NEW YORK, APRIL 21, 1849.

Business at the Patent Office.

Our readers will perceive that the Examiners of the Patent Office are making the business fly. There are more than double the number of patents issued every week now than were issued during the corresponding weeks of 1848. Last week there were thirty six patents issued. During the corresponding week of 1848. there were only five patents issued. There are thirty eight patents in our list of this week, while on the 11th of April 1848, there were only twelve. Here we have the astonishing number of fifty seven patents issued within two weeks, over and above the number issued during the same weeks of last year. This speaks volumes for the efficiency of the Examining corps to exterminate the business that had acumulated on the files of the Patent Office before additional examiners were appointed by the law passed last year for that purpose. There are few who are aware of the many troubles experienced by the Patent Office. The amount of correspondence with it and inventors throughout our country, is enormous, and there are many very many anoyances to which the Patent Office is subject. One man writes us that he sent his model and specification to the Patent Office about six months ago but had not yet forwarded the fee $30. Well here is a case of trouble to the Patent Office. The papers are placed on file, but not in turn for examination until the fee is paid. The model, specification and Fee must all be entered upon the regular file before the application takes its turn for examination. There are a great many who write letters to the Patent Office about this and that business. No notice are taken of such letters —the Patent Office is supported, not by the funds of Government but the fees for patents, recording, drawings and copies of patents. Those who pay nothing into the Patent Treasury cannot justly expect to receive any equivalent but that which they have rendered.

A great number of people suppose that the British Patent Office is better managed than ours because the fees are higher. This is a great mistake. Our Patent Office is two centuries in advance of the London one. It is true that patents are more easily secured there. They are not examined and corrected (if there are any mistakes,) as is done at Washington, but granted if there are no just opposers to the granting of the patent. This is the reason why so many old inventions are repatented in England. In the eye of the law they are worthless. There is one thing, however, about the sustaining a patent abroad, which is commendable. Their inventors are protected, and protected well in their just rights. Our inventors are subject to more chagrin and trouble after they have secured a patent to sustain it, if there is any infringement—in fact, a poor inventor unless supported by some man of wealth, is not able to sustain his patent.—There exists, therefore, a great necessity for a thorough reform in the Patent laws. This is the only hope and rock of confidence for our inventors. As far as it regards the organization of the Patent Office, it is almost perfect. The only reform which we would wish to see instituted is a widening of the field for decision respecting what is new. The decisions are frequently too contracted in spirit, as if ingenuity was exercised to invent objections. We have no doubt but many good novel things have been rejected for "want of novelty." True, many patents have been granted for inventions that had been rejected by a first examination, but it is human nature to stand by a first opinion. Nevertheless the Patent Office is very liberal in re-examining, but great care and kindliness should be exercised on the first examination before decision. If there is a doubt, let the inventor have it in his favor.—Whatever has a tone of novelty in the invention, let it be protected freely, if it would not bring it into conflict with an existing patent, or is similar to an expired one. There is no invention, however simple, that does not cost the inventor much trouble and expense to bring it before the Patent Office.

Labor and Capital.

It has been wisely decreed by Providence that the comforts and conveniences of our physical existence, and our mental too, should be obtained by labor. The humble fare of the peasant, the scanty furniture of his domicil, the mansion of the rich man with all its gilded appendages are produced, collected and arranged by labor. This being true, it follows as a matter of course, that the greater amount of labor that is performed, the greater amount of the necessaries, comforts and luxuries of life will be the result. All improvements in machinery tend to this result and must therefore be a benefit to the world In confirmation of this we need only refer to the difference in the dwellings and dress of the working classes at the present day, and the working classes of the fourteenth century. But the change is more apparent in the abodes of opulence than in the dwellings of those who may be termed the poorer of the people.—From this circumstance many are led to question the utility of improvements, because the advantages resulting from them are monopolized in a great measure by those who have but a small share in their production.

