the artillery could work very well at a pinch for some time with the above establishment, and some country carls to carry extra ammunition, with men to look after them. No doubt in such a case old soldiers of all ranks, officers and men, would be available in addition; and if we had such a force of guns, I see no serious difficulty in keeping it effectually supplied with ammunition in England. If we had to send them abroad, we should require for each battery one or two more officers, five or six more sub-officers (the scribbling and non military work in which our non commissioned officers are now employed for three fourths of their time would in such a case collapse; statistics of religion, country, crimes, and the like, if made out at all, would fall to civil clerkt), about twelve wagons, which would need to be of a lighter and more practically useful kind than the present--probably two horse carts would be found the best, which would reduce the number of horses required to say fifty additional, instead of nearly two hundred, which the present cumbrous mode of carrying ammunition would exact
—and seventy to 100 more men. There
would be no difficulty in getting men for war service, with short terms of enlistment; men who had served their time, Militia, Voiunteers, and recruits, in part of men from the garrison artillery, who cannot too soon be organized on a mobile footing. There would be of course some little trouble in expanding the battery but not one. tenth or one hundreth of what would accrue from the formation of a new field battery in a hurry, which is really an instar montis work. Recruits are of course a drawback, but in point of fact every fighting army consists largely of them, and they became aguerris in a wonderfully short time when there is a good pre existent system, a sound nucleus to attract and absorb them into ntiself. But the question of reserves is not one which I proposed to enter on in this series of letters. Whether the Horse Guards' impossible idea of a large army and enormous expenditure with corresponding patronage, or mine of a large well trained expansible system of nuclei, costing noth ing extra, and giving little scope for jambery is preferred, in either case reserves will be equally necessary; the country will not pay for, and will not permit at any price, such a monstrous standing army as alone would meet the magnificent ideas of some of the would be Prussian essayists.

I think, Sir, I have now, under favour of your kind insertion of my letters, sufficiently developed my view of how the most pressing of our many military necessitiesthe dearth of artillery—can be practically and effectively met. I have heard that since I first wrote .o you the nucleus scheme has been "engaging the attention" of the authorities, but I do not hope for its adoption unless public opinion demands it. I fear there are three fatal objections to itfirst, its directness and simplicity, which do not recommend it to the military mediocrities for the moment in power; second, its intelligibility, leaving no room for mystifymg and hamboozing the much befooled public: third, and worst of all, the damning treasure that it creates no new pa-tions co-much can be forgiven, but not that fault. However, that is not insuperable; if we can only get 700 field guin equipped, manned, and horse I, it will be at 12 ton, 9 in; 22 9ton, 8 in.; 261 ton, 7 in); that matter that his Royal Highness may complement 700. cene "and have the dispersi of" a few score more of unnecessary and useless " ap poutments." Time the great healer, will

If you will grant me space I will on another occasion try to show why dearth of officers and men exists even in our present establishment of artillery—why depression and discontent is universal among officers, non commissioned officers, and men of this most important arm; and how I think much of it could be remedied; premising that neither to lavish more money on the Horse Guards' view, nor to give a quarter pound more of meat, as others of the samp school suggest, will in my opinion meet the evil .-Yours truly,

SWINGLATREE.

Junior United Service Club, Jan. 15, 1-76.

## England's Power by Sea.

(From the London Standard.)

The strength of our fleet is a subject which never fails to interest every English man. Time has not altered the truthfulness of the words of Sir William Blackstone, that it is the Royal Navy of England which "hath ever been its greatest defence and ornament; i.s sucient and natural strength - the floating bulwark of our island." Thus it happens that any apparent short comings on the part of the service are viewed by the public with critical eyes. There has, of late, been a decided inclina-tion to look upon the navy with some disparagement, there being a very prevalent idea that its fighting power is not what it should be. It will therefore be interesting to inquire into the strength of the effective service as it exists at this moment, by which means a fair idea can be drawn of that most important question, its expansiveness in the hour of necessity.

As an introductory remark it may be sint ed that the total number of vessels of every class and description entitled to be termed "Hor Majesty's ships" amounts to no less than 560, with an armament of 3,600 guns, and of this number 240 mounting nearly 1, 700 guns, are in commission, the remainder being in reserve and employed on harbour service. But this is merely a statement of the fleet as it exists on paper, and fails to convey any correct idea of the effectiveness of the navy; indeed, it is far more liable to mislead than to instruct, for it is necessary to ascertain the class and condition of each of these 500 ships before their value for offence or defence can be estimated. result may be somewhat disappointing, but if the number are greatly reduced, there is the consolation that those which remain are not " dummies "

By this process of examination and "selection of the fittest" our fron clad fleet is found to consist of 43 ships of al. classes, with an aggregate displacement of 257,918 tons carrying 470 guns, and manned by 17 388 officers, seamen, marines, artificers, and boys.

Dealing in the first instance with the armour plated broadsito ships according to tonnage and class, as far as it is possible with a fleet composed of so great a variety of types, the number of guns or complement being no longer any guide, we have the— Minetaur. of 10 627 tons 17 guns (12 ton,

9 in ) and a crew of 700 all told.

Agi icourt, which may be termed a sister

Northumberland, 10 581 tons, 28 guns (4

Achilles, 9.691 tons, 16 guns (14 12 ton, 2 64 ton); complement, 710.

Warrior and Black Prince (sister ships), 9,137 tons, 28 guns (4 9 ton, 8 in ; 24 64

ton 7 in.); complement, 710.
Sultan, 8,629 tons and Hercules, 8 529 tons. 12 and 14 guns respectively (8 in each case being 18 ton, 10 in, and the remainder 12 ton and 64 ton gaus); complement. 630.

