



NEW YORK, APRIL 28, 1849.

Patents, Inventions and Inventors.

No less than fifty-five patents are on our list this week. New York State has 16, Pennsylvania 10, Massachusetts 5, New Hampshire 4, New Jersey 3, Ohio 3, Vermont 2, Connecticut 2, natives of Britain 2, Kentucky 1, Virginia 1, Louisiana 1, Indiana 1, Michigan 1, Delaware 1, District of Columbia 1, Maryland 1. The 53 patents are thus divided among 15 States, of which New York has a share of 35-16, nearly one third of the whole, and Pennsylvania nearly one-fifth. The old Granite State for its number of inhabitants stands well upon its adamantine limbs. The fees for the 53 American patents amount to \$1590. The fees for the two British patents amount to \$1000. Four of the patents granted have already been illustrated and described in the Scientific American, viz. Mr. John Massey's Grain Drier, Mr. Tremper's Rotary Engine, Mr. Nathaniel Adams's Machine for Pressing Brick, and Mr. Bain's Electro Telegraph. It will be observed that the patent for Mr. Bain's Electro Chemical Telegraph which is issued this week, is the one that has created so much sensation throughout the country. We had expected to see Mr. Morse's issued at the same time, but this is probably delayed by request of the gifted inventor. A number of the patents have been described without being illustrated, in this paper.

A number of patents have recently been secured for Planing Machines. Mr. Allen's patent, granted this week, has been described, and Messrs. Barnum & Wells', granted a few weeks ago, illustrated in our columns.

We often hear people sneering at inventions and with a knowing look at their independence of mechanical improvements, ridiculing the honest efforts of inventors. Such men are infidels to progressive principles and scientific improvement, and we never fail to tell such characters our opinions respecting their principles. Such characters should have lived in the year 1 and died in the year 0-1.

In the spring of 1846 we happened to be travelling in the cars from Buffalo to Utica.—They were then erecting the telegraph wires on that line, and as we were wrapt in enthusiasm respecting that wonderful invention, and in conversation with a gentleman was pointing out some of its benefits, a person of a smiling and smirking consequential air, who had been reading one of the fashionable novels to his lady from the time he entered the cars at Rochester, interrupted us with, "oh yes, sir, it is all very fine for some interesting speculation, one of your perpetual motion hobbies to gull the public for a short time and disappear." We did not like the interruption, but like Midshipman Easy, we tried to reason the matter with him. But it was all in vain, *he had seen too much of the world* to be deceived with such things. We could not but exclaim—

"Oft has it been our lot to mark,
A proud, conceited talking spark,
Returned from his finished tour,
Grows ten times pertier than before
Whatever word you chance to drop,
The travelled fool your mouth will stop,
Sir, if my judgment you'll allow,
I've seen it and I ought to know."

A sweeping article upon inventions has lately appeared in the Edinburgh Review and has been copied into that excellent periodical Littell's Living Age. The lash is laid on severely and injudiciously. The article points out the evils and defects of some inventions, and jeers at the lack of scientific knowledge displayed by inventors generally. It is true that many inventors are illiterate men, and a little science would have saved many of them much trouble and expense; but all men have not the good fortune to live above a state of dependence on severe daily toil, and consequently have not been able to acquire what is called "a good education." But learning can

no more make an inventor, than it can a poet, and the only difference after all between an educated and an uneducated inventor, is this—the former may arrive at a conclusion faster as based upon comparative knowledge, while the system of the latter is tentative, and surely there is no man so ignorant, as not to know that experiment is the left hand of invention.

The Inventor of the Tubular Boiler.

