

some parts whole forests of the trees exist, and they are frequently cut down for firewood. Although the tree exists in Mexico and the East Indies, there appears to be no importation into the United States from these places. The reason I suppose must be the want of that prolificness found in them here. The caoutchouc tree may be worked all the year, but generally in the wet seasons they have rest, owing to the flooded state of the woods; and the milk being watery, requires more to manufacture the same article than in a dry season."—*Western Literary Magazine*.

FROGS IN STONES.

We have several apparently well authenticated instances on record of frogs and toads having been found enclosed in masses of rock, to the interior of which there is no perceptible means of ingress. It has been the fashion, however, with naturalists, to dismiss all such cases on the assumption that there must have been some cleft or opening by which the animal was admitted while in embryo, or while in a very young state; no one, as far as we are aware, believing that the sperm or young animal may have been enclosed when the rock was in the process of formation at the bottom of shallow waters. Whatever may be the true theory regarding animals so enclosed, their history is certainly one of the highest interest; and without attempting to solve the problem, we present our readers with an instance taken from the Mining Journal, of January 18th, 1845:—"A few days since, as a miner, named W. Ellis, was working in the Penydarran Mine Works, at forty-five feet depth, he struck his mandril into a piece of shale, and to the surprise of the workmen, a frog leaped out of the cleft. When first observed, it appeared very weak, and, though of large size, would crawl only with difficulty. On closer examination, several peculiarities were observed; its eyes were full-sized, though it could not see, and does not now see, as, upon touching the eye, it evinces no feeling. There is a line indicating where the mouth would have been, had it not been confined; but the mouth has never been opened. Several deformities were also observable; and the spine, which has been forced to develop itself in angular form, appears a sufficient proof of its having grown in very confined space, even if the hollow in the shale, by corresponding to the shape of the back, did not place the matter beyond a reasonable doubt. The frog continues to increase in size and weight, though no food can be given to it; and its vitality is preserved only by breathing through the thin skin covering the lower jaw. Mr. W. Ellis, with a view of giving his prize as much publicity as possible, has deposited it at the New Inn, Merthyr, where it is exhibited as "the greatest wonder in the world—a frog found in a stone forty-five feet from the surface of the earth, where it has been living without food for the last 5000 years!"—*Chambers' Journal*.

DESCENT IN A DIVING BELL.

The Bunker Hill Aurora, states that Capt. Taylor afforded a highly interesting exhibition, on board the Spitfire, while lying near the Navy Yard a short time ago. A number of gentlemen had been invited on board, and about fifty were present, including Commodore Nicholson, Collector Morton, Mr. Parmenter, Capt Sturgis, Hon. Benjamin Thompson, and others. One of Capt. Taylor's men first went down in the sub-

marine armor and explored the bottom for some time, being fully supplied with air from the air-pumps. After he was drawn up, Capt. Taylor taking a friend with him, went down in one of his new copper Diving Bells, which he had just been making for the government. They descended to the depth of about forty-five feet, and remained on the bottom about half an hour. While there they sent up a message, written on a piece of board, for a bottle of Porter, which came down, with a corkscrew and tumbler, and each gentleman "took a drink." At one time there was about a foot of water in the bell while Captain Taylor permitted the air to escape at the top of the bell so as to keep it fresh; by turning the stopcock, the air was condensed, and the water expelled to within an inch of the rim of the bell. The experiment was completely successful and highly satisfactory. A strong tide was running, but the bell was so constructed that it was but slightly affected by it. The bottom was thoroughly explored, for a circumference of twenty feet around the spot where the bell descended. Various kinds of fish were seen and could have been taken with a spear. The atmosphere inside the bell was warm, but the heat was not oppressive or disagreeable. In descending, the pressure of the air on the tympanums of the ears was rather painful; but this was obviated as soon as the system became adjusted to the pressure. While at the bottom the sensations were pleasant and rather exhilarating. The bell appears to us to be a most perfect apparatus, and to possess many advantages over all others which have heretofore been used.—*Literary Messenger*.

GREAT DISCOVERY IN ILLUMINATING AND MOTIVE POWER.—The *Railway Times* has the following:—"The decomposition of water has at length been obtained, and that at a merely nominal cost, and with unerring precision. This great discovery originating in America, has been perfected by the experiments of an eminent German chemist, and patented in the three kingdoms by Mr. Shepard. The carburetted hydrogen may be formed to any extent, which, while possessing an illuminating power, equal to that of coal gas, is capable of being itself applied to the same purposes as steam at a remarkably high pressure. The gas is also capable of producing an amount of caloric equal to that of live coal, and consequently well and cheaply fitted to act as a combustible agent in the conversion of water into steam. This tremendous power has been for some time engaging the attention of our most eminent engineers, and will, when sufficiently tested, be experimented upon before the public. If successful, as there is every appearance of its being, the revolution it must effect in the economic working of railways, and indeed in every branch of trade and manufacture where steam is employed as a motive power, is altogether incalculable. It almost opens to the wondering gaze the Utopian vista in which unskilled manual labor shall be no longer necessary. It is sufficient for us, however, to state that several leading railway companies are in treaty with the patentee; and that, consequently, if anything whatever is capable of being made out of the discovery, the railway interest will possess at once the first benefit and chief honor in its realization."

HEATING BY STEAM.—This is by no means a modern invention. In 1745, Col. William Cook improved upon a plan of heating hothouses, suggested by Sir Hugh Platt, many years before, and in 1755, we find him recommending it as applicable for the forcing of fruit.—*Nor. h-British Agriculturist*.