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Discovery of Etherization.

It is well known that application was made to the present Congress, by Drs. Morton and Jackson, of Boston, to get remuneration for the application of etherization in the U. S. Hospitals. It was said that the Committee having the matter in hand, had agreed to grant $100,000 to Dr. Morton, whose claims were disputed by Dr. Jackson. In commenting upon this question, on page 221, we said, "if Dr. Wells were living, he perhaps could establish his claim against both of these gentlemen." A pamphlet is now before us by J. Wales, of Hartford, Conn., which, in our opinion, clearly demonstrates who was the discoverer of etherization, and who was the first person that applied it successfully in surgical operations;—that person was Dr. Wells. Before the latter part of 1844, the fact was not known that, by the inhalation of a gaseous substance, the body could be rendered insensible to pain during surgical operations, without injury to the patient. "No one," says the pamplet, "before that time, had ascertained the fact by actual experiment," It is true Sir Humphrey Davy made the first suggestion, and so far as that goes, his claims are entitled to some prominence. He says, "nitrous oxyde, in its extensive operation, appears capable of destroying physical pain; it may probably be used with advantage during surgical operations, in which no great effusion of blood takes place." We have no record of any experiment made by him for this purpose, therefore his conjecture must be estimated according to its worth, and we must say that is not little; it exhibits that far-reaching sagacity for which he was celebrated.

In the autumn of 1844, Dr. Horace Wells, of Hartford, Conn., directed his attention to this subject, and having procured some nitrous oxyde (laughing gas) he resolved to make the first experiment on himself, by having a tooth extracted. This was done, and Dr. John Riggs made the experiment at Dr. Wells' request. This was about the first of November, 1844. Dr. Riggs testifies that he along, with Dr. Wells, encouraged by this experiment, administered the gas to various individuals in the presence of several gentlemen. and extracted teeth from those who were placed under its influence. At this time Dr. Wells knew the properties of sulphuric ether, but he believed the nitrous oxyde gas to be more safe. The testimony of the persons upon whom these experiments were made in 1844, has been given. Dr. E. E. Marcy, formerly of Hartford, now of this city (New York), was present at one of the experiments, and the fact of rendering the body, for a limited time, insensible to pain while undergoing a surgical operation, by the inhalation of a gas, was then entirely new to him. He suggested to Dr. Wells the employment of rectified sulphuric ether, as he knew it produced the same effects as the nitrous oxyde gas. He prepared some sulphuric ether, and in a few days afterwards he administered it to a young man, who was rendered insensible, and a tumor was cut from his head. This demonstrated to him and Dr. Wells the anæsthetic properties of ether vapor. It is also stated that Dr. Wells visited Boston, and communicated these facts to Drs. Jackson and Morton, —and the former, and other medical gentlemen in Boston, only ridiculed him for his pains. The fact of gas being used to render persons insensible to pain during surgical operations, was also announced in June, 1845, in the "Boston Medical and Surgical Journal."

It was not until the 27th of October, 1846, that Drs. Jackson and Morton—the latter a pupil of Dr. Wells—applied for and obtained a patent for the use of *ether*, or the vapor thereof, in surgical operations. This was about two years after the first experiments of Dr. Wells. Taking all these facts into consideration, it appears to us that the claims to priority of discovery and application belong to Dr. Wells. Congress, therefore, instead of granting $100,000 to either of these gentlemen, should first investigate the claims of Dr. Wels. It is the duty of our government to render "honor to whom honor is due, and tribute to whom tribute is due."

Fires and Falling Walls.

On Thursday last week (13th inst.), a fire broke out at 11½ A. M., in the rear of French's Hotel, this city, and the whole of that part of the premises was destroyed. The building was a very high one, and it was difficult for the firemen to do rapid execution, as none of the ladders could reach the top story. The body of a man was found burned to a crisp among the ruins. Part of one wall fell and wounded a fireman severely. If the whole hotel had been burned, and the walls fallen down, they would no doubt have crushed Tammany Hall on one side, and the buildings on Frankfort street on the other. Owing to the very high price of lots in the city, it is customary to erect very high buildings, in order to economize money upwards, because so much has to be expended in purchasing the few miserable feet of ground on which a building is erected—owing to America being so very small, and ground so scarce, we suppose. There should be a new law passed forbidding the erection of stone or brick buildings over a certain height according to a sure thickness of the walls. Thus for a six story building—specifying the height in feet, the outside walls should be no less than two feet thick, and a four story building no less than twenty inches, and so on. The outside walls of some buildings in our city are mere shells, and the front walls of all brick buildings are now built for show, without respect to their strength, for no headers and binders are employed in the front rows of brick. The walls of these buildings are dependent on the joists and floors for support; therefore, when a fire takes place, and the floors are burned, the walls come crushing down to the great danger of life and adjacent houses. It is time that some reform was effected in respect to the security of the walls of houses in this city.

