

Hecla. The Great Geyser rises from a cylindrical pipe or pit, 8 or 10 feet in diameter, and 75 feet deep. It opens into the centre of a basin 4 feet deep, and between 46 and 50 feet in diameter. As soon as the basin is filled by the boiling water that rises through the tube, explosions are heard, the ground trembles, and the water is thrown to the height of 100 or 150 feet, followed by large volumes of steam. After the basin is thus emptied, no further explosion takes place until it is replenished, when the same phenomena again occurs. The cold air condenses the steam into vapor, which is tossed about in dense clouds, tumbling one over another with singular rapidity, and presenting a sight of great magnificence.

Depth of the Ocean.—On account of the irregularities existing at the bottom of the ocean, its depth varies considerably in different places. The exact depth at any place is, moreover, a matter to be attained with great difficulty, in consequence of the rapid currents that exist in the ocean. These, in many places, render it impracticable to ascertain this depth even with the heaviest sounding-lead. In the northern Ocean, Lord Mulgrave gave out 4,700 feet of Line, without finding bottom; and Mr. Scoresby could not find a bottom in one part of the Greenland Sea at the depth of 7,200 feet, Captain James Ross found bottom at a depth of 15,000 feet, at a place west of Cape of Good Hope, which is the height of Mont Blanc; but at a place west of St. Helena, he gave out 27,000 feet of line without finding bottom. Dr. Young assigns to the Atlantic Ocean, a depth of three miles, that is 13,400 feet, and to the Pacific Ocean, the depth of a league and a half, or about 18,000 feet. According to the calculations of La Place, in his "Mechanique Celeste," founded upon the oscillations of the ocean, the mean depth of the water is a fraction of the difference produced in the diameter of the earth by the flattening of the poles, and it has been estimated at between two and three miles. These calculations the above experiments seem to confirm.

Surinam Bible.—The version of the new Testament, printed by the British and Foreign Bible Society for the English negroes of Surinam, is a curiosity in its way. These negroes have no distinct language, but speak a strange lingo compounded of African words of clipped and softened English words and of violently treated Portuguese words. The Society brought upon itself smart censures and much ridicule for the seemingly irreverent and ludicrous character of the volume they had published. The whole edition, save a few copies, was sent to Surinam. These copies are becoming scarce, and at the sale of the Duke of Sussex's Library, one brought £3 10s. though its original cost could not have exceeded two or three shillings. The annexed extracts literally translated, will give a specimen as little offensive as any that can be found in the book. The word *swigin* is rendered *wan njo swenjo*, i. e. one new wench. The following verses are from Matthew v. :

"1. But when Jesus see the people, he go after one mountain-top, he go sit down, then disciple for him come close by after him.

"2. And he opened him mouth and learn them and talk.

"Good is them, these the pretty in heart, because God's country is for them.

"3. Good is it for them, these the sorry in heart because heart for them so cheery."

M. Michelet.—A Paris writer states that Michelet, the celebrated Professor, has opened a course of lectures on the education of Females. He is understood to have become more Royalist.

Whimsical Benevolence of Goldsmith.—Among the anecdotes told of him while at college is one indicative of that prompt, but thoughtless and often whimsical benevolence which throughout life formed one of the most eccentric, yet endearing points of his character. He was engaged at breakfast one day with a college-inmate, but failed to make his appearance. His friend repaired to his room, knocked at the door and was bidden to enter. To his surprise he found Goldsmith in his bed, immersed to his chin in feathers. A serio comic story explained the circumstance. In the course of the preceding evening's stroll he had met with a woman with five children, who implored his charity. Her husband was in the hospital; she was just from the country, a stranger, and destitute, without food or shelter for her helpless offspring. This was too much for the kind heart of Goldsmith. He was almost as poor as herself, it is true, and had no money in his pocket; but he brought her to the college gate, gave her the blankets from his bed to cover her little brood, and part of his clothes for her to sell and purchase food; and, finding himself cold during the night, had cut open his bed and buried himself among the feathers.—[Washington Irving's Life of Goldsmith.

Illegible Scribble.—Dr. Parr, whose hand was the very abstraction of incomprehensibility, visiting the reading-room of the watering-place, happened to find among the subscribers a name which he could decipher, though few others would have been equally successful. It was that of a friend whom he had not seen for some time. Anxious to renew early impression, he inquired of the proprietor of the rooms his friend's address.

