

IS THE BLOCKADE EFFECTIVE?

Facts are better than fancies, and statistics are more reliable than loose opinions from prejudiced sources. For years the enemies of the Government, and of the Navy Department in particular, have kept up a bitter tirade against it on account of its assumed want of care or watchfulness in blockading the Southern ports. Did a British vessel succeed in entering Charleston, vials of wrath and vituperation were poured out upon every one in the navy, from the Secretary down to the mess cook, and some papers were so unscrupulous as to assert that naval officers connived at the entrance of the blockade runners, being paid for so doing.

The London *Engineer* publishes a letter from its Liverpool correspondent showing the net results—profit and loss, as regards the number of ships built, captured and now running, which presents the subject of the efficiency of the blockade in a very different light from that in which it is exhibited by our own disloyal journals.

It appears that the whole number of vessels built from 1862 to 1864, was 111. The fate that befell them is thus stated:—Destroyed, 23; captured, 48; still running, 29; on the way out, 11. The "still running" list must be decreased somewhat, for the Liverpool correspondent was not aware that some half a dozen would be captured between the time of his letter and its reception in America. The cost of this fleet was \$8,500,000, estimating the pound sterling at \$5, net. Besides the men employed in the building and engineering of these vessels, there were 3,300 other men taken from the commerce of the Clyde. Of this vast fleet of blockade runners—far larger in fact than the steam navy of the United States before the war—one half has been captured, and nearly one-fourth destroyed, while the loss of men and money to the builders and owners has been very great. These unadorned facts are a sufficient answer to the oft-repeated statement that the blockade of the Southern coast has been defective.

WOOL FROM PINE TREES.

A correspondent has very kindly copied and sent to us an article from *Chamber's Journal*, of 1852, giving an account of a wonderful discovery by a German chemist of a chemical process for obtaining wool from the leaves of pine trees. The leaves are stripped from the trees by hand, and treated by the process, which results in dissolving the resinous portions and leaving the fibers separated in the form of "wood-wool." The article states:—

"It was found that, at the end of five years, a wood-wool mattress had cost less than one made of straw, as the latter requires an addition of two pounds of new straw every year. In comparison with horse-hair, it is three times cheaper; it is safe from the attack of moths, and in a finished sofa no upholsterer would be able to distinguish between wood wool and hair stuffing. It has been further ascertained that this wool can be spun and woven. The finest gives a thread similar to that of hemp, and quite as strong. When spun, woven and combed, a cloth is produced which has been used for carpets, horse-cloths, etc.; while mixed with canvas warp it will serve for quilts, instead of being employed in the form of wadding."

The whole article is a puff in the same strain, without any description of the process, the only thing that would be of any interest to either ourselves or our readers. We always distrust accounts of great results produced by secret processes, especially if they purport to have been discovered by an unknown chemist. When Bunsen, Kirchoff, Liebig, or any other great master of chemical science makes a discovery, he hastens to lay it before the world in all its minute details. If a German or other chemist offers to sell a secret process which will produce some wonderful results it is pretty safe to conclude that he is a charlatan and a swindler.

Report of the Ordnance Department on Stevenson's Turbine.

Wm. N. Jeffers, Inspector of Ordnance, in charge, says:—"After a sufficient trial I have to report that it is in every respect satisfactory, and performs all the work for which it was calculated. As a considerable portion of the power is required to drive the circular saw, which is intermittent in its action. I

have found it convenient to apply a governor in order to keep up a uniform speed when all the lathes are not in action."

RECENT AMERICAN PATENTS.

The following are some of the most important improvements for which Letters Patent were issued from the United States Patent Office last week; the claims may be found in the official list:—

Improved Press—This invention consists in a press box, one side of which is made movable, so that the size of this box can be increased or decreased at pleasure. The movable side is fitted in suitable grooves, and it connects by ropes or chains with a windlass, in such a manner that by turning said windlass in one direction, the movable side is thrown open, and by turning it in the opposite direction, said side is closed up, and by the peculiar arrangement of the windlass and rollers, the chains are always kept taut. The follower is operated by two levers or lifters, the inner ends of which are hinged to the follower and connected by ropes or chains which extend over pulleys secured to the frame and thence down and under pulleys near the inner ends and over pulleys in the outer ends of said levers, and to a windlass or windlasses, in such a manner that, by the action of those branches of the ropes or chains, extending from the inner ends of the levers over the pulleys secured to the frame of the press, said levers are started from a horizontal position without requiring any attention from the operator. In order to take up the extra amount of chain, without embarrassing the operation of the press, the chains used for operating the levers and the follower extend over two drums, which are geared together, so that they rotate in opposite directions, and that the length of chain required to give the press sufficient power to do the work, can be taken up without difficulty. S. J. Austin, Freeport, Me., is the inventor.

Tobacco Paper.—This invention consists in coating or preparing thin sheets of fibrous material on one or both surfaces with fine particles of tobacco, thereby utilizing tobacco which is generally abandoned as "waste," or unfit for use, and thereby employing it for use in smoking after the manner of leaf tobacco.—H. J. Hale, No. 16 Beekman street, New York, is the inventor.

