



LIST OF PATENTS.

ISSUED FROM THE UNITED STATES PATENT OFFICE,

For the week ending May 8, 1849.

To Prouty & Whitman of Philadelphia, Pa. for improvement in Corn Shellers. Patented May 8, 1849.

To Thomas Lockett, of Warren Co., Geo. for improvement in Sausage Machines. Patented May 8, 1849.

To A. J. Goodman, of Duval Co. Florida, for improvement in Broom Brushes. Patented May 8, 1849.

To Lyman Baker, of Newbury, N. H. for improvement in Spring Rake Teeth. Patented May 8, 1849.

To L. A. Hall, of Newark, N. J. for improvement in Trusses. Patented May 8, 1849.

To Munson & Pratt, of Fremont, Ills. for improvement in Washing Machines. Patented May 8, 1849.

To L. B. Woods, of Bradford, N. H. for improved self acting Railroad Switch. Patented May 8, 1849.

To Chapman Warner of Louisville, Ky. for improved Lugs & Links for connecting pipes. Patented May 8, 1849.

To W. C. Hicks, of Rutland, Vt. for method of operating railway switches. Patented May 8, 1849.

To John Hopkins, of Brownsville, Pa., for improvement in brewing and preserving alcoholic drinks. Patented May 8, 1849.

To Wm. & W. H. Lewis, New York City, for improvement in Daguerreotype apparatus for gilding plates. Patented May 8, 1849.

To Lemuel Hedge, of New York City, for improvement in Saw Mills. Patented May 8, 1849.

To F. M. W. Webster, of Newport, Ky. for improvement in Bedsteads for Invalids and others. Patented May 8, 1849.

To Wm. Watson, of Chicago, Ills. for improvement in destroying weevil in grain. Patented May 8, 1849.

To Geo. H. Dodge, of Attleborough, Mass. for improvement in apparatus for Spooling yarn. Patented May 8, 1849.

To Rufus Powers, of Prescott, Mass. for improvement in machinery for working timber into irregular forms. Patented May 8, 1849.

To J. S. Conant, of Dracut, Mass., for improvement in Sewing Machines. Patented May 8, 1849.

To D. L. Weatherhead, of Providence, R. I. for improved method of constructing & operating the header in Belt machines. Patented May 8, 1849.

To John Bachelder, of Boston, Mass. for improvement in Sewing Machines. Patented May 8, 1849.

To F. G. Bucklin of West Troy, N. Y. for improvement in preparing metallic patterns for casting. Patented May 8, 1849.

To Martin Guild, of Boston, Mass. for improvement in Machinery for laying ropes. Patented May 8, 1849.

To M. H. Ford, of Boston, Mass. for improvement in Annunciators for Railway Carriages. Patented May 8, 1849.

To Harvey Law, of Wilmington, N. C. for improvement in Machinery for dressing Staves. Patented May 8, 1849.

To A. D. Boynton, of Haverhill, Mass. for improvement in Machinery for cutting soles of boots and shoes. Patented May 8, 1849.

To William Montgomery of Roxbury, Mass. for improvement in Tarring Rope Yarns. Patented May 8, 1849.

To Richard Coad, of Kensington, England, for improvement in the combustion of Fuel. Patented May 8, 1849.

DESIGN.

To Abram Haney, of Troy, N. Y. for Design for Stoves. Patented May 8, 1849.

A pail, bucket and barrel factory is about to be started at Augusta, Ga. by Messrs. Glendinning & Lockhart. In connection with the wooden ware, machinery will be erected for cutting and polishing marble.

Blanchard's Patent.

(Concluded.)

Now when the cutters are acting with this alternate or reciprocating motion, they can scarcely be considered as moving on a cutter wheel, implying, as this does, the idea of continuous rotation. The abstract principle, therefore, that shall include both forms of structure, cannot recognize the cutter wheel, strictly speaking, as an element of the combination, but rather a cutter, or series of cutters, deriving motion from a circle, and acting in a circular arc.

If this were the correct definition of Mr. Blanchard's principle, the difference between the two machines would be resolved very easily. One, the patented, applies the revolving power immediately to its work, in the most simple, convenient, economical, and effective mode;—the other, the defendant's, interposes between the revolving power and the work an additional member, that serves no purpose whatever, unless to avoid identity with the patented machine.

