, yea, many belonging to the cook-room, being of pure silver) with divers shows of all sorts of curious workmanship, wherely the civility and magnificence of his native country might, among all nations whither he should come, be the more admired." $\dagger$ Few of his companions knew at the outset the destination of his voyage ; it was given out that they were bound merely for Alexandria.

The expedition sailed on November 15th, 1577, from Plymouth, and immediately encountered a storm so severe that the vessels came near shipwreck, and were obliged to put back and refit. When they had again started under fairer auspices, Drake gave his people some little information as to his proposed voyage, and appointed an island off the coast of Barbary as a rendezvous in case of separation at sea, and sulsequently Cape Blaneo, where he mustered his men ashore and put them through drills and warlike exercises. Already, early in January, he had taken some minor Spanish prizes, and a little later, off the island of Santiago, chased a Portuguese ship, bound for Brazil, "with many passengers, and among other commodities, good store of wine." Drake captured and set the people on one of his smaller pinnaces, giving them their clothes, some provisions, and one butt of wine, letting them all go except their pilot. The provisions and wine on board the prize proved invaluable to the expedition. From the Cape de Verde Islands they were nine weeks out of sight of land, and before they reached the coast of Brazil, when near the equator, "Drake, being very careful of his men's health, let every one of them blood with

[^91]his own hands." On nearing the Brazilian coast, the inhabitants "made great fires for a sacrifice to the devils, about which they use conjurations (making heaps of sand and other ceremonies), that when any ships shall go about to stay upon their coast, not only sands may be gathered together in shoals in every place, but also that storms and tempests may arise, to the casting away of ships and men." Near the Plata they slaughtered large numbers of seals, thinking them "good and acceptable meat both as food for the present, and as a supply of provisions for the future." Further south, they found stages constructed on the rocks by the nat ves for drying the flesh of ostriehes; their thighs were as large as "reasonable legs of mutton." At a spot which Drake named Scal Bay, they remained over a fortnight. Here they "made new provisions of seals, whereof they slew to the number of from 200 to 300 in the space of an hour." Some little traffic ensued with the natives, all of whom were highly painted, some of them having the whule of one side, from crown to heel, painted black, and the other white. "They fed on seals and other flesh, which they ate nearly raw, casting pieces of four or six pounds' weight into the fire, till it waz a little scorched, and then tearing it in pieces with their teeth like lions." At the sound of Drake's band of trumpeters they showed great delight, dancing on the beach with the saibors. They were described as of large stature. "One of these giants," said the chaplain of the expedition, "standing with our men when they were taking their morning draughts, showed himself so familiar that he also would do as they did; and taking a glass in his hand (being strong canary wine), it came no sooner to his lips, than it took him by the nose, and so suddenly entered his head, that he was so drunk, or at least so overcome, that he fell right down, not able to stand; yet he held the glass fast in his hand, without spilling any of the wine; and when he came to himself, he tried again, and lastius, by degrees got to the bottom. From which time he took such a liking to the wine, the, having learnt the name, he would every morning come down from the mountains with a miglity cry of 'Wine! wine! wine!' continuing the same until he arrived at the tent."*

After some troulle caused by the scparation of the vessels, the whole fleet arrived safely at the "good harborough called by Magellan Port Julian," where nearly the first sight they met was a gibbet, on which the Portuguese navigator had executed several mutinous members of his company, some of the bones of whom yet remained. Drake himself was to have trouble here. At the outset the natives appeared friendly, and a trial of skill in shooting arrows resulted in an English gumer excceding their efforts, at which they appeared pleased by the skill shown. A little while after another Indian came, "but of a sourer sort," and one Winter, prepared for another display of arehery, unfortunately broke the bow-string when he drew it to its full length. This disabused the natives, to some extent, of the superior skill of the English, and an attack was made, apparently incited by the Indian just mentioned. Poor Winter received two wounds, and the gunner coming to the rescue with his gun missed fire, and was immediately shot "through the breast and out at back, so that he fell down stark dead." Drake assembled his men, ordering them to cover themselves with their targets, and mareh on the assailants,

[^92]fires for a d and other only sands mpests may itered large the present, constructed ere as large Bay, they f they slew affic ensued he whole of ed on seals nds' weight ir teeth like rht, dancing ne of these they were do as they oner to his s so drunk, e held the to himself, ne he took rning come tinuing the
eet arrived ly the first ted several
d. Drake dly, and a eir efforts, her Indian of archery, This disattack was ro wounds, iately sloot assembled assailants,
instructing them to break the arrows shot at them, noting that the savages had but a small store. "At the same time he took the piece which had so unhappily missed fire, aimed at the Indian who had killed the gunner, and who was th. man who had begun the frey, and shot him in the belly. An arrow wound, however severe, the savage would have borne without betraying any indication of pain; but his cries, upon being thas wounded, were so lond and hideous, that his companions were terrified and fled, though many wern then hastening to their assistance. Drake did not pursue them, but hastened to conve: Winter to the ship for speedy help; no help, however, availed, and he died on the second day. The gunner's body, which had been left on shore, was sent for the next day; the savages, meantime, had stripped it, as if for the sake of curiously inspecting it ; the clothes they had laid under the head, and stuck an Linglish arrow in the right eye for mockery. Both bodies were buried in a little island in the harbour."* No farther attempt was made to injure the English, who remained two months in the harbour, but friendly relations were not established. A more serious event was to follow.

One Master Doughtic was suspeeted and accused of something worse than ordinary mutiny or insubordination. It is affirmed in a history of the voyage published under the name of Drake's nephew, that Douglitie had embarked on the expedition for the distinct purpose of overthrowing it for his own aggrandisement, to accomplish whieh he intended to raise a mutiny, and murder the admiral and his most attached followers. Further, it is stated, that Drake was informed of this before he left Plymouth; but that he would not credit "that a person whom he so dearly loved would conceive such evil purposes against him." Doughtie had been put in possession of the Portuguese prize, but had been removed on a charge of peculation, and it is likely that "resentment, whether for the wrongful charge, or the rightful removal, might be rankling in him;" at all events, his later conduct, and mutinous words, left no alternative to Drake but to examine him before a properly constituted court, and he seems to have most reluctantly gone even to this length. $\dagger \mathrm{He}$ was "found guilty by twelve men after the English manner, and suffered accordingly." "The mosi indifferent persons in the fleet," says Southey, "were of opinion that he had acted seditionsly, and that Drake eut him off because of his emulous designs. The question is, how far those designs extended? He could not aspire to the credit of the voyage without devising how to obtain for himself some more conspicnous station in it than that of a gentleman volunteer; if he regarded Drake as a rival, he must have hoped to supplant, or at least to vie with him ; and in no other way could he have vied with him but by making off with one of the ships, and trying his own fortune" (which was afterwards actually accomplished by others). Doughtie was condemned to death. "And he," says a writer, quoted by Hakluyt, " seeing no remedy but patience for himself, desired before his death to receive the communion; which he did at the hands of Master Fleteher, our minister, and our general himself accompanied him in that holy action;

[^93]which being done, and the place of execution made ready, he, having embraced our general, and taken his leave of all the company, with prayer for the queen's majesty and our realm, in quiet sort laid his head to the block, where he ended his life." One account says that after partaking of the communion, Drake and Donghtie dined at the same table together, "as checrfully, in sobriety, as ever in their lives they had done; and taking their leave by drinking to each other, as if some short journey only had been in hand." A provost marshal had made all things ready, and after drinking this funcreal stirrup-cup, Doughtie went to the block. Drake subsequently addressed the whole company, exhorting them to unity and subordination, asking them to prepare reverently for a special celebration of the holy communion on the following Sunday.

