

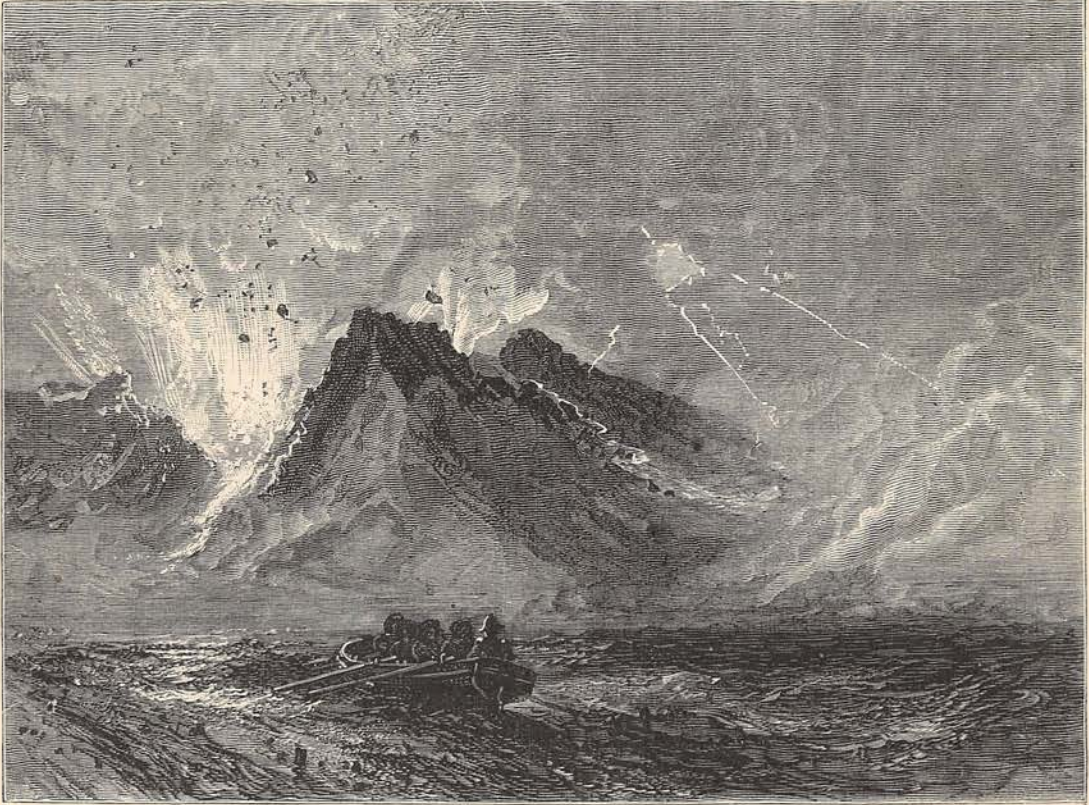
NEPTUNE'S ARBITRATION IN THE YEAR 1831.

BY VICE-ADMIRAL SIR WILLIAM KING HALL, K.C.B.



ANY readers may never have heard of "Graham's Island," its rise and disappearance, and whilst the Governments of Great Britain and Naples were watching its increase, and probably preparing to claim it—this country, from priority of discovery, and taking the earliest opportunity of naming it after the First Lord of the Admiralty, Sir James Graham, and the Neapolitan Government from its being within a few

that the shock took place about eleven at night, and, although lasting only a few seconds, effectually startled all hands, waking very promptly those who were sleeping, and all anxiously awaiting a repetition. Those who "occupy their business in great waters, truly see the wonders of the deep." The tremulous and severe vibration was as if the vessel had run over some rocks, her anchors let go, and chain cable running out with great rapidity; but should any of our readers travel



"AN ENORMOUS MASS OF HOT CINDERS AND DUST" (p. 569).

miles from their coast—Father Neptune, to prevent any dispute, turned it from an island which might have been resorted to, into a dangerous shoal much to be avoided. Now for the tale as written in my journal.

The *Rapid*, a brig-of-war, mounting ten small guns, and of 230 tons, commanded by Captain Swinburne, a most able and zealous officer, was returning to Malta from Marseilles, having a few days before, on her passage towards the latter place, when in company with the *Britannia*, 120-gun ship, with Sir Pulteney Malcolm's flag, on her way to England, experienced a smart shock of earthquake very near the spot which the brig had reached at the time the smoke was seen, on the day I am about to relate the interesting occurrence. But, in passing, I may as well state

on the Metropolitan Underground Railway, and have just dropped off to sleep, and felt the break suddenly applied, and the vibration multiplied tenfold, they can imagine exactly what the feeling was.