The patent law would give but an illusory protection to the meritorious inventor, if it respected devices like this. It requires of a patentee, that he shall disclose in his specification the most beneficial mode of applying his principle that is known to him. (Neilson's patent, *Webster Ca.* 337.) But it does not require of him to go further, and point out all the possible contrivances by which the machine that illustrates his principle can be rendered less beneficial or less perfect. The more fully matured his discovery, the more complete his machine in all its parts, the more signally and immediately profitable to the community,—the greater will be the number of the defects it has avoided or provided for, and the greater of course the number of changes for the worse that may be grafted upon it by a forward ingenuity. For surely ingenuity may be so styled, when it toils with inverted energies, not to improve or advance, but to devise something less useful and more costly than that which was known before.

But, in truth, the principle of Mr. Blanchard's invention calls for a less restricted definition than that which I have for the moment assumed. Strike out from this specification all the details of structure, or look thro' them into the inventive idea, the essential principle that resides within, and what do we find? A tracer, so arranged as to pass in a spiral or helix line over the surface of a model,—while the rough material revolves in a similar line under a cutter, guided by the tracer, but acting with independent rapid motion,—the combination of these for a declared purpose: this is the principle of the Blanchard patent. All the rest is detail, properly introduced into the specification, as exhibiting "the most beneficial mode of applying the principle," but essentially forming no part of it.

Now although it be true, that, technically speaking, an inventor cannot claim a patent for the principle he has discovered, yet it is equally true that, if he has embodied it in any clear, definite, and distinct form, others will not be permitted to take that principle and embody it in some other form merely copied from his; "and thus," as was well argued in the case I have cited, "you may attain a result which is practically equivalent to the patenting of a principle," for when you have put your invention into shape, no person will be allowed to come in and steal the spirit of your invention, by putting it into some other shape, which, though different, is imitated from yours.

The defendant in this case has mistaken his legal rights, and the sooner he is advised of his error, the better for him and for the public. He is obviously possessed of considerable mechanical ingenuity, which, if applied in a different direction, may advance his own interests, while contributing incidentally to the interests of art. But he has confounded the details of Mr. Blanchard's machine with its principle, and in seeking to escape from the operation of the patent, he has violated the law by which it is guarded.

It is possible that he may have been misled by the language of the charge, when his case was before me on the law side of the court.

Abstract propositions are liable to inaccu-

racy, when elicited in the haste of a trial at bar, and however accurate, they are not suited to the purpose of imparting instruction to a jury. I prefer, therefore, generally to employ illustrations, derived from the case itself, to convey the legal principle which should rule it rather than to announce the law in general and abstract terms. It is enough for me if I can succeed in teaching all that belongs to the circumstances and the time.

This consideration, however, of the possibility of my having been misunderstood, will have its influence with me in the future stages of this proceeding; and the attachment which I feel it my duty to award will be set aside on payment of costs, upon my receiving an assurance from the defendant that he will desist from violating the complainant's patent any further.

Nova Scotia Mines.—Cast Steel by Simple Fusion Direct from the Ore.

Messrs MUNN & Co.

On a recent occasion you were pleased to make favorable mention of the specular iron of Londonderry, Nova Scotia, in your valuable paper. A company is now formed in Halifax comprising among its Directors the first men of that city with every prospect of success, notwithstanding the depressed state of the iron trade generally, in Europe as well as America.

The remarkable character of this ore is, that from its extreme purity, (containing nothing but oxygen) it is capable of being manufactured into iron and steel direct from the ore, thus reducing the cost of producing these commodities more than one half.

Mr. Robert Mushet of Coleford, England, has tested the Londonderry ores on a manufacturing scale. I copy from the London "Mining Journal" of the 17th of June 1848, a statement published by him showing what cast steel of the best quality can be produced by carrying the ore to England, and where charcoal made from oak cost about £4 per ton. Mr. Mushet's calculations were made upon this data. Every ton of cast steel will require about 6 cwts. of charcoal. I presume that charcoal of equal quality can be obtained in New York for one half the cost in England.

I believe that your hard coal with a soft blast from fanners would answer remarkably well for smelting in the crucible and with a corresponding saving as compared with coke. Mr. Mushet's estimate is as follows.

2 tons of ore at 60s., including freight to England,	£6 0 0 st.
Preparation of the ore and labor	
30s. per ton,	3 0 0
Cast steel pots per ton,	1 15 0
Coke 4 tons at 14s., per ton,	2 16 0
Repairs of furnaces, waste &c.,	2 8 0
Drawing down into inch square,	4 0 0
Waste in drawing.	12 0

Cost of one ton of cast steel, £20 11 0

"As this steel would be of the best quality, I am warranted in assuming, that it will sell readily at a price which would realize £20 net profit per ton of bars. Without any establishment in Nova Scotia, beyond that required to raise and ship the ore to England from their ores, or 2500 tons annually, the sale of which would return them a nett profit exceeding £50,000 per annum."