And now, having broken up the Portnguese prize on account of its unseaworthiness, and rechristened his own ship, the Pelican, into the (iolden Minde, Drake entered the Straits now named after Magellan, though that navigutor termed them the Patagonian Straits, because he hall found the natives wearing clumsy shoes or sandels: palayon signifying in Portuguese a large, ill-shaped foot. The land surrounding the straits is high and mountainous, and the water generally deep close to the cliffs. "We found the strait," says the first narrator, " to have many turnings, and as it were, shuttings up, as if there were no passage at all." Drake passed through the tortuous strait in seventeen days. Clift, one of the historians of the expedition, whose narrative is preserved in Hakluyt's collection of "Voyages," says of the nenguins there, three thousand of which were killed in less than a day, "We viefualled ourselves with a kind of fowl which is plentiful on that isle (St. George's in the Straits), and whose flesh is not unlike a fat goose here in England. They have no wings. but short pinions, which serve their turn in swimming: their colour is somewhat black, mixed with white spots under their belly, and about their neeks. They wall: so upright that, afne off, a man would take them to be little children. If a man approach anything near them, they run into holes in the ground (which be not very deep) whereof the island is full, so that to take them we had staves with hooks fast to the end, wherewith some of our men pulled them out, and others being ready with cudgels did knock them on the head, for they bite so cruelly with their erooked bills, that none of us were able to handle them alive."

Drake's vessels, separated by a gale, were driven hither and thither. One of them, the Marigold, must have foundered, as she was never again heard of. The two remaining ships sought shelter in a dangerous rocky bay, from which the Golden Himle was driven to sea, her cable having parted. The other vessel, under Captain Winter's command, regained the straits, and "anchoring there in an open bay, made great fires on the shore, that if Drake should put into the strait also, he might discover them." Winter proceeded later up the straits, and anchored in a sound, which he named the Port of IIealth, because his men, who had been "very sick with long watehing, wet, cold, and evil diet," soon recovered on the nourishing shell-fish found there. He, after waiting some time, and despairing of regaining Drake's company, gave over the voyage, and set sail for England, "where he arrived with the reproach of having abandoned his commander."

Drake was now reduced to his own vessel, the Golden Mimle, which was obliged
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vorthiness, atered the ?atagonian : purtagou ts is high he strait," is if there teen lays. Hakluyt's vere killed entiful on roose here wimming: bout their children. (which be aves with acrs being ir crooked of them, remaining as driven command,
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Winter
Port of cold, and waiting age, aul oned his ; obliged
to seek shelter on the coast of Terra del Fuego. The winds again foreed him from his anchorage, and his shallop, with eight men on board, and provisions for only one day, was separated from him. The fate of these poor fellows was tragical. They regainel the straits, where they eaught and salted a quantity of penguins, and then coasted up South Ameriea to the Plata. Six of them landed, and while searehing for food in the forests, encountered a party of Indians, who wounded all of them with their arrows, and secured four, pursuing the others to the boat. These latter reached the two men in charge, but before they could put off, all were wounded by the natives. They, however, succecdel in reaehing an island some distance from the mainland, where two of them died from the injuries received, and the boat was wrecked and beaten to pieces on the

rocks. The remaining two stopped on the island eight weeks, living on shell-fish and a fruit resembling an orange, but could find no water. They at length ventured to the mainland on a large plank some ten feet in length, whieh they propelled with paddles; the passage occupied three days. "On coming to land," says Carter, the only survivor, "we found a rivulet of sweet water; when William Piteher, my only comfort and companion (although I endeavoured to dissuade him) overdrank himself, and to my unspeakable grief, died within half an hour." Carter hinself fell into the hands of some Indians, who took pity on him, and conducted him to a Portugueso settlement. Nine years clapsed before he was alle to regain his own country.

Meantime Drake was driven so far to the southward, that at length he "fell in with the uttermost part of the land towards the South Pole," or in other words, reached Caje Horn. The storm had lasted with little intermission for over seven weeks. "Drake went ashore, and, sailor-like, leaning over a promontory, as far as he safely could, came back
and told his people how that he had been farther south than any man living." At last the wiad was favourable, and he coasted northward, along the American shore, till he reached the island of Mocha, where the Indians appeared at first to be friendly, and brought off potatoes, roots, and two fat sheep, for which they received recompense. But on landing for the purpose of watering the ship, the natives shot at them, wounding every one of twelve men, and Drake himcelf under the right eye. In this case no attempt was made at retaliation. The Indians doubtless took them for Spaniards. Drake, continuing his voyage, fell in with an Indian fishing from a canoe, who was made to understand their want of provisions, and was sent ashore with presents. This brought off a number of natives with supplies of poultry, hogs, and fryits, while Felipe, one of them who spoke Spanish, informed Drake that they had pised the port of Valparaisothen an insignificant settlement of less than a dozen Spanish families-where a large ship was lying at anchor. Felipe piloted them thither, and they soon discovered the ship, with a meagre crew of eight Spaniards and four negroes on board. So little was an enemy expected, that as Drake's vessel approached, it was saluted with beat of d: 'm, and a jar of Chili wine made ready for an hospitable reception. But Drake and h.s men wanted something more than bumpers of wine, and soon boarded the vessel, one of the men striking down the first Spaniard he met, and exclaiming, "Abaxo perro!" (Down, dog!) Another of the crew leaped overboard and swam ashore to give an alarm to the town ; the rest were soon secured under hatches. The inhabitants of the town fled incontinently, but the spoils secured there were small. The chapel was rifted of its altar-cloth, silver chalice, and other articles, which were handed over to Drake's chaplain; quantities of wine and other provisions were secured. The crew of the prize, with the exception of the Greek pilot, were set ashore, and Drake left with his new acquisition, which when examined at sea was found to contain one thousand seven hundred and seventy jars of wine, sixty thousand pieces of gold, some pearls, and other articles of value. The Indian who had guided them to this piece of good fortune, was liberally rewarded.

At a place called Tarapaca, whither they had gone to water the ship, they found a Spaniard lying asleep, and keeping very bad guard over thirteen bars of silver, worth four thousand ducats. Drake determined to take care of it for him. At a short distance off, they encountered another, who, with an Indian, was driving eight llamas, each carrying a hundredweight of silver. It is needless to say that the llamas were conveyed on board, plus the silver. At Ariea two ships were found at anchor, one of which yielded forty hars of silver, and the other a ecasiderable quantity of wine. But these were as trifles to that which followed.

Drake had pursued a leisurely course, but in spite of this fact, no intelligence of the pirate's approach had reached Lima. The term "pirate" is used advisedly, for whatever the gain to geographical seience afforded by his voyages, their chief aim was spoil, and it mattered nothing whether England was at war with the vietims of his prowess or not. $\therefore$ ferv leagues off Callao harbour (the port of Lima), Drake boarded a Portuguese vessel: the owner agreed to pilot him into Callao, provided his cargo was left lim. They arrived at uightfall, "sailing in between all the ships that lay there, seventeen in number," most of which had their sails ashore, for the Spaniards had had, as yet, no.

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 er, worth t distance carrying on board, ded forty as triflesgence of whatever ppuil, and owess or oarded a was left seventeen yet, no
enemies in those waters. They rifled the ships of thir valuables, and these included a large quantity of silk and linen, and one chest of silver reales. But they heard that which made their ears tingle, and inflamed their desires for gain ; the Cacafiuego, a great treasure ship, had sailed only a few days before for a neighbouring port. Drake immediately cut the cables of the ships at Lima, and let them drive, that they might not pursue him. "While he was thus employed, a vessel from Panama, laden with Spanish goods, entered the harbour, and anchored close by the Golden Minde. A boat came from the shore to search it; but because it was night, they deferred the scarch till the morning, and only sent a man on board. The boat then came alongside Drake's vessel, and asked what ship it was. A Spanish prisoner answered, as he was ordered, that it was Miguel Angel's, from Chili. Satisfied with this, the officer in the boat sent a man to board it; but he, when on the point of entering, perceived one of the large guns, and retreated in the boat with all celerity, because no vessels that frequented that port, and navigated those scas, carried great shot." The erew of the Panama ship took alarm when they observed the rapid flight of the man, and put to sea. The IIinde followed her, and the Spanish crew abandoned their ship, and escaped ashore in their boat. The alarm had now been given in Lima, and the viceroy dispatched two vessels in pursuit, each having two hundred men on board, but no artillery. The Spanish commander, however, showed no desire to tackle Drake, and he escaped, taking shortly afterwards three tolcrable prizes, one of which yielded forty bars of silver, eighty pounds' weight of gold, and a golden crucifix, "set with goodly great emeralds." One of the men having secreted two plates of gold from this prize, and denied the theft, was immediately hanged.