New War Steamers.

On the 11th inst., Senator Stockton addressed the Senate at length on the resolution authorizing the building of a war steamer for harbor defence, in pursuance of a law authorizing a contract for that purpose with Robert L. Stevens. He said he desired to impress upon the Senate the necessity of providing a harbor defence, and to have justice done to one of his constituents who had been ungenerously treated by the former Secretary of the Navy. "It was his opinion that the present state of affairs in Europe rendered war probable, and in that event there was danger of us being brought into it. The harbor of New York is not now any better than it was during the war of 1812, and fleets now approached the United States uninterrupted by winds or tides. With a speed of 20 miles per hour, a steamer could pass beyond the range of a fort in five minutes. To obviate the attack of a foreign fleet, it was necessary that there should be a construction for harbor defence, combining the qualities of stone with the power of motion. This vessel being shot and bomb proof, could do more to resist the progress of hostile fleets than 20 forts. Mr. Stevens, the author of the design, is an accomplished and experienced gentleman, who is willing to hazard his character and reputation on the success of the undertaking." Thus, and a great deal more, Senator Stockton spoke in reference to a steam floating battery.

A petition has also been presented to Congress by a person professing to be acquainted with steam navigation, who believes that he can construct an ocean craft which can neither be burnt nor sunk, (even if stove against icebergs or rocks), nor blown up by its boilers, and which will average, in a voyage across the Atlantic, fifteen miles an hour, and he will undertake to build the vessel providing the Government will remunerate him in case of success. He asks Congress to place in the Deficiency Bill a provision giving him and his associates, or their legal representatives, the sum of one million of dollars upon condition of his producing such a vessel within five years from the passage of the act, to be adjudged and reported on by a committee of five disinterested persons to be appointed by the President, on whose decision the Secretary of the Navy is to pay the money. The plan is, that the vessel is not to be less than four thousand tons, forty rods long, and six wide; to draw only from five to six feet of water when laden. She is to have two sets of boilers and engines, and four pairs of water wheels; is to be of iron entirely, with zinc finishing; the kelsons, ribs, &c., are of plate iron, corrugated where proper, and made air-tight, forming air chambers. The floors or decks will be double, having sectional air chambers throughout, as will also the portions of the ship, including those forming the state rooms, cabins, &c., thereby rendering it impossible for her to sink. She is also to be subdivided by water-tight partitions. Although five years are asked, the memorialist says he can accomplish the work in two; and although the condition of speed is fixed at the moderate rate of fifteen miles an hour, he has no doubt of accomplishing an average of from twenty to twenty-five miles per hour, besides having her shot-proof.

Here, then, are two Richmonds in the field. The latter proposition, we believe, is the best. Mr. Stevens will no doubt accomplish anything he undertakes in the steamboat line, but a harbor floating fort would be a most useless appendage. Let us have a good steam fleet; let our sea defence be upon the mountain wave. In an emergency, sand bank barricades can be thrown up for the defence of our harbors, and these, with heavy guns and brave hearts, need fear no foreign floating batteries.

Patent Self-Raising Flour.

We see it stated in many papers that Hecker & Brothers, of Croton Mills, this city, manufacture and sell flour ready for the market, called "Patent Self-Raising Flour." We are not aware of any patent ever having been issued for the said flour, and we presume the public have given it the name of *patent*, not the manufacturers. It is not very safe to use word "patent" on an article, if it has not been patented. That such flour as "self-raising flour" is made by Hecker & Bro., is true, but it is not the flour itself which has the quality of *raising*, as it is termed, when kneaded only with cold water, but it must be some admixture which causes effervesence. As this kind of flour is coming into somewhat extensive use, it is right the public should know what the effervescing materials are which are mixed with the flour. Tartaric acid and saleratus may be the ingredients, which are very excellent and safe, but if alum be used, a trick common among English millers, we deprecate its general use. Any person can mix their own flour, with but little trouble, so as to make the dough ferment, but there are so many who dislike even this little trouble, that the new fermenting flour will become quite a favorite; and, we must say, if the fermenting ingredients are healthful, we hail its introduction; if not, we deprecate its use.

