



NEW YORK, APRIL 22, 1848.

Report of the Commissioner of Patents.

By the Report of the Commissioner of Patents for 1847, for a copy of which we are indebted to Mr. Burke, we learn that no less than fifteen hundred and thirty one applications were made for patents last year, and there were filed no less than five hundred and thirty three caveats. The whole number of patents issued was five hundred and seventy two, including fourteen re-issues, three additional improvements and sixty designs. Five hundred and fifty seven applications have been rejected. Therefore we learn that no less than 402 applications were made for patents which it was impossible for the Patent Office to examine, and no wonder, considering the labor they had to perform. We hope Congress will never again be so culpable in neglecting the rights of inventors. From the great number of rejections—the majority of which were applied for at the very door of the Patent Office, we would call upon the Smithsonian gentlemen to take into consideration the publication of a work on American Inventions. Such a work would be a mine of wealth to our ingenious and inventive people. Many of them would be saved much trouble of mind and much expense. There is not a week passes, but some invention is brought to us for which to make the application for a patent, and much disappointment is experienced when we say, “this is an old invention and cannot be patented.” Some will not believe, but make the application at all hazards, others are grateful for the candid advice, but a work on American Inventions would be the Urim and Thummim to all our inventors.

We are glad to hear that the Patent Office Fund is no less than \$207,797 98. There was a surplus over all expenditures last year of more than twenty one thousand dollars—thus shewing the favorable contrast between working (producing,) and fighting and destroying.

The Commissioner in his Report stands up boldly for the rights of the inventor, and he recommends that foreigners may be admitted to the same privileges of patent rights upon the same conditions as our own citizens. At the first glance, this would appear to be a little too liberal, but there is a far sighted sagacity for the benefit of America in the recommendation. In England many an important invention is kept secret for years because the inventor is not able to pay the tremendous expense of getting out a British patent, but let him be able to get out a patent here at a moderate expense, and we predict that in a the course of twenty years the flower of British inventors with all their scientific attainments and knowledge will take up their abode with us, and thus doubly arm our nation in the struggle of progressive invention. This will not injure our own inventors, “invention begets invention,” and the end of invention will only be when the human mind ceases to exist. We are glad to see that this Report is printed on better paper than the generality of Congressional Documents, and we hope that the Examiners' Report will be printed on no worse. It is really ashamed to see what miserable paper some of the most valuable Congressional Reports are printed on. We have seen some that looked exactly like Scotch snuff and just as irritating to the eyes and olfactory nerves.

Industry.

The United States possesses within her borders all the natural advantages of climate, soil, mineral and commercial greatness, inland seas, endless rivers, mines of inexhaustible stores for fuel, a soil that can feed ourselves and starving millions abroad, and above all an energetic and industrious population. Our mountains might be gold and the valleys silver and the earth might spontaneously yield as luxuriously as the rich savannahs beneath

the belted zone of Africa, but if we had not a people intelligent and industrious we would be poor indeed. The great capacity of the United States lies in her people. Industry—downright honest industry, is the wealth of nations. It is indeed true that we are much indebted for our rapid advancement in the race of national greatness to our natural resources, but with an energetic, industrious and intelligent population, no country will be poor.—New England is by no means a fertile land, but her people, that hive of industrious bees, make up in fertile industry and invention, what her soil lacks in productive quality.—She has coined money out of the ice that forms on her ponds and pressed gold out of her flinty rocks, and now with her wealth, she is the road builder of nearly the whole continent. Her capitalists own more stocks in railroads than all the rest of the States put together.—And how did she get those stocks? By downright industry—her natural resources are in her people. All honor then to industry and intelligence and moral worth. We are often pained to hear people talking of the greatness of our country and attributing this to its rocks its rivers, its mountains and valleys. These were in existence before our fathers trod our shores, and the unbroken forest reared its dark shadows over the ground where hundreds of cities and villages now rear their glittering spires and lofty domes. What has made the change? Industry. Without industry the forest would still have frowned in gloomy grandeur where the cheerful smiles of civilized plenty now deck the valley and mountain. Without industry, the wild deer

—Would still

Come down to drink his fill,

At fair Manhattan's silvery rill.

When our citizens speak of our national greatness, never let them forget that all this is the fruit of industry, and it is the anticipation of a just reward for labor that is now peopling the mighty valley of the West—it is in anticipation of a just reward for toil that causes the emigrant to pierce the gorges of the distant Rocky Mountains and pitch his tent on the banks of the Wallamette. All honor then we say again to embrowned industry—an industrious, intelligent, enterprising and moral people, is the real gold and silver of our Republic.

Wisconsin Copper Ore.

The copper ore of Wisconsin is of great importance, but it is at present secondary to the lead interests of that great Territory. This ore occupies the same geological position as the lead ore. It originates in fissures of the cliff limestone. No great masses of native copper have ever been found—five hundred pounds was the largest, a very small piece in comparison with some found in the Lake Superior region. The course of copper vein is from South-east to North-west and exists in veins of continuous and uniform bearing. It is found in some localities in plentiful abundance to repay well the labor of the miner, but skill and capital are much wanting to smelt it. The copper ore of Wisconsin yields nearly a third more than the Welsh ores. The whole of the Western copper ores have to be transported to Boston, Baltimore or Swansea, to be smelted, thus creating an expense which on the face of it appears to be exceedingly absurd. If the Wisconsin ores could be smelted in Illinois where there is abundance of coal, the copper could be produced at a less price than to transport the ores to a greater distance. Considering the great demand for copper, now so extensively used in electrotyping and electro telegraphing, the demand will be still increasing and it would perhaps be no bad speculation for a Company of Smelters with a sufficient capital to establish themselves in the West at an early date.

Another Splendid Steamboat.