But it was the Cacafuego that Drake wanted, and after crossing the line he promised to give his own chain of goid to the first man who should descry her. On St. David's Day, the coveted prize was discovered from the top, by a namesake of the commander, one Jolm Drake, All sail was set, but an easy capture was before them; for the Spanish captain, not dreaming of enemies in those latitudes, slackened sail, in order to find out what ship she was. When they had approached near enough, Drake hailed them to strike, which being refused, "with a great piece le shot her mast everboard, and having wounded the master with an arrow, the ship yielded." Having taken possession, the vessels sailed in company far out to sea, when they stopped and lay by. She proved a prize indeed: gold and silver in coin and bars, jewels and precious stones amounting to three hundred and sixty thousand pieces of gold were taken from her. The silver alone amounted to a value in our money of $£ 212,000$. It is stated that Drake called for the register of the treasure on board, and wrote a receipt for the amount! The ship was dismissed, and Drake gave the captain a letter of safe conduct, in case she should fall in with his consorts. This, as we know, was impossible.

Drake's plain course now was to make his way home, and he wisely argued that it would be unsafe to attempt the voyage by the route he had come, as the Spaniards would surely attack him in full force, the whole coast of Chili and Peru being aroused to action. He conceived the bold notion of rounding North America: in other worls, he proposed to make that passage which has been the great dream of Aretic explorers, and which has only, as we shall hereafter see, been once made (and that in a very partial sense) by Franklin and

M'Clure. His company agreed to his views : firstly to refit, water, and provision the ship in some convenient bay; " thenceforward," says one of them, "to hasten on our intended journey for the discovery of the said passage, through which we might with joy return to our longed homes." They sailed for Nicaragua, near the mainland of which they found a small island with a suitable bay, where they obtained wood, water, and fish. A small prize was taken while there, having on board a cargo of sarsaparilla, which they disdained, and butter and honey, which they appropriated. Drake now sailed northward, and most

mbake's arrifal at ternatr.
undoubtedly reached the grand bay of San Francisco. Californian authorities concede this. The "Drake's Bay" of the charts is an open roadstead, and does not answer the descriptions given of the great navigator's visit. He had peaceful interviews with the natives, and took possession, in the fashion of those days, of the country, setting up a monument of the queen's "right and title to the same, namely, a plate nailed upon a fair great post, whereupon was engraven her Majesty's name, the day and year of our arrival there, together with her highness's picture and arms in a picee of sixpence (!) of current English money under the plate, where under also was written the name of our general." History does not tell us the fate of that sixpence, but the title, New Albion, bestowed on the country by Drake, remained on the maps half way into this century, or just before the discovery of gold in California. The natives regarded the English with superstitious awe,
se ship itended turn to found 1 small dained, d most
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and could not be prevented from offering them saerifiees, " with lamentable weeping, seratehing, and tearing the flesh from their faces with their nails, whereof issued abundance of blood. "But we used," says the narrator quoted by Hakluyt, "signs to them of disliking this, and stayed their hands from force, and directed them upwards to the living God, whom only they ought to worship." After remaining there five weeks, Drake took his departure, and the natives watched the ships sadly as they sailed, and kept fires burning on the hill-tops as long as they continued in sight. "Good store of seals and birds" were taken from the Farralone Islands. Many an egg has the writer eaten, laid by the descendants of those very birds: they are supplied in quantities to the San Franciseo markets. Drake's attempt at the northern passage was now abandoned.

Sixty-eight days was Drake's ship-containing one of the most valuable freights ever held in one bottom-in the open sea, during which time no land was sighted; at the end of this period the Pelew, Philippine, and Molucea Islands were suceessively reached. At Ternate, Drake sent a velvet cloak as a present to the king, requesting provisions, and that he might be allowed to trade for spices. The king was amiable and well disposed; he sent before him "four great and large canoes, in every one whereof were certain of his greatest states that were about him, attired in white lawn of cloth of Calieut, having over their heads, from the one end of the canoe to the other, a covering of thin perfumed mats, borne up with a frame made of reeds for the same use, under which every one did sit in his order, according to his dignity, to keep him from the heat of the sun. * * * The rest were soldiers which stood in comely order, round about on both sides; without whom sat the rowers in certain galleries, which being three on a side all along the eanoes, did lie off from the side thereof three or four yards, one being orderly builded lower than another, in every of which galleries were fourseore rowers. These canoes were furnished with warlike munitions, every man, for the most part, having his sword and target, with his dagger, besides other weapons, as lances, calivers, darts, bows and arrows; also every canoe had a small cast-base (or cannon) mounted at the least one full yard upon a stock set upright." These canoes or galleys were rowed about the ship, those on board doing homage as they passed. The king soon arrived in state, and was received " with a salute of great guns, with trumpets sounding, and such politio display of state and strength as Drake knew it was advisable to exhibit." Many presents were made to the king, who in return sent off provisions of riee, fowls, fruits, sugar-cane, and "imperfect and liquid sugar" (presumably molasses). Next day there was a grand reception ashore; the king, novered with gold and jewels, under a rich canopy embossed with gold, professing great friendship. The faet was that his own father had been assassinated by the Portuguese, and he himself had besieged and taken their Fort St. Paul's, and compelled them to leave it. He was, doubtless, anxious for some alliance which might strengthen his hands against the Portuguese. Drake, however. had no commission, nor desire at that time to engage his country to any such treaty; his principal object now was to get home safely with his treasure. He, however, suceessfully traded for a quantity of cloves and provisions.

Off Celebes, the IIinde beeame entangled among the shoals, and while running under full sail, suddeuly struck on a roek, where she stuck fast. Boats were got out to see whether
an anchor might not be employed to draw the ship off, but the water all round was very deep, no bottom being found. Three tons of cloves, eight guns, and certain stores were thrown overboard, but to no purpose. Fuller says quaintly, that they "throw overboard as much wealth as would break the heart of a miser to think on 't; with much sugar, and packs of spices, making a caudle of the sea round about. Then they betook themselves to their prayers, the best lever at such a dead lift indeed, and it pleased God that the wind, formerly their mortal enemy, became their friend."* To the joy of all, the IIinde glided off the roeks, and almost uninjured. On the way home they visited Barateva, Java, the Cape, and Sierra Leone, being singularly fortunate in avoiding the Portugueso and Spanish ships. The Hiiule arrived safely at Plymouth on September 20th, 1580, having been nearly three years on her eventful voyage. Drake was reeeived with great honour, and was knighted by the queen. She gave orders that his little ship should be laid up at Deptford, and there carefully preserved as a monument of the most remarkable voyage yet made. Elizabeth honoured Drake by banqueting on board, and his fame spread everywhere through the kingdom. The boys of Westminster School set up some Latin verses on the mainmast, of which Southey gives the following free translation-

> "On Herculcs' Pillars, Drako, thou may'st plus ultra writo full well, And say, I will in greatness that great Hercules oxcel."