Academy of Natural Sciences of Philadelphia.

This respected and time-honored Institution has published a pamphlet, containing a condensed notice of its origin, progress, and present condition, which was the subject of a paper read before the society during the past winter, by Dr. Ruschenberger, U. S. Navy. From small things it has attained to a most dignified and respectable position. It contains Wilson's unrivalled collections of birds, and in time it may rival the British Museum. It was founded in 1812, with seven members, and since that time, has had, and now has, some of the most eminent men in our country for members, such as Say, Wm. McClure, Drs. Morton, Hare, and others. The object of this Association is the cultivation of the "Natural Sciences," and we cannot help quoting the following extract to show their importance:—"To ascertain and understand the laws of God, exhibited in the living organization, which exists on its surface; to bring to light whatever may lie hidden in the obscure recesses of nature; to expose truth stripped of the distorting disguises in which ignorance and superstition combine to hide her charms from the gaze of mankind, are among the objects of the natural sciences. Such objects are not and cannot be inconsistent with the duties or the feelings of a true Christian.—The study of natural history has a happy influence in the cultivation of the intellect,—while it tends to tranquilize and strengthen the mind, and to release it from the thraldom of superstition and credulity, it refines the taste and teaches man to appreciate justly the beauties and wisdom of nature. It enables us to derive from objects that everywhere present themselves in our rural walks, not only amusement and instruction, but the highest incitements to piety and virtue." This is indeed true; a naturalist cannot be an athiest, for all he sees and all he learns is absolute truth.

Naval Dry Docks of the United States.

This is the title of a book—that *is* a book—by Charles B. Stuart, Engineer in Chief of the United States Navy. This work is now before us, and we must pay it the compliment of being far and away the most beautiful work on engineering ever published in our country, and perhaps any other,—at least without some government support. As a private undertaking it is an extraordinary one. It will stand a monument of the author's taste, skill great acquirements, and spirit, for centuries, Gen. Stuart deserves the gratitude (for he has extorted praises of every one who has seen his work) of his countrymen for the splendid manner in which he has treated his subject, and commemorated those great national works. "The Dry Docks of the United States." It is his intention to bring out a second number of the series, on the "Naval and Mail Steamers of the United States," to be followed by a third on the "Railways of the United States."

As a work for its own intrinsic merit, we hope it will have a most extensive sale, and we also bespeak for it the attention of our countrymen, in order that it may be followed by the two other volumes spoken of, for such subjects are in the hands of the very person who can do them justice.

In this work we have an historical description, embracing the fullest details, of the Granite Dry Dock at the Brooklyn Navy Yard, the Floating Sectional Dry Dock, Philadelphia, and the Floating Balance Dry Dock, Portsmouth, together with the mode of constructing and working the dry docks at the principal naval stations of the United States. The statistics of these great public works, in addition to the engineering descriptions, are given at length, comprising a statement of the materials and their cost, the contract prices of the various kinds of machinery, the expenditures for labor, the names of the contractors, and a great amount of valuable informtion on every point relating to the construction of the docks. The volume is splendidly illustrated by twenty-four engravings on steel.

This valuable work is gracefully and appropriately dedicated to the President of the United States, Millard Fillmore. It should find a place on the shelves of every public library in the Union, and the private library of no American will be complete without it. It is for sale at C. B. Norton's Irving House.

Another Telegraph Case.

On the 10th inst. Judge Kane refused to grant an injunction on behalf of the proprietors of the Morse Telegraph Patent, to restrain the Ohio Telegraph Company, and the Pittsburg and Louisville Company from using said patent. The complainants stated that they were entitled to one-quarter of the stock, and one quarter of the dividends in the above line, under what is generally known as the O'Reilly contract, which had been withheld by defendants. This was denied by defendants who charged vexatious suits, and fraudulent proceedings on the part of the plaintiffs for the purpose of breaking down the O'Reilly Line, &c.

Iodine

This substance, which a few years since was thought to be confined to a few marine plants, has been gradually traced through the mineral, vegetable, and animal kingdoms, and its general diffusion throughout nature is rendered exceedingly probable. At the Paris Academy of Sciences, M. Chatin recently read a paper in continuation of his researches on the presence of iodine in the air, the water, the soils, and products of the Alps of France.

The Managers of the Maryland Institute have adopted suitable measures of respect to the memory of the late Prof. R. Johnson.