Lord Warden, 7 842 tons, 18 guns ) 12 ton, 16 9 ton); complement, 610.

Bellerophon, 7,551 tons, 15 guns (10 12-ton, 5 61 ton); complement, 550. Royal Alfred, 6,807 tons, 18 guns (10 12-

ton. 8 63-ton); complement, 605.
Hector and Valient, 6,804 tons, 18 guns (29 ton., 1662 ton), complements, 605.

Triumph and Swiftsure. 6,660 tons; and Audacious, invincible, and Iron Duke. 6,-034 tons, each carrying 14 guns (10 12 ton, 464 pounder muzzle loading rifle guns); complement, 455.

Repulse, 6.190 tons, 12 guns (9 ton); complement, 520;

R. s.stance and Defence, 6,070 tons, 16 guns (29-ton, 1461-ton); complement,

Shannon. 5,103 tons, 9 guns (2 18-ton, 7 12 ton); complement, 350.

Penelope, 4,391 tons, 11 guns 39 ton, 3

40 pounders); complement, 400. Pallas, 3787 tons, 8 guns (4 9-ton, 4 64pounders); complement, 250.

Favourite, 3,232 tons, 10 guns (8 64 ton, 2 64 pounders); complement, 270.

Research, sloop, 1.741 tons, 4 guns (61-ton); complement, 150, and the Viper and Vixen, 1,228 tons, and Waterwitch, 1,274 tons, gunbouts, 4 guns (264-ton, 264-pounders); complement, 53

These vessels carry 427 guns, and are manned by 14,494 men.

It was but a few weeks since that this list was nominally strengthened by the Lord Clyde, Prince Consort, Royal Oak, Ocean. Zealous, and Enterprise; but with intent of clearing the effective list of useless ships. these vessels have now been consigned to the harbour service reserve. The whole of the last long to the "wooden ironclad" class, having been laid down as wooden vessels but converted into armoured ships, and they are the first of our ironclad fleet which have been condemned as unit for further sea service. Unfortunately, there still remain a small number of this type amongst the foregoing effective list, and a few years will probably suffice to render the Lord Warden, Royal Alfred, Pallas, Favour ite, and Research ineffective. The wiste on the list of armoured ships by the removal of vessels named amounts to about 28,000 tons and 100 guns.

But as a set oftagainst this " waste" there are coming forward and building the broadside ships Temeraire, 3.412 tons, 8 guns (4. 25 ton, 11 in.; 4 is ton. 10 in.); complement 500; and Nelson and Northampton, armoured covered deck corvettes, 7,323 tons, 12 guns (4 18-ton, 8 12 ton); complement 550.

Of turret ships there are 14 the list being headed by the Thunderer and Devastation, of 9,190 tons, armed with four guis (2.38 ton 2 35 ton, and 4 35 ton guns respectively), and complement 329 and 340, Monarch, 8. 322 tons, carrying 4 25 ton guns in turrets, 2 12 ton chase guns on upper deck, and 1 6½ ton gun on the main deck, complement 525; Papert, 5,358 tons 2 18 ton guns in turrets, 164 pounders on upper deck, complement 200; Glatton, 4,912 tons 225 ton guns, complement 200; Hotspur, 4,010 tons. 125 ton gun in turret, 264 pounders on upper deck, complement 190; Prince Alpositionate." Time the great, healer, will: Alexandra, 9.491 tons, 12 guns (2.25 ton, lupper deck, complement 190; Prince Alexandra, 9.491 tons, 12 guns (2.25 ton, lupper deck, complement 190; Prince Alexandra, 9.491 tons, 12 guns (2.25 ton, lupper deck, complement 190; Prince Alexandra, 9.491 tons, 12 guns (2.25 ton, lupper deck, complement 190; Prince Alexandra, 9.491 tons, 12 guns (2.25 ton, lupper deck, complement 190; Prince Alexandra, 9.491 tons, 12 guns (2.25 ton, lupper deck, complement 190; Prince Alexandra, 9.491 tons, 12 guns (2.25 ton, lupper deck, complement 190; Prince Alexandra, 9.491 tons, 12 guns (2.25 ton, lupper deck, complement 190; Prince Alexandra, 9.491 tons, 12 guns (2.25 ton, lupper deck, complement 190; Prince Alexandra, 9.491 tons, 12 guns (2.25 ton, lupper deck, complement 190; Prince Alexandra, 9.491 tons, 12 guns (2.25 ton, lupper deck, complement 190; Prince Alexandra, 9.491 tons, 12 guns (2.25 ton, lupper deck, complement 190; Prince Alexandra, 9.491 tons, 12 guns (2.25 ton, lupper deck, complement 190; Prince Alexandra, 9.491 tons, 12 guns (2.25 ton, lupper deck, complement 190; Prince Alexandra, 9.491 tons, 12 guns (2.25 ton, lupper deck, complement 190; Prince Alexandra, 9.491 tons, 12 guns (2.25 ton, lupper deck, complement 190; Prince Alexandra, 9.491 tons, 12 guns (2.25 tons, lupper deck, complement 190; Prince Alexandra, 9.491 tons, 12 guns (2.25 tons, lupper deck, complement 190; Prince Alexandra, 9.491 tons, 12 guns (2.25 tons, lupper deck, complement 190; Prince Alexandra, 9.491 tons, 12 guns (2.25 tons, lupper deck, complement 190; Prince Alexandra, 9.491 tons, 12 guns (2.25 tons, lupper deck, complement 190; Prince Alexandra, 9.491 tons, 12 guns (2.25 tons, lupper deck, complement 190; Prince Alexandra, 9.491 tons, 12 guns (2.25 tons, lupper deck, complement 190; Prince Alexandra, 9.491 tons, 12 guns (2.25 tons, lupper deck, lu