## And again-

> "Sir Drako, whom well the world's end knows, which thou didst compass round, And whom both poles of heaven once saw which north and south do bound, The stars above will make theo known if men hero silent wero; The sun himself cannot forget his fellow-traveller."

Drake's series of vietories over the Spaniards, and the repulse which occurred just before his death are details of history which would fill a volume. He received a sailor's funeral at Puerto Bello, his body being committed to the deep in a leaden coff:r, with the solemn service of the English Church, rendered more impressive by vollers of musketry, and the booming of guns from all the fleet. A poet of the day says-
> "Tho waves became his winding sheet, tho waters wero his tomb; But for his fame the occan sea was not sufficient room."

No single name in naval history has ever attained the celebrity aequired by Drake. The Spaniards, who called him a dragon, believed that he had dealings with the devil; "that notion," says Southey, "prevented them from feeling any mortification at his successes, * * * and it enhanced their exultation over the failure of his last expedition, which they considered as the triumph of their religion over neresy and magie." The common people in England itself, more especially in the wostern counties, believed any quantity of fables coneerning him, some of them verging on childishness. He had only to cast a chip in the water when it would become a fine vessel. "It was not by his skill as an engineer, and the munificent expenditure of the wealth which he had so daringly obtained, that Drake supplied Plymouth with fresh water; but by mounting his horse,

[^94]riding about Dartmoor till he came to a spring sufficiently copious for his design, then wheeling round, pronouncing some magical words, and galloping back into the town, with the stream in full flow, and forming its own channel at the horse's heels." Ono of the popular stories regarding him is briefly as follows. When Sir Franeis left on one of his long voyages, he told his wife that should he not return within a certain number of years she might conclude that he was dead, and might, if she so chose, wed again. One version places the time at seven, and another at ten years. During these long years the excellent lady remained true to her lord, but at the end of the term accepted an offer. "One of Drake's ministering spirits, whose charge it was to convey to him any intelligence in which he was nearly concerned, brought him the tidings. Immediately he loaded one of his great guns, and fired it right through the globe on one side, and up on the other, with so true an aim that it made its way into the church, between the two parties most concerned, just as the marriage service was 'beginning. 'It comes from Drake!' eried the wife to the now unbrided bridegroom; 'he is alive! and there must be neither troth nor ring between thee and me.'"

Drake is deseribed as of low stature, but well set, and of an a mirable presence. His ehest was broad, his hair nut-brown, his beard hindsome and full, his head "remarkably round," his eyes large and clear, his countenance fresh, cheerful and engaging. "It has been said of him that he was a willing hearer of every man's opinion, but commonly a follower of his own," which, as a rule, was really sure to be judicious. He had a quiek temper, and onee offended, was "hard to be reconeiled," but his friendships were firm ; he was ambitious to the last degree, and "the vanity which usually aceompanies that sin laid him open to flattery." He was affable with his men, who idolised him as the grand commander and skilful seaman that he most undoubtedly was.

In spite of the rich prizes so often taken, a competent authority says: "The expeditions undertaken, in Elizabeth's reign against the Spaniards are said to have produced no advantage to England in any degree commensurate with the cost of money and expense of life with which they were performed." But we must never forget the wonderful development of the navy which resulted; the splendid training acquired by our sailors, and the grand gains to geographical science.

The opening of colonisation and trade with America-so far as England is concernedis due to Sir Humphrey Gilbert, and his step-brother, Sir Walter Raleigh. From their comparatively insiguificant attempts at settling parts of that vast northern continent what grand results have acerued! The acorn has become a mighty, wide-spreading oak, sheltering the representatives of every nationality.

When Sir Humphrey Gilbert proposed to Queen Elizabeth the settlement of a colony in the New World, she immediately assented, and granted him letiers patent as comprehensive and wide-spreading as ever issued by papal sanction. She accorded free liberty to him, his heirs and assigns for ever, to discover and take possession of any heathen and savage lands not being actually possessed by any Christian prince or people; such countries, and all towns, castles or villages, to be holden by them of the crown, payment of a fifth of all the gold and silver ore diseovered being required by the latter. The privileges seemed so great that "very many gentlemen of good estimation drew unto Sir

Humphrey to associate with him in so commendable an euterprise." But divisions and feuds arose, and Gilbert went to sea only to become involved in a "dangerons sea-fight, in which many of his company were slain, aud his ships wero battered and disabled." He was compelled to put back "with the loss of a tall ship." The records of this encounter are meagre, but the disaster retarded for the time his attempt at colonisation, besides impairing lis estate.

Sir Itumphrey's patent was only for six years, muless he succeeded in his project, and in 1 b 83 he found means to equip a second expedition, to which laleigh contributed a bark of 200 tons, named after him, the little fleet numbering in all five vessels. The queen had always favoured Gilbert, and be"ne he departed on this voyage, sent him a golden anchor with a large pearl on it, by the hands of haleigh. In the letter accompanying it, Raleigh wrote, " Brother, I have sent you a token from her Majesty-an anehor guided by a lady, as you see. And, further, her highness willed me to send you word, that she wished you as great a good hap and safety to your ship, as if she herself wero there in person, desiring you to have eare of yourself as of that which she tendereth; and, therefore, for her sake you must provide for it accordingly. Further she commandeth that you leave your pieture with me." Elizabeth's direct interest in the rapidly increasing maritime and commercial interests of the day was very apparent in all her actions.

Burk Ralcigh was the largest vessel of the expedition, two of the others being of forty, and one of twenty tons only. The number of those who embarked was about 200 , and the list included carpenters, shipwrights, masons, and smiths; also " mineral men and refiners." It is admitted that among them there were many "who had been taken as pirates in the narrow seas, instead of being hanged according to their deserts." "For solace of our people," says one of the captains under Gilbert, "and allurement of the savages, we were provided of music in good variety, not omitting the least toys, as morris-dancers, hobby-horse, and May-like conceits to delight the savage people, whom we intended to win by all fair means possible." "ane period of starting being somewhat late in the season, it was determined to sail first for Newfoundland instead of Cape Florida, as at the former Gilbert knew that he could obtain abundant supplies from the numerous ships employed in the abundant cod-fisheries. The voyage was to commence in disaster. They sailed on June 11th, and two days later the men of the Bark Raleigh hailed their companions with the information that their captain and many on board were grievously sick. She left them that night and put back to Plymouth, where, it is stated, she arrived with a number of the crew prostrated by a contagious disease. Some mystery attaches to this defeetion; "the others proceeded on their way, not a little grieved with the loss of the most puissant ship in their fleet." "Two of the fleet parted company in a fog; one of them was found in the Bay of Conception, her men in new apparel and particularly well provided, the secret being that they had boarded an unfortunate Newfoundland ship on the way, and had pretty well rifled it, not even stopping at torture where the wretehed sailors had oljeeted to be stripped of their possessions. The other vessel was found lying off the harbour of St. John's, where at first the English merchants objeeted to Gilbert's entry, till he assured them that he came with a commission from her Majesty, and had no ill-intent. On the way in, his vessel struck on a rock, whereupon the other captains sent to the rescue,
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being of out 260, eral men en taken " "For t of the toys, as whom we what late lorida, as numerous disaster. iled their rievously e arrived attaches the loss cog ; one arly well $p$ on the d sailors off the ntry, till l-intent.
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THE DEATH OF SIR HUMPHREY GILBERT.
saved the ship, and fired a salute in his henour. His first act was to tax all the ships for his own supply; the Portuguese, in particular, contributed liberally, so that the crews were "presentel, above their allowanees, with wine3, marmalades, most fine rusk or biscuit, sweet oil, and sundry delicacies." Then the merchants and masters were assembled to hear his commission read, and possession of the harbour and country for 200 leagues every way was taken in the name of the queen. $\Lambda$ wooden pillar was ereeted on the spot, and the arms of l'ngland, engraved on lead, were affixed. The lands lying by the water side were granted to certain of the adventurers and merchants, they covenanting to pay rent and serviee to Gilbert, his heirs and assigns for ever.