The apparent unjust distribution of the goods of this life, is the result of the relation between labor and capital. But what is capital in the strict sense of the word? Accumulated labor, for money is the acknowledged representative of labor. Were there no accumulated labor (capital) in our country, what would be the difference between us and the sluggard whom the wise preacher, exhorted to "go to the ant and learn to be wise, for she layeth up her food for the winter."—Capital bringeth to the possessor of it, all those ingenious contrivances which increase production, and if the capital is honestly attained who should find fault, for it is paid out again as an exchange for the mill, or the other machinery that is purchased to increase production. If a man stipulates to perform a certain amount of work for a hundred dollars that might take him 100 days to perform, and he discovers some implement whereby he can complete it in 10 days, has he not the same right still to his $100? Surely he has, and the 90 days that are now left at his disposal may be employed to produce a house to shield him from the weather, or perform any other kind of labor that will increase his comforts. No man should find fault with this. It is no doubt true that there is a disproportionate difference between the returns which labor brings and the returns of capital. This is not the fault of the capital, but the way in which it is managed. It is indeed wrong to injure any class for the sake of benefitting another class, but this is a nice question to discuss.—Capital is good, and not an evil but as it is used, and surely the greatest and most noble manner of using it, is in doing good with it. Without accumulated capital, it would be impossible to conduct the affairs of the world in the present highly civilized state of society. Without a very large capital invested, we would see no steamboat crossing the Atlantic and no railroads bearing their rich freights from lake to ocean. When capital is fairly and freely paid in exchange for labor, as it should always be, it is certainly a great element in popular elevation.

Nail Making.

At one period all Nails were made by hand —forged out of rods of iron. Men who had learned the trade were exceedingly expert at the business, but still the price of the labor was great, as every nail had to be heated and receive a certain number of blows from the nailor. These considerations gave rise to various patented inventions for making nails by machinery. The first patent was taken out in England by a Mr. French, of Winbourne, in Stafford, in 1790. He merely employed water power to operate the hammer, enabling children to become nailors. One brought the rod from the fire, another turned it under the hammer and cut it off, when it was taken to the header to be finished. In 1792 a Mr. Clifford, of Bristol, England, made an improvement by making the nail in a steel die. The steel dies were rollers, and each roller had a cog wheel on it—the cogs of one working into the cogs of the other, both making the same number of revolutions, and one half the impress was made in the one roller and the other half in the other roller, and the two impressions formed a cavity or die of the exact form of the nail, extending lengthwise of the nail on the circumference of the rollers. A number of dies were thus made in one set of rollers.

Another plan was to cut out the nails by punches operated by machinery, in the same manner as buckles and buttons were made; and still another plan was to punch the hot nail rods with cams upwards to form the head and afterwards to anneal them in the ordinary way to soften them for clinching.

All these plans were different from our common machine cut nails, and they were intended to answer the purpose of the wrought iron clinching nail. The first American invention of the cut nail, but which had no head, is claimed to have been accomplished by Benjamin Cochran, who died in December, 1846, at Batavia, N. Y., who was once a shopmate of Eli Whitney, at New Haven, Conn. He invented his machine before the Federal Constitution was adopted. In 1790, the very year that the first English patent was taken out by Mr. French for making nails by machinery, some ingenious mechanics in America made nails by cutting them first by punches out of sheets of iron, and heading them afterwards.

In 1810 machinery was erected in the United States by the ingenious Perkins and Jonathan Ellis for cutting and heading nails at one operation. The cut nail does not clinch like the wrought iron nail, but for many purposes it is better. To drive wrought iron nails, the timber has first to be bored with the gimlet. This was too tedious a process for us Yankees to stick by—it did not suit the spirit of Jonathan, who would rather mount on a rocket than travel on terra firma by any system of Donkey locomotion. The cut nail needs no gimlet hole and a carpenter will nail up a partition with cut nails before holes could be bored in half the boards for the reception of wrought nails. Cut nails is exclusively an American invention—and except for doors and where it is necessary they should be clinched, they are better than those of wrought iron. There are a number of Cut Nail Works in the United States. At South Troy in this State, there are large establishments, and they make Spikes by the machinery of Burdon's patent also For cutting brads by machinery we know of no machine equal to that invented by Mr. Bissel of this city. In 1827 Messrs. Ledsham & Jones of Birmingham, England, invented machinery for making Brads, which is described in the Repertory of Arts, but it is inferior to Mr. Bissel's machine.