On the 18th of July, 1831, the town of Marsala, in Sicily, famed for its wine, was about nine miles off, when, at four in the afternoon, a high irregular column of white smoke or steam was observed, a point or two on the starboard bow. It was first believed to be a ship on fire; we steered towards it, and at a quarter past eight, having run about thirty miles, flashes of the most brilliant light mingled with the smoke, which was distinctly visible by the light of the moon, resembling explosions from powder. In a few minutes the whole column became black, and much larger; almost immediately afterwards several

successive eruptions of lurid fire rose up amidst the smoke. They subsided, and the column then became gradually white again. As we were nearing it very fast, sail was taken in and we hove-to till daylight; every one remained up, beholding this grand scene, nor did any tire at witnessing this beautiful, and at times awfully impressive, convulsion of nature. At dawn of day we again neared it; after each eruption the sea was seen to be perfectly smooth, and nothing to mark the locality from which the eruption took place. But at five in the morning, when the smoke had for a moment cleared away at the base, several voices cried out, "*There is an island!*" A small hillock, of a dark colour, a few feet above the sea, in appearance like a large boat bottom up, gave witness to the birth of the island. This was soon hidden again, and was only visible through the smoke at intervals between the more violent eruptions. The volcano was in a constant state of activity, and discharging dust and stones, with vast volumes of steam. At half-past seven the rushing, hissing noise of the eruptions was heard, and at nine we were within two miles of it. The island was seen much clearer, and fancy led us to believe we saw it increasing after each eruption. The water around us was discoloured with dark cinders, and to our surprise the captain announced his intention of proceeding in for a thorough examination. There was evidently much risk, but he was an officer who inspired all under his command with the most perfect confidence in his judgment; he had taken the time between the eruptions, and having a fast boat and good crew, calculated his power of being able to pay a visit to the island. We were then just one mile distant, and found the water 150 fathoms deep, and the bottom soft brown mud. The captain, keeping on the weather side, reached within sixty feet of the western side, where there was eighteen fathoms water, and discovered it was a crater composed of fine cinders and mud of a dark brown colour; within it was to be seen a mixture of muddy water, steam, and cinders, dashing up and down, running into the sea over the edge of the crater, which on its western side was broken down to the level of the sea for ten or twelve yards; here a really good view of the interior was obtained, and red-hot stones, as well as cinders, were thrown up a few yards, and fell into it again. But great quantities of steam were constantly rising. The island, or crater, was about seventy or eighty yards in its external diameter, and the lip as thin as it could be consistent with its height, which was twenty feet at the highest part, and six feet at the lowest. No words can describe the grandeur of the scene. The process was generally as follows:—After the volcano had emitted for some time its usual quantities of white steam, suddenly the whole aperture was filled with an enormous mass of hot cinders and dust, rushing up to the height of some hundred feet, with a loud roaring noise; then falling into the sea, with a still louder noise, arising from the prodigious quantity of steam which instantly burst forth. This steam was at first of a brown colour, having embodied a great deal of the dust; as it rose it gradually recovered its pure

white colour, depositing the dust in the shape of muddy rain. Whilst this was being accomplished, and renewed eruptions of cinders and dust, with forked lightning darting in all directions within the column, darkened with dust, and distorted by sudden gusts and whirlwinds, with rattling thunder and imperfect water-spouts on the lee side, ushered into existence this new island, an eruption on a larger and grander scale took place, and the dark cloud like a pall overhung the vessel. The wind, originally light, left us, and mid-day sun and sky were obscured, and a very impressive feeling came over us. The sweeps (large oars) which these vessels were supplied with were prepared, and alarm was felt for our captain and boat's crew. After a few moments' suspense the cloud passed over, and the sun in all its brightness came forth, showing us the cheering sight of our absent crew, not many yards away. On coming on board, their faces begrimed with a dark, gritty, sparkling powder, as well as the large quantity in the boat, testified how thoroughly the examination had been made, at considerable risk, by the determination and skill of our excellent captain, whose teaching and training has ever been gratefully remembered by the writer, impressing as he did upon all, by example and precept, the spirit as well as the weighty value of the words, "Duty before pleasure."

On the 20th November, 1831, the *Barham*, fifty-gun frigate, commanded by Captain Pigot, with the great novelist, Sir Walter Scott, on board, visited the island, the Admiralty and Government having fitted her for his comfort and passage to Malta, in recognition of his services to literature. Would there were a few more in this age like him, rather than the trashy, exciting, and immoral novels which, unfit to be read by virtuous, pure-minded women, are flooding our land; and it would almost appear that with the French Treaty of Commerce we commenced an importation of French novels, French plays, and a still further attempt to import Continental Sundays. Oh for more Sir Walter Scotts, and fewer godless writers! But to resume: when it was visited, Sir Walter Scott thus wrote:—

"20th November.—It is on the eve of a very important change, though in what respect is doubtful. I saw a portion of about five or six feet in length give way under the feet of one of our companions, on the very ridge of the southern corner. You know my old talents for horsemanship; finding the earth, or what seemed a substitute for it, sink at every step up to my knee, so as to make walking for an old and infirm man nearly impossible, I mounted the shoulders of an able and willing seaman, and by dint of his exertions rode nearly to the top of the island. We found two dolphins, killed apparently by the hot temperature, and the body of a robin redbreast, which seemingly had come off from the nearest land, and such had been the fate of the first attempt to stock the island with fish and fowl. On the south side the volcanic principle was still apparently active. The perpetual bubbling up from the bottom produces a quantity of steam, which rises all round the base of the island, and surrounds it as with a cloak when seen

from a distance. A gentleman, who has visited here repeatedly, is of opinion that it is certainly increasing. The atmosphere in this new-born island is anything but odoriferous: brimstone and such-like are the prevailing savours, to a degree almost suffocating. Every hole dug in the sand is filled with boiling water."