Some of the before-mentioned pirates of the expedition gave Sir Humphrey a censiderable amount of trouble while at St. John's, some deserting, and others plotting to steal away the shipping by night. A number of them stole a ship laden with fish, setting the crew on shore. When ready to sail, he found that there were not sufficient hands for all his vessels, and the Swallow was left for the purpose of transporting home a number of the siek. He selected for himself the smallest of his fleet, the Squirrel, described as a "frigate" of ten tons, as most suitable for exploring the coasts. But that which made him of good heart was a sample of silver ore which one of his miners had discovered; "he doubted not to borrow $£ 10,000$ of the queen, for lis next voyage, upon the credit of this mine."

For eight days they followed the coast towards Cape Breton, at the end of which time the wind rose, bringing thick fog and rain, so that they could not see a cable's length before them. They were driven among shoals and breakers, and their largest ship was wreeked in a moment. "They in the other vessel," says Hayes,* "saw her strike, and her stern presently beaten to pieees; whereupon the frigate in which was the general, and the Gollen Hinde cast about, even for our lives, into the wind's eye, because that way carried us to the seaward. Making out from this danger, we sounded one while seven fathoms, then five, then four, and less; again deeper, immediately four fathom, then but three, the sea going mightily and high. At last we reeovered (God be thanked $l$ ) in some despair to sea room enough. All that day, and part of the night, we beat up and down as near unto the wreck as was possible, but all in vain. This was a heavy and grievous event to lose our chief ship, freighted with great provision; but worse was the loss of our men, to the number of almost a hundred souls; amongst whom was drowned a learned man, an Hungarian, born in the city of Buda, called thereof Budæus, who out of piety and zeal to good attempts, adventured in this action, minding to record in the Latin tongue, the gests and things worthy of remembrance happening in this diseovery to the honour of our nation. Here, also, perished our Saxon refiner, and discoverer of inestimable riches. Maurice Brown, the captain, when advised to shift for his life in the pinnace, refused to quit the ship, lest it should be thought to have been lost through his default. With this mind he mounted upon the highest deck, where he attended imminent death and unavoidable,-how long, I leave it to God, who withdraweth not his comfort from his servants at such a time." Of the company only ten were saved in a small pinnace which was piloted to Newfoundland.

[^95]ships for ews were r biscuit, mbled to ues every spot, and vater side pay rent y a conotting to h, setting int hands a number ibed as a ich made scovered ; credit of
hieh time 's length slip was trike, and : general, that way aile seven then but in some nd down grievous ss of our a learned of piety he Latin $y$ to the cstimable pinnace, default. ht death ort from pinnace

Meantime, on board the remaining vessels, there was muels suffering, and Sir Humphrey was obliged to yield to the general desire, and sail for England, having "compussion upon his poor men, in whom he saw no lack of good will, but of means fit to perform the action they eume for." He promised his subordinate offieers to set them forth "royally the next spring," if God should spare them. But it was not so to be.

Sir Humphrey Gilbert was entreated, when one day he had come on board the Ilinde, to remain there, instead of risking himself "in the frigate, which was overeharged with nettage, and small artillery," to which he answered, "I will not forsake my little company going homewards, with whom I have passed so many storms and perils." A short time afterwards, while experieneing "foul weather and terrible seas, breaking short and high, pyramidwise, men which all their life had oceupied the sea never saw it more outrageous," the frigate was nearly engulfed, but recovered. Gilbert, sitting abaft with a book in his hand, cried out to the crew of the Hinde in the following nolle words, so often since recorded in poetry and prose: "Courage, my lads !. We are as near to heaven by sea as by land!" That same night the lights of the little vessel were suddenly missel, and Gilbert and his gallant men were engulfed in the depths for ever. Of such men we may appropriately say with the poet Campbell-

> "The deck it was their field of fame, And Ocean was their grave."

The Iliude reached Falmouth in safety, though sadly shattered and torn.
But the spirit of enterprise then prevailing was not to be casily quashed, and only a few months after the failure of poor Gilbert's enterprise, we find Sir Walter Raleigh in the field. He obtained letters of patent similar to those before mentioned, and was aided by several persons of wealth, particularly Sir Richard Greenville and Mr. William Saunderson. Two barks, under Captains Amadas and Barlow, were sent to a part of the American continent north of the Gulf of Florida, and after skirting the coast for one hundred and twenty miles, a suitable haven was found, the land round which was immediately taken for the queen with the usual formalities. After sundry minor explorations they returned to England, where they gave a glowing account of the country. It was "so full of grapes that the very beating and surge of the sea overflowed them." The vegetation was so rich and abundant that one of the captains thought that "in all the world the like abundance is not to be found," while the woods were full of deer and smaller game. The cedars were "tho highest and reddest in the world," while among smaller trees was that bearing "the rind of black cinnamon." The inhabitants were kind and gentle, and void of treason, "handsome and goodly people in their behaviour, as mamnerly and civil as any of Europe." It is true that "they had a mortal malice against a certain neighbouring nation; that their wars were very cruel and bloody, and that by reason thereof, and of civil dissensions which had happened of late years amongst them, the peorle were morvellously wasted, and in some places the country left desolate." These little discrepancies were passed over, and Elizabeth was so well pleased with the accounts brought home, that she named the country Virginia; not merely because it was discovered in the reign of a virgin queen, but " because it did still seem to retain the virgin purity and plenty
of the first creation, and the people their primitive innocence." These happy natives were described as living after the manner of the golden age; as free from toil, spending their time in fishing, fowling, and hunting, and gathering the fruits of the carth, which ripened without their care. They had no boundaries to their lands, nor individual property in eattle, but shared and shared alike. All this, which was rather too grood to be absolutely true, seems to have been implicitly believed. The letters of patent, however, granted to poor Sir Humphrey Gilbert, and subsequently to Sir Walter Raleigh, mark a most important epoch in the world's history, for from those sinall starting-points date the English efforts at colonising America-the great New World of the past, the present, and the future. Where then a few naked savages lurked and lazed, fished and hunted, forty millions of English-speaking people now dwell, whose interests on and about the sea, rising in importance every day, are seareely excelled by those of any nation on the globe, except our own. Some points in connection with this colonisation, bearing as they do on the history of the sea and maritime affairs, will be treated in the succeeding volume.

The reader, who while living "at home in ease," has voyaged in spirit with the writer over so much of the globe's watery surface, visiting its most distant shores, will not be one of those who under-rate
"The dangers of the scas."
Nor will current events allow us to forget them. "The many voices" of ocean-as Michelet puts it-its murmur and its menace, its thunder and its roar, its wail, its sigh, rise frem the watery graves of six hundred brave men, who but a few weeks ago formed the bulk of two crews, the one of a noble English frigate, the other a splendid German ironelad, both lost within sight of our own shores. Early in this volume wooden walls were compared with armoured vessels, and we are painfully reminded by the loss of both the Furylice and Grosser Kurfiist how unsettled is the question in its practical bearings. Its discussion mus', also be resumed as a part of the history of ships and shipping in the ensuing volume. Till then, kind reader, adieu !

END OF VOLUME 1.
py natives were ading their time ripened without $y$ in eattle, but tely true, seems ed to poor Sir rortant epoch in rts at colonising Where then a inglish-speaking e every day, are Some points in a and maritime
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an-as Michelet sigh, rise from red the bulk of a ironclad, both were compared h the Furydice Its discussion msuing volume.



[^0]:    - W. S. Lindsay, "History of Merchant Shipping," \&e.

[^1]:    * Southey, in his "Life of Nelson," says nine.
    † "Songs for Sailors."