Improved Picker.—This invention consists in binding the wooden picker-cylinder of pickers for disintegrating fibrous materials by means of a strand or strands of wire or other equivalent means, so as to strengthen them, and make it possible to run them with safety at a greater speed than has been hitherto possible. Seth Boyden, Newark, N. J., is the inventor.

Carbureting Air.—This invention consists, principally, in carbureting air by confining or catching the carbonaceous matter which rises in the form of vapor from the hydro-carbon liquid during the natural process of evaporation. Mr. McAvoy's discovery obviates the necessity, heretofore existing, of employing the expensive and complicated apparatus which is commonly used to commingle the oil and air by forcing the latter through the former. Hugh L. McAvoy, of Baltimore, Md., is the inventor.

Canadian Patent Laws.

Hon. Mr. Perrault has introduced into the Legislative Assembly of Canada a bill to amend the Patent Laws so as to allow inventors of all other countries the privilege to take out patents in those Provinces. The bill, a copy of which is now before us, is quite liberal in its provisions, and we trust that it may become a law. When this is done, Canadians can take out patents here upon the same terms as citizens.

THE *Evening Post*, in a recent notice of Munn & Co.'s Patent Agency, says:—"These gentlemen are publishers of the SCIENTIFIC AMERICAN, in this city, and have had long experience in procuring patents for this and other countries. They possess unusual facilities, through their favorable connections in Washington, for securing patents without unnecessary delay, and, through their paper, for bringing the patents to public notice."

REGNAULT has in press a new work on vapors. This ought to settle all questions in relation to the theory at least of expansion.

SPECIAL NOTICES.

MILO PECK, of New Haven, Conn., has petitioned for the extension of a patent granted to him on the 25th day of November, 1851, for an improvement in drop presses.

Parties wishing to oppose the above extension must appear and show cause on the 30th day of October next, at 12 o'clock, M., when the petition will be heard.

J. C. DICKEY, of Saratoga Springs, N. Y., has petitioned for the extension of a patent granted to him on the 3d day of June, 1851, for an improvement in revolving frames for drying fruits and other articles.

Parties wishing to oppose the above extension must appear and show cause on the 15th day of May next, at 12 o'clock, M., when the petition will be heard.

RICHARD E. SCHROEDER, of Rochester, N. Y., has petitioned for the extension of a patent granted to him on the 6th day of May, 1851, for an improvement in lirekilns.

HENRY B. GOODYEAR, of New Haven, Conn., administrator of the estate of Nelson Goodyear, deceased, has petitioned for the extension of a patent granted to the said Nelson Goodyear on the 6th day of May, 1851, and re-issued, No. 556, on the 18th day of May, 1858, for an improvement in the manufacture of india-rubber.

HENRY B. GOODYEAR, of New Haven, Conn., administrator of the estate of Nelson Goodyear, deceased, has petitioned for the extension of a patent granted to the said Nelson Goodyear on the 6th day of May, 1851, and re-issued, No. 557, on the 18th day of May, 1858, for an improvement in the manufacture of india-rubber.

Parties wishing to oppose the above extensions must appear and show cause on the 17th day of April, at 12 o'clock, M., when the petitions will be heard.

A CURIOUS trial took place in Paris this week on a vexed horticultural question. It was decided that cauliflowers are not simple cabbages. This point was determined in a case of a "Railway Company v. Importers of Salad." The plaintiffs pleaded that by reason of its head a cauliflower required especial care *in transitu*. The defendants set it up as a mere cabbage, treating the head as an accident requiring no special service. If the head was broken, the pieces could be picked up and rendered serviceable. The Court, however, held that your cauliflower was a delicate plant, and ruled that it was entitled to be placed with peas, and therefore a verdict was given in favor of the carriers.

BUTTER.—The amount of the butter crop of the United States is estimated at \$65,000,000. The value of this article might be greatly enhanced by stricter attention to its manufacture. No product of the farm is so liable to depreciation as this.

It is said that at the present time, scarcely one firkin in four opens perfectly sweet. This deterioration arises not from any real chemical or practical difficulty, but solely from want of knowledge or want of care in making it.

NUMBER OF FIRE ENGINES IN NEW YORK CITY.—

At a recent examination of the Chief Engineer of the Fire Department, in this city, it appeared that there are 125 engine, truck and hose carriages, some 30 tenders to engines, and a number of "crabs" or "jumpers," for use in bad weather. The Chief Engineer testified that the ordinary speed of the steam engines drawn by hand, on the Broadway pavement, was $7\frac{1}{2}$ miles per hour.

A French proprietor lately paid four millions of francs for a track of vine-land where Medoc was the favorite wine; and he has realized the full amount of the purchase money from the crop of 1864 alone. This result would almost satisfy an unsuccessful petroleum speculator.

It was in 1846 that Faraday made the great discovery that all bodies are subject to the force of magnetism, some being drawn into positions parallel with the magnet, and others at right angles.

STEROXYLIN is the name of a substitute for glue used by paper manufacturers. It is said to be only soluble glass in a very concentrated condition.