Many inquiries have been made of us respecting machinery to make wrought iron nails. We heard last year that there was such machinery in successful operation in Providence, R. I., and that the invention had been introduced into England from America.

Goodyear's Patent Vulcanized India Rubber.

The London correspondent of the United States Gazette, says that a few years ago some specimens of Goodyear's india rubber goods were sent to England and left with a firm doing business in the north of England. It was subsequently discovered that this firm had taken out a patent for manufacturing similar articles in this country. The firm has ever since carried on a most extensive and profitable business, and now claim the exclusive right of the patent as the first inventors! Large quantities of india rubber goods have recently arrived in England from America, and have been sold here. The English patentees have notified all traders in these articles that they cannot import, purchase or sell these American manufactures, unless they first paid a tax on each article! Actions at law have already been commenced against about fifty different firms in London, and they will soon be tried. Now the Convention of Commerce of July 3, 1815, between Great Britain and the United States, subsequently extended and ratified by the British Legislature, authorises the importation into England of "any articles, the growth, produce or manufacture of the United States;" such goods are subject only to the duties specified by the Legislature, and no letters patent granted subsequently to this treaty of commerce can nullify its conditions.—The American importers interested in this question have submitted the case to the American Minister, who has promised to bring it before the Secretary of State for Foreign Affairs."

Reduction of Tolls on the Canals.

The Canal Board of this state have recently been engaged in revising the tariff of tolls charged on property transported on the canals during the past year, and have concluded to make several important reductions on some of the leading articles, which, we doubt not, will prove alike advantageous to the interest of the State as well as to shippers. A reduction has been made on the tolls of 23 1 3 per cent on Indian Corn and Corn Meal, and 25 per cent on Barley, Oats and bloom Iron.

Last year, three mills per 1000 pounds per mile was paid on corn and corn meal; this year they will be charged two mills. Barley, oats and bloom iron paid last year four mills per 1000 pounds; this year three mills is the rate established by the Board. The reduction of one mill on corn and corn meal was agitated last year, and was agreed upon, but after more mature reflection the Board finally concluded not to make any alteration in the tolls of 1847, and they have consequently remained unchanged up to this year.

Patent Cases.

In the U. S. Distriet Court in this city on the 13th inst., Judge Nelson on the bench, Blanchard's Gun Stock Turning Factory vs. Daniel Simmons, to recover damages for alleged violation of patent was decided and verdict rendered plaintiffs of $400.

We have the report made by Wm. Hubbell, Esq. in relation to the construction and operation of Eldridge's Last Machine, of which so many have heard and are anxious to know more about. We shall commence publishing it next week, and will conclude with Judge Kane's charge. The facts alone, without any comment by us, will be presented.

Expansibility of Steam.

If Dalton be correct in his opinion that steam like gas, has expansive power in proportion to its compression or density, we have data to calculate the maximum power of steam. Water is found to expand nearly 1800 times into steam of atmospheric pressure, or 15 lbs. to the inch. Then, by compressing such steam to 1 1800th of its bulk, we should get it back in to water, and multiply its elastic force in the same degree, 1800X15=27000 lbs. per square inch, the maximum. Steam thus compressed into water, would instantly give out all its heat. In following the same law of elastic power in proportion to density, we find, that each expansion of steam to twice tis volume, in a steam cylinder, gives precisely the same increment of power to the piston, which must have each time doubled the distance.

The Boston Traveller of Friday last, announces the discovery of a new telescopic comet, on the Wednesday evening previous, near the Northern Crown, by Mr. Bond, of the Cambridge Observatory—being the eighth discovered by him before any information thereof had reached this country.

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