[^2]:    * "Annals of the Wars of the Nineteenth C'entury," by the Hon. Sir Edward Cust, D.C.L., \&e.

[^3]:    * Brialmont, "Etudo sur la Défense des Etats et sur la Fortification."

[^4]:    * The Turks had at Sinope seven frigates, one sloop, two corvettes, and two transports. The Russians were stronger, but this did not determine the battle; their suceess was won beeauso they wero well supplied with large shells and shell-guns, while the Turks had nothing more effective than $\mathbf{2 t}$-ponnders. Their wooden ressels were speedily on fire, and the Russians won in easy snecess. Shells were no novelty, yet a great sea-fight had never beforo been, as it was then, won by their exelusive ageney.
    + The Hon. S. J. G. Calthorpe, "Letters from Head-quarters."
    $\pm$ The seven Russian ships sunk at the entrance of the harbour of Sebastopol were of no small size or value, and they were scuttled in a hurry so great that they had all their guns, ammunition, and stores on board, and their rigging standing. They comprised five line-of-battle ships, two of them eighty, two eightyfour, and one 120 guns, and two frigates of forty guns; a total of 528 guns. Afterwards it becamo a common report that vessels had been disabled and sunk in the harbour. On the night of the 5 th of September, just before the evacuation of the town, two largo Russian men-of-war caught firo and burned fiercely, illumining the harbour and town, and eausing great excitement, as an omen of coming doom. The night of the memorablo 8th, when the Russians gave up all further idea of resistance, and left tho town to take care of itself, witnessed tho sinking of the remainder of the Black sea fleet. So far, therefore, the presence of our fleet had a pronounced moral effect, without involving further loss of life.

[^5]:    * Cust, "Annals of the Wars of the Fighteenth Century:"
    $\dagger$ Drinkwater, "Siege of Gibraltar."

[^6]:    * Some have even gone so far as to consider Louis Napoleon the inventor of iron-plated and armoured vessels. This is absurd. The ancients knew the use of plates of iron or brass for covering ships of war and battering-rams. One of Hiero's greatest galleys was coverel that way. That it must come to this sooner or later was the published idea of many, both in this eountry and in France. The Emperor's sagacity, however, was always fully alive to quastions of the kind.

[^7]:    * Tho report of the Chicf Engincer and Naval Constructor of the Confederate Service, in regard to the eonversion of the Merrimac into an armoured vessel, distinctly stated that from the effects of fire she was "useless for any other purpose, without ineurring a very heary expense for rebuilding."
    $\dagger$ The official reports state that she was plated, many popular accounts averring that she was only cevered with "railroad iron." The information presented here is drawn from the fellowing sourecs:-"The Rebellion Record," a voluminous work, edited by Frank Moore, of New York, and which contains all the leading official war-doeuments, both of the Federals and Confederates; the statement of Mr. A. B. Smith, pilot of che Cumberland, one of tho survivors of the fight; the Baltimore Ameriaan, and the Norfolk Day Book, both newspapers pullished near the seenc of action. There is great unanimity in the accounts published on both sides.

[^8]:    * The pilot of the Cumberland.

[^9]:    * "Finally, after abot threc-fouths of an hour of the most severe fighting, our vessel sank, the Stars and Stripes still waving. That flug was finally submerged; but after the hull grounded on the sands, fifty-four feet below the surface of the water, our pennant was still flying from the top-mast above the waves." (The Pilot of tho Cumberland's Narvative.)

[^10]:    * The original Monitor, from which that elass of vessel took its name.

[^11]:    * Account of ryewitnesses furnished to the Baltimore American.

[^12]:    * Berlin correspondence of the Times, 31st July, 1877.

[^13]:    *The " sinkers" were usunlly allowed at the rate of 112 lb . for each 1,000 fathoms.

[^14]:    * In their popular works on the sea, "Tho Ocean Wurld," and "The World of the Sea."

[^15]:    *This is an apparatus consisting of a number of india-rubber bands suspended from tho mast-head, during dredging operations, which indicates, by its expansion and contraction, how the dredge is passing over the inequalities of the bottom.

[^16]:    * "Log Letters from tho Challengcr:"

[^17]:    * All readers will renember Peter Simple, and how he tells us that "It has been from timo immemorial the heathenish custom to sacrifiec the greatest fool of the family to the prosperity and naval superiority of the country," and that ho personally "was selected by general acelamation!" Marryat knew very well, however, that it was "younger sons," and not by any means necessarily the greatest fools of the family who went to sea.
    + William Pitt, long Master-Attendant at Jamaica Dockyard, who died at Malta, in 1840. The song is often wrongly attributed to Dibdin, or Tom Hood tho elder.
    $\ddagger$ Alphonso Esquiros, "English Seamen and Divers."

[^18]:    * Robert Mindry, "Chips from the Log of an Old Salt."

[^19]:    * The corditions for entering a Government training-ship for tho servico involve, 1st, tho consent of parents. or proper guardians; 2nd, tho candidato must sign to servo ten years commencing from the age of eighteen. A bounty of $£ 6$ is paid to provide outfit, and he receives sixpenco a day. At the age of eighteen he reecives ono shilling and a penny per day-tho same as an ordinary seaman. Each eandidate passes a medieal examination, and must be from fifteen to sixteen and a half years of age. The standard height is five feet for sixteen years. old-rather a low averago.

[^20]:    * In "Singleton Fontenoy, R.N."

[^21]:    * A naval friend kindly informs me that the Malta holystones are excellent, natural lara being ab:andant.

    7

[^22]:    * Vide Dana's "Seaman's Manual." $\quad$ A form of heavy pile silk.

[^23]:    * "Medical Life in the Nary;" by W. Stables, M.D., \&c.

[^24]:    " Praise the sea, but keep on land."

[^25]:     Plymouth had furnis', at more than one-(hird of tho crew.
    
     ocentrod.

[^26]:    * One man testified that he had heard Captain Burgoyne's inquiries as to how much the ship was heeling over, the answers given being respectively, " 18 ," " 23, " " 25 degrees." The movement was never checked, and almost the moment after she had reached 25 degrees, she was keel-uppermost, and about to make that terrific plunge to the bettem.
    + Mr. May's statement at the court-martial was in part as follows:-"Shortly after 0.15 a.m. on the 7th inst., being in my cabin, which was on the starboard or lee side of the ship, I was disturbed in my slecp by the noise of some marines. Feeling the ship uneasy, I dressed myself, and took the lantern to look at the guns in the turrets. . . . . It was but a very short time-from fifteen to $t$ venty minutes-past midnight. I then went to the after-turret. The guns were all right. Immediately I got inside the turret I felt the ship heel steadily over, decper and deeper, and a heavy sea struck her on the weather-side. The water flowed into the turret as I got through the pointing-hole on the top, and I found mysclf overboard; I struck out, and succeeded in reaching the steam-pinnace, which was bottom up, on which were Captain Burgoyne and five or six others. I saw the ship turn bottom-up, and sink stern first, the last I saw of her being her bows. The whole time of her turning over to sinking was but from five to ten minutes, if so much. Shortly after, I saw the launch drifting close to us who were on the pinnace; she was but a few yards from us; I called out, 'Jump, men-it is your last chance!' I jumped, and succeeded, with three others, in reaching her. I do not know for certain whether Captain Burgoyne jumped or not. I was under the impression he did ; but the others in the launch do not think so. At any rate, he never reached her. When on the pinnace, a large ship, which I believe to have been the Inconstant, passed us fifty yards to leeward. We all hailed her; but, I suppose, the howling of the wind and sea prevented their hearing us."

[^27]:    *The lato Admiral Sherard Osborn, in a letter to the Times, spid, "The desiro of our Admiralty to make all their fighting-ships eruiso under canvas, as well as steam, induced poor Captain Coles to go a step further, and to mako a ship with a low free board a sailing-ship." This was agrinst his judgment, howover.