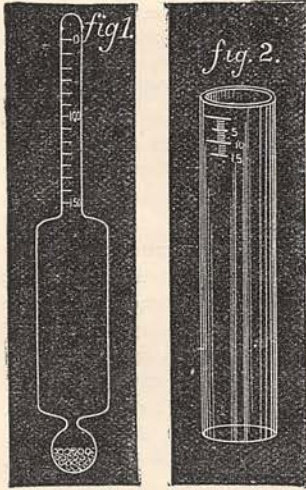
A very short period after this, the island subsided, and the following year, 1832, the *Rapid* was sent to survey the spot. We were at anchor for two or three days, and in the first night, when on watch, I was startled by a shout, "Call the captain, sir; here's the

wolcano a-rising close aboard us!" And there, sure enough, was a blazing red light in the direction. But a more experienced old quartermaster said, "Hold hard, sir; it is only the full moon. We will soon see under her, but to satisfy yourself come up the rigging, sir," which we did, and proved the correctness, more quickly, of the old sailor's assertion. He wound up by saying, "Depend upon it, Graham's Island has gone for ever." Now a shoal (the crater) lies a few feet beneath the water, marking the spot over which the Union Jack had flown on what was once Graham's Island.

THE GATHERER.

For All who Carry the Milking Pail.

When the golden age of universal honesty comes, what an easy life we shall lead! In the meantime we must be content to wage war against all kinds of fraud, armed with such weapons as weights and measures, chemical tests, and the lactometer and creamometer shown in the accompanying engravings.



The lactometer (Fig. 1), about which every one has heard something, is a very delicate hydrometer, so arranged that it floats in pure water at the zero point of the scale. The depth to which it sinks in milk, or any liquid with a specific gravity of 1.029 at 60 degrees Fahr., is marked 100. When employed in connection with milk, the lactometer shows its specific gravity only; it does not determine the quality.

There is a difficulty in settling the quality of milk, even when we know its density, and it arises in this way:—Milk contains two different kinds of ingredients, salt and sugar—each of which increases its specific gravity—and butter and cream, by which the specific gravity is lowered. Hence arises the apparent paradox, "that you may lower the specific gravity of milk by adding either water or cream, and increase its density by removing the cream." But although cream is lighter than milk, it is heavier than water; thus, so far as the specific gravity is concerned, the addition of cream has a much less effect than the addition of an equal amount of water, and the lactometer, though it does not detect skimmed milk, cannot fail to indicate the admixture of water in any considerable quantity. If the result of the lactometer test excites suspicion, the milk can easily be submitted to a complete analysis by competent hands.

The creamometer (Fig. 2) is a very simple instrument, which may be used in connection with the lactometer. Its object is to decide upon the richness of the milk. It is a straight tube, closed at the bottom and graduated in hundredths, although the figures need not extend farther than a little way from the top. To use it, pour in the milk, let it stand and throw up the cream, then read the volume. Pure milk yields about ten per cent. of cream, but is subject to great variations. The creamometer at once detects skim milk, but cannot decide on the quantity of water added, because unwatered milk may still be poor in cream, and watered milk throws up its cream more rapidly than pure. Both this instrument and the lactometer, however, should be in frequent use; they do not injure the seller, and to the buyer afford at least partial protection.

Soothing One's Nerves.

Nervousness is one of the prices we have to pay for civilisation; the nervous savage is a being unheard of. For this disorder, which is partly of a mental, and partly of a bodily nature, relief is sought in various ways, and amongst these we may place the employment of narcotics. The temporary relief afforded by these drugs is very apt to lead those who suffer from nervous sensations to put too much trust in, and resort too frequently to them. In the long run they prove most destructive to health. Their use has of late become so frequent as to threaten society with a serious evil. It has been boldly contended that chloral is to be found in the workboxes and baskets of nearly every lady in the West End of the metropolis, "to calm her nerves." No doubt this is an exaggeration, but it is a fact that in New York chloral-punch had become an institution scarcely a year after the introduction of chloral into medical practice. And now it turns out that Germany—"sober, orderly, paternally-ruled Germany"—has such a thing as morphia disease spreading amongst its population. The symptoms are not unlike those of opium-eating. Experience suggests that persons suffering from this disease should at once be deprived of the drug. Their wilfulness and liability to relapse, however, are so great