

Selections.

THE NAUTILUS SUBMARINE PHENOMENON AT THE VICTORIA DOCKS.

Gathering of the C. E. Savans—Opinion of Robert Stephenson on the invention—Dejeuner after the diving.—The Calculating Boy in the chair.

LONDON, Friday, June 1857.

On Tuesday last there was a vast gathering of celebrities of the scientific world at the Victoria Docks, to witness experiments with a submarine machine of extraordinary ingenuity and capability, called the Nautilus, destined to achieve wonders probably yet undreamt of in a sphere thought to be closed against further progress of human skill or daring. It is an importation from America, where it has been at work for a considerable time, both on the Atlantic and Pacific coasts, especially the latter, in the neighbourhood of Acapulco. There, during a storm of considerable violence, it performed its operations at a depth of many fathoms, with the same facility and with the same ease to those engaged as if there was a perfect calm, thus demonstrating its suitability for use under circumstances that would forbid the employment of the ordinary diving-bell altogether. And unlike the ordinary diving-bell it is in every respect; so much so that the visitors on arriving at the Docks, and seeing nothing in the least degree resembling what their fancy—following the old idea—had conjured up, imagined, when the appointed hour had passed, that the experiment was not to come off. They were soon pleasantly and surprisingly undeceived. Presently a boat full of gentlemen, owners of some of the most famous names in England, men who had done most to advance the material greatness of England in this century to its present status—put off from the jetty, a dozen strokes of the oars brought them alongside a grayish colored substance of about ten feet square, floating some couple of feet just above the surface, in the form of a nearly flat dome, with a smaller erection upon that of another couple of feet high, like a circular chimney pot. Upon the larger surface there stepped from out the boat Mr. Samuel Hallett, who, with Major Sears, is engaged in exhibiting the invention; and opening a door in the smaller circle, the top of the pot as it were, he disclosed a spacious chamber, perfectly dry, and commodious, capable of conveniently accommodating no less than sixteen full grown persons. Into this chamber about half that number entered, as though they were going into the cabin of a ship, in their ordinary attire, without any of the cumbrous gutta-percha body-wrapping and India-rubbing head dress, and the sifting and unsightly paraphernalia in which all who encounter the martyrdom of a diving bell venture have to induct themselves. The boat-full of notabilities having thus been swallowed up in the machine, the machine itself was presently swallowed up in the water, to the infinite amazement of the bystanders, whose astonishment had been going on *crescenda* from the first, and who were specially puzzled to comprehend by what means the apparatus had got to the bottom, there being no external contrivance of any sort for such purpose, no barges alongside, with ropes and pulleys and windlasses. Nor was even any signal made from the shore; it was evident therefore, that the machinery for descending was inside, and of course controlled entirely from within. And so it was. The submersion was protracted for a period very considerable in itself, but which seemed infinitely more so to the wonder-stricken spectators, who, not perceiving the faintest ripple on the water, might well, in their novelty, feel somewhat alarmed concerning their "departed" friends. This anxiety was conveyed to Sir Morton Peto, chairman of the Victoria Docks, who, however, soon set apprehension at rest by stating that the Nautilus had been for some weeks employed in the Company's service, that its operations have been thoroughly understood, and all idea of derangement or danger was out of the question. Soon after the machine arose; Mr. Hallett undid the fastening from within; and, as when the fisherman took off the seal of Solomon from the brass vessel, and the gigantic genii spread in smoke over the shore, so did the submerged occupants of the Nautilus emerge, dry, and smiling and unruffled, and were rowed ashore, where they recounted their emotions, being themselves almost incredulous that they could have been at the bottom of the basin at all, and still more that they should have been so with no more derangement to their toilette than if they had walked into one of the neighbouring warehouses.

It is true that in order to give full efficiency to the machine, a steam engine floating at some distance, pumped air into it, through a gutta-percha tube strengthened with spiral wires; and as long as this

supply is kept up those inside the Nautilus can remain down with as little derangement to the breathing as though they were on shore. But if this supply were suspended, and the tube cut off, as was the case frequently on Tuesday, that does not at all interfere with the control of the Nautilus from within, the sinking and rising at the pleasure of those within;—though of course it interferes with the duration of the stay beneath the surface; but in that respect also, as in the immensity of its lifting power, the Nautilus is incomparably preferable to all other discoveries for sub-aqueous purposes.

It is to be recollected that this is not the opinion of verdant *gobemouches*, enamoured of novelty and prone to panegyric in proportion to their ignorance: but of the most acute and far-seeing savans in Europe, men distrustful of everything in the shape of innovation, capable of detecting at a glance any old imposture in a new guise, and able to lay their hands on the vital point of fallacy in principle or detail. Thus Mr. Robert Stephenson, at the *dejeuner* which followed the exhibition, said, he had been persuaded to investigate the claims of the Nautilus, and he rejoiced heartily that he had done so; for in no case within his recollection had largeness of scientific grasp and completeness and simplicity of mechanical detail been more happily combined, or for purposes capable of more important or general benefit, and from which general benefit was more certain to accrue.

Many other gentlemen also indulged in encomiums upon the views of the machine, among whom were the eminent honors of Mayor Leask, Mr. Brooks, (known in his early youth as the calculating boy) and several other of equal celebrity. Even Sir Morton Peto found leisure from his multifarious duties to view the descent and attend the *dejeuner*.