[^28]:    * Admiral Milne, in his despatch dated from II.M.S. Lord Warden, off Finisterre, September 7th, 1870, stated that, at a little before 1 a.m., the Captain was astern of his ship, "apparently elosing under steam." Tho signal "open order" was made, and at onee answered; and at 1.15 a.m. she was on tho Lord Warden's (the flag-ship's) lee quarter, about six points abaft the beam. From that time until about 1.30 a.m. I constantly watched the ship. . . . She was heeling over a good deal to starboard," \&e. We have seen that she went down shortly after the midnight watch had been called.

[^29]:    * A "Narrative of the Loss of the Royal George," published at Portsea, and written by a gentleman who was on the island at the time.
    $\dagger$ The exact number was never known. There were 250 women on board, a large proportion of whom were the wives and relatives of the sailors; and there wero also a number of ehildren, most of whom beionged to Portsmouth. Besides these, there were a number of Jew and other traders on board.

[^30]:    * Mr. Ingram, whose narrative, printed in the little work before quoted, bears all the impress of truth.

[^31]:    * The sentence of the court-martial blamed Captain Dawkins, his navigating-lieutenant, and the ship's carpenter, for not endeavouring to stop "tho breach from the outside with the means at their command, such as hammocks and sails;" for not having "ordered Captain Hickley, of H.M.S. Iron Duke, to tow H.M.S. Vanguard into shallow water," such being available at a short distance; the chief-engineer for not "applying the means at his command to relieve the ship of water; the navigating-lieutenant "for neglect of duty in not pointing out to his captain that there was shoaler water within a short distance;" and the carpenter in "not taking immediato steps for sounding the compartments, and reporting from time to timo the progress of tho water." A lamentable showing, truly, if all these points were neglected! So far as tho commander is concerned, his successful efforts to save the lives of all on board (not knowing when his ship might go down, and with the remembrance of the sudden loss of the Captain full in view) spcak much in his favour, and in extenuation of much that would otherwise appear culpable neglect.

[^32]:    * Mr. Ward Munt said publiely that, "If the Iron Duke had sent an enemy's ship to the bottom, we should havo calted her ono of the most formidable ships of war in tho world, and all that she has done is actually what she was intended to do, except, of course, that the ship she struck ras mufortmately our oun property, and not that of the enemy."
    $\dagger$ Mu. Reed wrote to the Times to the effect that there would, undoubtedly, be a "greater measure of safety during " naval engagement than on ordinary oceasions," and explained that "the ruling consideration whieh has been aimed at in theso ships has been so to divide them into eompartments, that, when all the water-tight doors and valves are arranged as they would be on going into action, the breach by a ram of ono compartment only shonld not suffice to sink the shij."
    $\ddagger$ Sir Menry James, Attomey-(ieneral to tho previons Govemment, spoke publiely on the subject in tho plainest terms. He said:-"Ono would have thought that if there wero a conrt-martial on tho vessel which is lost, the officers of the vessel which caused that loss would not go seot free." Tho Admiralty was biamed. for not having sent the decision of the Court back to it for reconsideration, instead of which they broke a rule of naval etiquette, and seemed anxious to quash inquiry

[^33]:    *"The loss of the Kent, East Indiaman." hy Lient.-General Sir Duncan MacGregor, K.C.B.

[^34]:    * The raft is described in tho original work on the shipwreck of the Medusa substantially as follows:-It was composed of topmasts, yards, plinks, the boom, \&e., lashed strongly together; two topmasts formed tho sides, and four other masts, of the same length as the former, were placed in the centre, planks being nailed on them. Long timbers wero placed across the raft, adding considerably to its strength; these projected about ten feet on each side. There was a rail along the sides, to keep those on board from falling into the sea. Its height being only about a foot and a half, it was constantly under water, though this could easily have been remedied, by raising a second floor a foot or two above it. Two of the ship's yards, joined to the extremities of the sides, at one end met in front and formed a bow. Its length was sixty feet, and breadth about twenty.

[^35]:    * Later it took with many of them still stranger forms. One M. Savigny had the most agreeablo visions; he fancied himself in a rieh and highly-cultivated country, surrounded by happy companions. Some desired their companions not to fear, that they wore going to look for succour, and would soon return; they then plunged. into the sea. Others became furious, and rushed on their companions with drawn swords, asking for the wing of a chicken, or some bread. Some, thinking themselves still aboard the frigate, asked for their hammock, that they might go below to sleep. Others imagined that they saw ships, or a harbour, behind which was a noble city. M. Correard believed he was in Italy, enjoying all the delights of that beautiful country. One of the officers said to him, "I recollect that wo have been deserted by the boats, but don't be afraid; I have just written to the governor, and in a few hours we shall be in safety." These illusiens did net last for any length ef time, but were constantly broken ly the war of the elements, and the fitful revolts which constantly disgraced the company.

[^36]:    * The writer, during a long voyage (England to Vancouver Island, via Cape Horn), mado in 1862, saw flyingfish constantly falling on the deek, where they remained quivering and glittering in the sunlight. To accomplish this, they had to fly over a height of about fifteen or sixteen feet, the top of the bulwarks, or walls of the steamship, being at least that distance above the water.

[^37]:    * Large merchant-vessols have been constructed of steel, which is stronger tian irca, woight for weight; and consequently, in building vessels of equal strength, a loss weight and thickness is required. It is said, that if the large Atlantic steamers of 3,500 tons and upwards were buiit of steel, instead of iron, their displecement in tho water would be one-sixth less, and their carrying capacity doublo. A steol troop-ship, accommodating about 1,000 persons,

[^38]:    and drawing only two fect and a quarter of water, was constructed, in 1861, for use on the Lower Indus. She was taken out in pieces and put together in Indin, the total weight of the steel employed being only 270 tons, although she wan 375 feet long, with a beam of 46 feet.

    * "The Fleet of the Future : Iron or Wood," by J. Scott Russell, F.R.S., \&e.

[^39]:    * Letter to the Times, Sept. 6ti, 1875 (after the loss of the Tmanard).
    + Parliamentary luper, 1872. lieports of the Comeattee on Designs for Ships of W a s:c.
    $\pm$ Ibid. $\quad$ "Our Ironclad Ships."

[^40]:    " Vide "The Mediterranean," by Rear-Admiral Smyth. This is a standurd work on all scientific points connected with the Mediterrnean.

[^41]:    * One of the carliest of the Moorish conquerors of Spuin, who first fortified the Rock.
    $\dagger$ Vide page 16.

[^42]:    *"History of Gibraltar and its Sieges," by F. G. Stephens, with photographic illustrations by J. H. Mann The writer is much indebted to this valuable work for information embodied in these pages.

[^43]:    * On more than one oceasion such wrecks have happened, as, for example, when a Danish vessel, laden with lemons, fell into tho hands of General Elliott's garrison, then suffering fearfully with seurvy, October 11th, 1780. A year lefore a storm cast a quantity of drift-wood under tho walls. "As fuel had long been a searee article, this supply was therefure considered as a miraculous interference of Providence in our farour." (Iide Drinkwater's " ': itraltar.")
    $\dagger$ The Romans, however, sometimes employed red-hot bolts, which were cjeeted from eatapults.

[^44]:    * Lopez do Ayala, " Historia de Gibraltar."

[^45]:    * " Memoirs of Sully," bk. xx.

[^46]:    * In a memorial presented to Philip V. after the eapture, it was stated that the garrison comprised "fewer than 300 men; a few poor and raw peasants." Other accounts range from 150 to 500 .

[^47]:    * "Journal of an Officer during the Siege."
    $\ddagger$ Sayer's " History of Gibraltar."
    $\dagger$ Sec ante, pege 16.
    § Barrow's "Life of Lord Howe."