A steamboat named the Autocrat, has lately been launched on the Mississippi that beats entirely the Big Maria. Her size may be imagined from the fact that she has carried nearly 4,800 bales of cotton. She has seven large boilers, two powerful engines, and a supply engine or doctor—and the extent of her accommodations for passengers corresponds with her other proportions; her cabin is the longest and widest on the river, and it is finished in a style of splendor that cannot be excelled.

Last Machines.

Mr. Editor.—I should sincerely desire to know whether Mr. E. Webber's or Wilbur M. Davis's machines for turning irregular patterns have actually been put in operation or not. There never was a more favorable time for the success of some such machine to supersede, at least evade Blanchard's patent. I have been informed that Congress granted a renewal of Blanchard's patent at its last session and that from the 20th of last January to the 20th of January, 1862, it will continue in full force, being the second renewal, extending from the first grant over a period of forty two years, as the first patent dates 1820.

The Last manufacturers in the United States and also Axe Helve manufacturers, will soon feel the biting hand of a keen tax laid upon them, as the patentee has the right to affix a tariff price upon all lasts made in the United States, and I have been informed that the tariff will be upon the regular cash system, “that no manufacturer will be allowed to dispose of any last by barter, nor receive any payment except money, nor give longer credit than six months, allowing three per cent for cash down at the time of sale.” Also that every manufacturer shall be obliged to keep correct accounts of all lasts made by them and pay Mr. Blanchard or his executives once in three months, a tax of one and a half cents on every last or piece of boot-tree made, during the preceding quarter.

I have also been informed, (yet I do not think such anti-republican conduct can be true) that manufacturers before they can get the right to manufacture must bind themselves to “keep their books open for the inspection of Mr. Blanchard or his agents at all times and that if they fail to perform any of their obligations, he reserves the power to enter and take possession of their machinery without being guilty of any trespass whatever.

Common Law, Mr. Editor, is founded upon common sense, but exparte law is founded upon the principle of feudal assumption of power, the divine right of rulers to make any law they choose and to which the ruled must submit in cowed humility. Despots and monarchs have long exercised the pretence to a right of conferring special privileges, but no man of common sense and with right views of justice, considers such a right any thing but divine or pertaining to the true principles of our federal compact. The Constitution grants to Congress the power of making laws for the encouragement of the arts and sciences. Now no man will doubt but what the late renewal of Blanchard's patent was for this purpose, but it was done by Congress, as the Sprig of Shillelah has it,

“He meets with a friend,

And for love knocks him down.”

That is, the renewal of Blanchard's patent will thump so hard upon the heads of our Last Manufacturers that some of them no doubt will invent a machine shortly, that will successfully evade Blanchard's patent, whether the machines referred to above, and noticed some time since in the Scientific American, do so or not.

JAMES JOHNSTON.

New York, April 16, 1848,

N. B. It would be interesting to myself, Mr. Editor, and I have no doubt to many of your readers, to know the exact boundary of the power of Congress in conferring special privileges in the several States.

J. J.

Railway Sleepers.

In Britain the first Railway sleepers were laid upon stone blocks and by the very rigidity of such a foundation the travelling was not only made more uncomfortable but the carriages and roads were sooner destroyed.—The English rails are now laid upon wooden sleepers resting many of them upon a kind of felt prepared for that purpose. The heavy rail alone is used and the foundation is carefully packed so that travelling is smooth and no jarring—the great annoyance of our roads on this side of the water—but all our new roads are much better than the old.

Cheap Postage.

Scotland with only a population about the same as the State of New York circulated in 1846, three millions more letters than the whole United States.—Reduce the postage say we.

For the Scientific American.

Economy of Power in Cotton Factories.
(Continued from our last.)

That no combination of machinery can increase the power of a natural agent, is one of the established axioms in Mechanics. The intervention of machinery between the agent and the body to be moved, gives a particular direction to its force, but in all cases diminishes by friction, its inherent power. Hence the most perfect mechanism is that which performs its functions with the least consumption of power. The projector of a cotton mill approximates perfection in his plan in proportion to the number of spindles and looms he can operate with his first mover. The conditions under which this can be most easily accomplished depend upon having the building of a proper width to admit of an economical and convenient arrangement, and placing the machinery consuming the greatest quantity of power as near the first mover as circumstances may admit.

The width of building adopted by our best manufacturers is 50 feet. This gives ample room for mules to be placed parallel with the ends of the building if there are no more than 368 spindles in each; if throstles are used 6 rows of frames can be placed parallel with the sides and 8 rows of looms.

By exercising a little ingenuity with a mill of this width and four stories high, there need not be more than two main lines of shafting for the whole mill. Great care must be taken when distributing the weight upon the several shafts to let each bear its due proportion, for more power is consumed when one is loaded to excess while others have comparatively little to do.

The error of unequally distributing the weight upon the shafts, and of having the machinery that requires to run at the highest speed nearest the main power, are the ones most likely to be made in the planning of cotton mills. The former, from the tendency of all shafting to “crowd” from the driver to the driven causes more friction by the rubbing of collars (or shouldering if collars are not used) against the sides of the hangers, than the mere weight of the shafting revolving on the boxes or bearings of the hangers. And when such machinery as is used in the picking room is placed at the end of the building while the first mover is in the middle, it is apt to suggest to the practical mechanic the idea of a person carrying water pails on the end of a walking cane—certainly the same mechanical disadvantage is experienced in both cases.

W. MONTGOMERY.

(To be continued.)

The Surgical Journal, thinking no doubt that it is well to be clear and explicit when addressing common folks, thus describes chloroform: “Chloroform is the pechloride of formyle—formyle being the hypothetical radical of formic acid.” In this view of the case the question naturally arises, what is Chloroform?

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