THE WHALE.—At the present time a novel spectacle, an enormous whale—75 feet in length—is to be seen at the entrance of Tracadie harbor, it being one of the largest animals of which we have any certain information. The carcass was found floating at sea, and towed in to the harbor on Monday, the 3rd inst., and has become an interesting object. During the last ten days it has been visited by an immense concourse of people from every section of the Island, anxious to have the opportunity of seeing one of these mighty monsters of the deep, so rarely thrown on our shores. On Monday the writer proceeded to the spot, and gathered the following particulars from Mr. Oliver L. Gilman, who belongs to the vessel, and was landed to take charge and dispose of the carcass. Our informant states, that on Sunday, 2d August, at noon, it was first sighted floating on the surface, by the American fishing schooner *Samuel Gilbert*, of Gloucester, Mass., Henry Smith, master, when off about 20 or 25 miles from land. Bearing down directly toward the object, various conjectures were expressed as to what it really consisted of. Approaching it within about half a mile, it was discovered to be a dead whale—the tail and abdomen uppermost—floating about 20 feet high; and on nearing it the body presented one of the richest prizes that nature rarely awards to the humble fisherman. A hawser was easily fastened round the tail, and it was taken in tow—steering towards Tracadie at the rate of two miles an hour. In crossing the bar it grounded in 8 feet of water, where it stuck till the flow of the following tide, when it was towed inside of the harbor, next the sand-hills, near Mr. Fowle's new fishing establishment, and where it immediately became, and continues to be, an object of great curiosity. On reaching the beach, an enormous mass appears to the spectator—a carcass equal to 30 tons, or 120 fat oxen. The animal would, perhaps, be more interesting were it placed on its belly; but it floated with the abdomen upwards and rests in that position, surrounded with water intermixed with oil. The more unique features—such as the mouth, eyes, blow-holes, being underneath, are not visible. An animal of this size has lips nearly 20 feet in length, and displays when open, a cavity capable of receiving a jolly-boat and her crew. The head is disproportionately large—measuring about 20 feet, and forming about one third of the entire bulk. This is a Greenland humpbacked female, supposed to be with calf with two large teats at the lower part of the abdomen. The fins of the tail are flat, and placed longitudinally, and measure from the end of one fluke to the tail of the other end, about 25 feet across. The fins are, one on each side—about nine feet in length. The color of the fins and tail are yellow-white the tail being partly clouded as it terminates. The abdomen is black—being ribbed with large muscular bands passing longitudinally from the head to the tail,

each band measuring about nine inches in width—at present this outward covering is curling and peeling off from the effect of the sun, and beneath appears a solid fatty substance—the oil oozing out copiously from the whole surface, of a very strong odor, intermixing with the sea water. The body looks like a large Indian canoe turned upside down. Several persons got on it, and were walking—or rather wading—on its surface every step. By putting the hand under water the mouth is reached; and it is covered with long stout bristles of whale-bone, from 8 to 10 inches in length. We brought home several pieces of the outward skin, and a handful of these bristles.

The writer was accompanied with a lady—a pretty good artist—who, from the summit of the sand hills, took a very correct pencilling of the monster, intended to be forwarded to the Illustrated London News, together with the paper containing this description. Should the Editor think proper to give them admission—a daguerreotype was also taken by Mr. George P. Tanton. Some of our citizens who resort to the North side to enjoy retirement this sultry season of the year, must have their privacy slightly disturbed by the flow of visitors that invest the whole range of that neighborhood during the present excitement that prevails amongst the marvellous. Many persons going there for the present novelty, were little aware of the beautiful prospect of Tracadie harbor and the view from the sand hills—forty or fifty feet in height—the sea covered with a numerous fleet of seventy sail of fishermen, besides the boats. The hills range a distance of six or seven miles, and reach a great height on the sea coast—forming a kind of natural fortification on the frontier. The interval affords pasturage for a drove of cattle and horses, interspersed with the low shrubbery that produces the famous cranberry. The animals are grazing, regardless of the furious breakers that are rolling on the beach outside—sometimes with a fearful fury. Near here is the fishing establishment of Samuel A. Fowle, erected on the inside of the sand hills—where the deepest water flows—a scene now rendered rather conspicuous from the circumstances of the monster stranded on the shore.

The carcass of the whale has been purchased by W. B. Dean. One-half of the value is claimed by Mr. J. P. Jewell, Tamworth, New Hampshire, the owner of the vessel. The residue is to be equally divided between each of the crew, consisting of 12 persons. Preparations were making for rendering the oil—dissection has already commenced—and the naturalist will be further gratified by paying another visitation as it progresses. Few anatomists can undertake to ascertain the conformation and figure of this great inhabitant of the deep, where the operators, instead of separating with a lancet, must cut their way with a broad-axe and handsaw.—*P. E. Island Islander*, Aug. 19.

ADULTERATION OF LIQUORS.—That veteran laborer in the cause of Temperance, Total Abstinence, and Prohibition, E. Delavan, President of the State Temperance Society, thus speaks in his last address to that Society, of the adulterations now common in various liquors manufactured for the drinking community:—

Since the sale of intoxicating drinks is now legalized by a solemn act of the State Legislature, I feel it my duty to call your attention, as I have done before, to the character of the liquors which the law has so kindly taken under its protecting care and fostering patronage.

I have long known the fact that arsenic was employed in the manufacture of whiskey, and the reason why. Ever since the year 1833 I have been fully aware of the horrid adulterations that have been practiced in the manufacture of all not purely intoxicating drinks only, but also of those which are pretended to be pure, and I have never from that year ceased to warn the public against their use, so destructive to property, mind, reason, and life. My facts have been, in all cases, obtained from the manufacturers themselves, generally after they have abandoned the murderous business. The profit made has been enormous. In one case an individual engaged in the manufacture and sale, assured me that his sales in a single year amounted to \$3,000 bbls, the average cost to him being about 18 cents per gallon, while he sold it at a rate varying from fifty cents to five dollars the gallon.

I have not known till recently of the use of that deadly poison, strychnine, in the manufacture of whiskey. This is described as endowed with a greater amount of destructive energy than any other poison except prussic acid. One-third of a grain killed a hog