[^48]:    * Tide "Malta Sixty Years Ago," by Adminal Shaw.
    + "Thic Crescent and the Cross."
    $\ddagger$ "Malta under the Phenicians, Kinights, and English," by W. Tallack.

[^49]:    * In contradistinction to the Red Cross Knights, or Templars, who, though C'rusaders, formed a purcly military order.

[^50]:    *The Order of the Knights of St. John oxists now as a religious and benevoient body-n shadow of its former self. Thero was a period when the revenues of the Order wero over $£ 3,000,000$ sterling. It still exists, however, tho head-quarters being at Ferrara in Italy. Recent organisations, countenanced and supported by distinguished noblemen and gentlemen for the relief of sufferers by war, and convalescents in hospital in many parts of England, are in some sense under its banner ; H.R.II. the Prince of Wales is President of ono of themthe National Society for the Sick and Wounded in War. It had been reeommended by one writer, that gentlemen of the present day should become members, and wear at evening entertainments a special dress and decoration, and that thero should also be dames chevaliires, with decorations also. Ho believes, of conrse, that this would greatly aid the funds for those benevolent purposes.
    $\dagger$ For an elaborate, exhaustive disquisition on this subject, ride "The Voyago and shipwreck of st. 1aul," by James Smith.

[^51]:    *The Suez Canal, and all appertaining thereto, is well deseribed in the following works:-" Tho Suez Canal," by F. M. de Lesseps; "The History of the Suez Canal," by F. M. de Lesseps, translated by Sir H. D. Wolf; "My Trip to the Suez Canal," se.

[^52]:    - M. de Lesseps aeknowledges frankly that the English people were always with him, and cites examplo after example-as in the caso of tho then Mayor of Liverpool, who would not allow him to pay the ordinary expenses of a meeting. He says: "While finding sympathy in the commercial and lettered classes, I found heads of wood among the politicians." There wero, however, many who supported him in all his ideas, prominently among whom the eresent writer must place Richard Cobden.

[^53]:    * Exodus xir. 21, et seq.

[^54]:    * The reader may have heard of mummies manufactured in Cairo for the English market. The idol trade of Birmingham has often been stated as a fact.
    + Readers who have seen Mr. Edouin's impersonations of a Chinaman may be assured that they are true to nature, and not burlasques. That gentleman carefully studied the Chinese while engaged professionally in San Francisco.

[^55]:    * The Tyeoon is nominated out of the members of three families having hereditary rights. The princes or Daimios number three or four hundred, many having enormous ineomes and armies of retainers. The Princo of Kangâ, for example, has $£ 760,000$ a year; the Prince of Satsuma $£ 487,000$; and the Prince of Owari $£ 402,900$.

[^56]:    * For further details concerning this most interesting people, tide Dr. Robert Brown's "Races of Mankind."

[^57]:    * Tide "Nautical Magazine," October, 1855.

[^58]:    * Captain Scammon, detailed from the United Statos Revenue Scrvico, to take the post of Chief of Marine in the telegraph expedition on which the writer served, made a series of soundings. For nearly two degrees (between latitudes $64^{\circ}$ and $66^{\circ} \mathrm{N}$.) tho average depth is under $19 \frac{1}{2}$ fathoms.

[^59]:    * "Our Tropical Possessions in Malayan India," by John Camoron, Esq.
    $\dagger$ J. Thomson, "The Straits of Malneca, Indo-China, and China."

[^60]:    * "The Australian Colonies: their Origin and Present Condition."

[^61]:    * In his work " Westward by Rail," which contains a most veliable account of California, its history and progress.

[^62]:    * At tho Cariboo mines, British Columbia, in 1863 , there were 7,000 men on the various crecks, There wero not over a dozen women there!

[^63]:    * Excepting at San Firaneisco, tho only docks worthy of the name on the whols Pacific coasts of America are thuse of Eingland's naval station at Eisquimalt.

[^64]:    3

[^65]:    * Douglas pines have been measured in British Columbia which were forty-cight feet in eircumference at their base, and therefore about sixteen feet through. These magnifleent trees are only second in size to the "Big Trees" of California.

[^66]:    * On many parts of the North-west Pacific coasts of America, from Oregon northwards to Bering Straits, the salmon, in their season, swarm so that a boat can hardly make a way through their "schools."
    $\dagger$ Harpers Mngasine (New York), April, 1869.

[^67]:    *"Extracts from a Journal written on the Coasts of Chili, Peru, and Mexico, \&c."

[^68]:    * "At Last: A Christmas in the West Indies."

[^69]:    * " Naval Chronicles," vol. xii.
    $\dagger$ Other islands of the West Indies, as St. Thomas's, which is a kind of leading "junction" for mail steamers, and St. Domingo-so intimately connected with the voyages of Columbus-will be mentioned hereafter.

[^70]:    * "Lands of the Slave and the Free," by the Hon. Henry A. Murray.

[^71]:    * "Historical and Statistical Account of Nova Scotia," by Judge Haliburton.

[^72]:    * "To the Cape for Diamonds." By Frederiek Boyle.

[^73]:    * "The Cruise of H.M. Ship Galatea." By the Rev. John Nilner, B.A., Chaplain, and Oswald W. Brierly.

[^74]:    * Alluding to the previons visit of Prince Alfred when a midshipman.

[^75]:    * "Tho Settler"s Guide to the Cape of Good Hope," \&e., by Mr. Irons.

[^76]:    *"'The Autobiography of a Scaman." By Thomas, tenth Earl of Dundonald, G.C.B., Admiral of tho Red, se. se.

[^77]:    * "Medical Life in the Navy."

[^78]:    *The Naval Chronicle, vol. xiii. (1806).

[^79]:    * Her tonnago being no doubt calculated by what is known as O. M. (old measurement) and which was used up to a late dato in England, her actual capacity must have been considerahly greater.

[^80]:    * "The Eventful Iistory of the Mutiny and Piratieal Sci:ure of II.M.s. Boruty: Its Causes and Consequences."

[^81]:    * The Annual Register, 1789. The account above presented is darived from that source, and from tho standard works of Yonge and James.

[^82]:    "Could at ono bite the oyster's taste deeide, And say if at Circean rocks, or in The Lucrine Lake, or on the coast of Richborough, In Britain they were bred."

[^83]:    * (Tho Late) WV. S. Lindsay, M.P., \&c., "Tho IIistory of Merchant Shipping."

[^84]:    * "The British Admirals: with an Introductory View of the Naval Ifistory of England."

[^85]:    *Charnogk: " History of Marine Architecture."

[^86]:    * It has been elearly shown that a large vessel which had been built by Ifenry VII, bore the same name. The above was a successer, probably built after the first had become uafit for service.

[^87]:    - Sir William Monson : Churchill's "Collection of Voyages."

[^88]:    - Hakluyt.

[^89]:    * "Ilistoria Genoral."

[^90]:    - Camden. Balboa, the diseoverer of the Pacific, had expressed the same feelings in almost the samo locality.

[^91]:    - Whonever the South Seas are mentioned in theso early records, they must be understood to mean the South Pacific, and, indecd, sometimes portions of the Nerth Pacific. The title still clings to the Polynesian Islands.
    + Burney's "Voyages."

[^92]:    * Narrative of Chaplain Fletcher, quoted by Burney.

[^93]:    * Various authorities cited by Southey.
    + The various slanders thrown on Drake's nano in connection with this oceurrenee seem to have had no foundation in faet. Some of his enemies arerred that ho sailed from England with instructions from the Earl of Leicester to get rid of Dougltio at the first opportunity, beeanse the latter had reported that Essex had been poisoned by the former's means. But Drake appears to have been really attached to him.

[^94]:    *Fuller's "Holy State."

[^95]:    * Narrative of Captain Hayes (owner of the Golden IIinde) printed in Hakluyt's "Collection."