This, however, was not known; accordingly the doctor was obliged to leave his card, with his own address, thereon written, or intended to be written, in that peculiar vehicle of thought which his pen was wont to employ. On the next appearance of the person for whom the card was designed, it was duly put into his hand. Delighted at the proximity of his early friend, the recipient proceeded to inquire at the talisman where its owner was to be found, but it pertinaciously refused to declare: not a letter was decipherable. Whether crescent, street or square, was undiscoverable. Thus foiled, the reader, if we may so designate the unsuccessful attempter, had no resource save to leave his own card, with his address, as he imagined, written therein. But, alas! he and his friend were similar in their ideas of penmanship as well as of other things; and when Parr, surprised that he had not seen his old companion, heard the history and received the card, he was equally at fault, and the result was, that two friends anxious to meet, and living in the same town, actually lost the opportunity of intercourse through the enigmatical character of their writing.—[Sharpe's London Magazine.

Weighing Department in the Bank of England.—One of the most interesting and astonishing departments within the whole compass of the bank of England, is the weighing department, in which, with the rapidity of thought, and a precision approaching to the hundredth part of a grain, the weight of the gold coins are determined. There are six weighing machines, kept working by the same agency which supplies all the mechanical power in the bank, and three weighers attend to these. Rolls of sovereigns, or half-sovereigns, are placed in grooves, and are shaken, one at a time by the motion of the machine, into the weights. If they are of standard weight they are thrown by the same mechanical intelligence into a box at the right-hand side of the person who watches the operation: if they have lost the hundredth part of a grain they are cast into a box on the left. Those which stand the test are put into bags of one thousand sovereigns each, and those below *par* are cut by a machine, and sent back to mint. Between one and two thousand light sovereigns are thus daily sent out of circulation. The silver is put up into bags, each of one hundred pounds value, and the gold into bags of a thousand, and then those bagful of bullion are sent through a strongly-guarded door, or rather window, into the treasury. The treasury is a dark gloomy apartment, fitted up with iron presses, which are supplied with huge locks and bolts, and which are perfectly fire-proof. Gold silver, and paper money ready for circulation, to the amount of twenty-two millions sterling, were in the treasury when we visited it. One of the gentlemen in that department placed one thousand sovereigns in *our* hand, and at the same time pointed to seventy bags full of gold in the little recess which he had thrown open, making in all the modest sum of seventy thousand pounds. He placed notes to the amount of a half million also upon *our* palm, which no doubt had its own sensations as the precious deposit trembled on its top. The heads of departments meet in the treasury every evening, and there all the accounts are balanced.—[Hogg's Weekly Instructor.

An Admirable Orrery.—Some general impression may be conveyed by placing a globe, two feet in diameter, in the centre of a plain or bowling-green. With the sun for a centre, a circle of 164 feet in diameter will represent the orbit of Mercury, the comparative size of which planet may be represented by a grain of mustard seed. Venus might be represented by a pea, moving in a circle, the diameter of which would be 284 feet; the Earth also a pea, but on a circle of 480 feet diameter; Mars a large pin's head; and the diameter of its circle 654 feet; Juno, Ceres, Vesta, and Pallas, grains of sand moving in circles from 1000 feet to 1200 feet in diameter; Jupiter a moderate-sized orange, in a circle nearly half a mile across; Saturn, a small orange, on a circle four-fifths of a mile in diameter; Uranus, a large cherry, upon a circle more than a mile and a half in diameter; and Neptune, a good-sized plum, on a circle about two miles and a half in diameter.

Phenomena of the Brain.—One of the most inconceivable things in the nature of the brain, says Wigan in his work on the Duality of the Mind, is, that the organ of sensation should be itself insensible. To cut the brain gives no pain, yet in the brain alone resides the power of feeling pain in any other part of the body. If the nerve which leads from it to the injured part be divided, it becomes instantly unconscious of suffering. It is only by communication with the brain that any kind of sensation is produced, yet the organ itself is insensible. But there is a circumstance more wonderful still. The brain itself may be removed, may be cut away down to the *corpus callosum* without destroying life. The animal lives and performs all its functions which are necessary to simple vitality, but no longer as a mind, it cannot think or feed, it requires that the food should be pushed down its stomach, once there, it is digested, and the animal will even thrive and grow fat. We infer, therefore that the part of the brain, the convolutions, is simply intended for exercise of the intellectual faculties, whether of the low degree called instinct, or exalted kind bestowed on man, the gift of reason.