It is well known that our locomotives would make but poor speed if their boilers had not a great amount of heating surface. The speed of a locomotive may be said to be limited by the amount of steam it can generate in a certain time. The greater the amount of surface in contact with the water, that is exposed to the heat of the fire, the greater amount of steam will be generated with the least waste of fuel and in the shortest space of time. The best plan to accomplish this, is to construct the boiler with a number of water tubes directly exposed to the heat of the fire and hot air. All locomotive boilers are made with a number of tubes about an inch and a half in diameter. The first successful locomotive was the Rocket, and its success has been attributed to the great amount of heating surface which it possessed over its opponents. This being true and the benefits of railroads incalculable, some mead of praise should be bestowed on the memory of the man, who if he did not invent the locomotive engine, invented what it could not do without, viz. the locomotive boiler. "Who was that man some will say? We never heard of him." We have heard the name of Stevenson as being associated with the locomotive, and we had supposed that he was the inventor of the engine, tubular boiler, and all. This is not so. The inventor of the Tubular Boiler, was an American, Col. John Stevens of Hoboken, N. J. He invented his tubular boiler, in 1804, and patented it in England in 1805. He propelled a boat on the Hudson in 1804, three years before Fulton, and after expending \$30,000 he dropped the project without realizing a single shilling's worth of personal benefit. The whole world is now enjoying the benefits of his invention, and but few know the name of him to whom they are so much indebted.

Cork.

We are too apt to undervalue things that are used in common life, and which may be procured at no great expense. Water is as essential, yea more so, to our subsistence as food, yet we seldom think of its value because it is so plenty. Were we deprived of it by drouths like those experienced in some parts of the East, we would feel deeply the force of the beautiful song of David, "as the hart panteth for the water brooks."

Cork is a substance which is now very plenty and its real value as a useful article, is not duly estimated. Cork is a substance that is very light, can be easily compressed and it expands again when the compressing force is removed. It is therefore very useful to stop up very closely, that space into which it may have been driven, and it is therefore the best substance known for stopping the orifice of bottles and such like vessels. In olden times wax was the only substance used, in combination with clay or wood for this purpose.

Cork can be cut into various forms, and it has the property of preventing most liquids from passing through it, although it is so light.

Cork is the outside bark of a tree of the oak species, and which grows wild in Southern Europe. When the tree is about twenty years old it is fit to be barked and this can be done successively every eight years afterwards—The bark grows on again, and improves in quality with age. After it is taken off the tree it is generally singed a little, over a strong fire of coals, after it is soaked a certain time in water, and then placed under stones to straighten it. The Cork tree was known and used both by the Greeks and Romans. In the days of Pliny the fishermen as now, made floats to their nets of Cork. It was also used for buoys on sand banks, in the days of Pliny. We think that Cork soles are something new, but the Roman ladies used it for this purpose in the days of Pliny too, and even our Cork Life Preserver, or swimming jacket, was known in the days of Camillus, for the Roman Soldier whom he sent to the Capital when besieged

by the Gauls, "placed his clothes on his head when he came to the Tiber, and placing Cork under him crossed the river to the Capital."

Cork however was not in very common use in the "brave days of old," for cements and pitch were more commonly used with wood, to close up wine casks and vessels of oil.—Cork stoppers began to be generally used by German Apothecaries about the end of the 17th Century. For small stoppers to bottles a variety of different kinds of substances are now used, one substance is the wood of a tree which grows in South America, called Spondias Lutea. The roots of Liquorice is used in Sclavonia for that purpose, and the Cossacks of Russia, use the bark of the black poplar for stoppers to their flasks. In our county the cornears are used for a good purpose for stoppers, but none of these things are equal to cork, and as Dr. Liebig has said, science is indebted to it for some of the advancements which it has made within the last century. India rubber is now used as a substitute for Cork for a number of purposes and it is superior to it, as it is but slightly affected by moisture or dryness, it is also more elastic and tenacious. The finer the grain the more suitable they are for preserving liquors, &c. The grand secret is to prevent the escape of carbonic acid gas which is the grand preservative. In England there are an enormous quantity of stoppers now manufactured out of India rubber. It is a thing of manufacture that has not yet crossed the Atlantic and become common with us.

Patent Stove Case.

At Auburn, N. Y. before Judge Conklin of the U. S. District Court in Equity, in the case of Elisha Foote vs. Silsbee and others on motion of the defendants, and on their giving in the penalty of \$3,000 conditioned to pay him a judgement heretofore recovered by him for \$1,500 and costs, against the defendants Silsbee, Race, Downs, Henion, and one Charles C. Thompson, provided said judgement should not be set aside and a new trial granted either in this Court or in the Supreme Court of the United States, the injunction heretofore issued by the plaintiff against the defendants, preventing them from making, selling or using regulators for stoves commonly called Race's Regulators, was suspended, and it was ordered that the motion for a new trial be heard at the next term of the Court to be held at Canandaigua on the 9th of June next.