Now 1-5 of this capital or \$15,000 would be quite ample to cover the expense of fitting up of an establishment in the vicinity of New York, near a Shipping Port or a Railroad station, where a suitable site might be secured for, I presume a few hundred dollars, to make 20 tons of cast steel weekly, and the number of furnaces might be multiplied at pleasure to exceed, if necessary, Mr. Mushet's estimate of 50 tons weekly.

The Converting furnace for deoxydizing the ore might be made sufficiently large at very little more expense to prepare the ore for any given number of smelting furnaces. A steam engine of ten horse power high pressure, would have ample power to grind the ore and blow the furnaces, another of 6 horse power, would work the tilt hammer and blow the forge to heat the ingots.

The object of this communication is to bring the subject of Steel Making in New York, under the notice of Capitalists of the City,—and if one or more individuals (not ex-

ceeding four) will raise the necessary capital say \$15,000, the subscriber will furnish \$4000 worth of ore and fire clay at a reduced price to that calculated to deliver the ore in England, making together \$20,000, and will undertake to furnish the Company delivered at New York such quantities of ore and clay, for any number of years as they may contract for.

Being in England and Scotland last year arrangements are made with parties to come to America to conduct a work of this kind if the capital could be raised, so that there will be no difficulty in obtaining proper persons who are known to be competent to superintend such an undertaking.

Specimens of the ore and fire clay, may be seen at Thomas L. De Wolf's 108 Broad St., as also samples of steel produced from this ore as already stated. Also a sample of malleable iron, made direct from the ore in a puddling furnace, on a manufacturing scale at the "Bridge Water" Iron Works on Tuesday last.

Your Obedient Servant,
JOHN ROSS.

Parties wishing to embark in this lucrative manufacture are referred to Thomas L. De Wolf 108 Broad Street. If by letter post paid or to "Crowell Brooks & Company, Commerce, Wharf Boston." where similar specimens and samples may be seen and further information obtained.

Truro, May, 1849.

[Specimens of this ore may be seen at this Office and we have in our possession some strong vouchers of the value of these ores, in extracts from the London Mining Journal of June 3d, 1848.]

A Royal Siamese Machinet.

The Singapore Free Press of Oct. 19, 1848, publishes the following communication from Bangkok, Siam, describing the proficiency attained by a native prince in mechanical art:

Some time since, it was intimated that his Royal Highness, Prince T. N. Chau-Fa-Rhromakhun Isaret Rangsan, had commenced the construction of a small steam-engine. This, under the most indefatigable and preserving exertions on his part, has at length been completed, and the Siamese can now boast of having running on the river Menam, a steamboat every portion of which has been made and manufactured there, and entirely by native artificers. She is 26½ feet long, 3 feet 10½ inches broad; the engine being 2 horse power. This little phenomena has made several trips up and down the river, his Royal Highness the Prince generally acting steersman himself in full view of thousands of astonished and admiring spectators, who crowded the banks of the river on each occasion. The Prince is naturally enough very proud of his steamer, and some few days since, passed up and down in front of the palace with her before His Majesty the King of Siam, who was graciously pleased to pass the highest encomiums on his ingenuity, made him a munificent present, and honored him with his commands to have another steam-vessel constructed, sufficiently large to be capable of proceeding to Singapore, which his Highness has undertaken to accomplish. From not having copper or iron here of sufficient thickness, the boiler has been constructed in such a manner as to add very considerably to its weight, and in consequence detracting much from the speed of the boat. His Highness expects, however to be able to rectify this in some measure—to effect which, he has commenced building one on quite a different model, more buoyant than the present one, and with larger paddle wheels, and has sent to Singapore to have copper sufficiently thick for new boilers brought up.

The workmanship of even the most minute part of the engine is truly admirable, and reflects the greatest credit on its royal constructor, who had every portion of it made under his own immediate superintendence and constant inspection, and by workmen all self-instructed, being His Highnesses' body servant and retinue.

The last resource to raise the wind is that of a shrewd but not scrupulous Yankee, who bought a bushel of shoe pegs, and on discovering they were made of rotten wood, sharpened the other end, and then sold them for oats!