For the motion, William H. Seward and Samuel Blatchford. Against it, Henry B. Stanton, and the plaintiff in person.

The Great Smoke Case Decided.

After ten days' tedious trial in Cecil County Court, Maryland, the great suit of Dr. John K. Sappington against the Messrs. Whitaker, popularly known as "The Smoke Case," was decided on Friday evening last in favor of the defendants. The Messrs. Whitaker are extensive manufactures of iron, and have furnaces in Havre de Grace. This smoke, Dr. Sappington alleged, came to his dwelling and entered therein, and in the phrase of the lawyers, greatly "damnified" him in his person, his family and servants, causing sickness so that he had to remove away from his house and his business to escape it.

Manufacturing Profits at the South.

The Augusta Manufacturing Company have declared a dividend of 3 per cent for the last three months, which is at the rate of 12 per cent per anu. The Augusta Chronicle says:—This result is the most remarkable when it is borne in mind that during this time only one hundred and sixty looms have been in operation. The full complement with the present capital would be two hundred looms. When the additional capital of forty thousand dollars, subscribed by the original stockholders, is paid in, the number of looms will be increased to three hundred and twenty-five. Some idea may thus be formed of the future business and profits of the Company.

Mechanics Fair.

The Salem, Mass. Charitable Mechanics Association is to have its first Annual Exhibition in the month of September next. Mr. Eleazar M. Dalton is Secretary, to whom communications may be addressed for more information.

Electricity and the Telegraph.

The following are some views upon this interesting subject, by S. C. Newman, Esq. of the Telegraph Office, Woonsocket, R. I. and which appeared in the Woonsocket Patriot of the 16th inst. as an answer to Mr. J. Helme, who solicited in the name of a number of others information on the two subjects, viz. "the materiality, or not of electricity, and its velocity." Mr. Newman says: "This then, is the most definite answer I am able to give you; from evidence drawn principally from analogy, and from the entire lack of any thing like contrary evidence, I am strongly inclined to the belief that Electricity is matter, and fully entitled to a place among the materiel organizations of the physical world; but at the same time must frankly own that when any tests are applied to it in relation to the question involving absolute demonstration, all we can honestly say of it is, *stat nominis umbra.*"

[The most elaborate articles that have lately appeared on this subject, are some by Prof. Robert Hare, of Philadelphia. We believe that Faraday has the same opinion of the matter as Mr. Newman. Prof. Donovan of Dublin, differs from Faraday in a number of particulars.

The other question is: "Is its enormous velocity merely conjectural, or has it been subjected to any thing like demonstration; and if so, in what conceivable way can its velocity be computed?"

This can be more definitely answered Mr. Newman says. Its velocity is one hundred and eighty thousand miles in a second. The mode of demonstrating it we will give in a future number.

Emigration from the British Provinces.

During the week, ending April 16th, 425 passengers have arrived at Boston in thirty nine vessels, all but one of which were from the British North American provinces. 280 of these passengers paid head money, and 182 have been here before. These immigrants are of a good class of farmers and mechanics and almost as soon as they land, they start for the west. This large emigration is in consequence of the hard times in the Provinces—caused by the continued failure of the crops. It is said that the inhabitants in some places are very generally leaving for the States.

Rolling Mill at Utica.

Messrs. Higham & Co. of Utica, N. Y. have erected a Mill for rolling iron and are now in the full tide of successful operation. The mill has four furnaces, one steam engine of 160 horse power, and rollers for making round and bar iron, from three-eighths of an inch to three inches in size. The mill has turned out from four to five tons of iron per day, which has been pronounced by competent judges to be of a very superior quality.

New Glass Works.

Messrs. Reed, Allen, Cox & Co. of Pittsburg, have purchased a site and are erecting buildings for the manufacture of Glass in the village of Lancaster, near Buffalo. They will commence manufacturing about the 1st of August. This will be an important branch of business for Lancaster.

Our Patent Patrons.

Quite a number of friends who have favored us with their business, will perceive their names in the Patent List this week.

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Our London Patrons.

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