

New Inventions.

Great Invention for Shooting and Capturing Whales.

Capt. Robert Brown, of New London Conn., has invented a most important improvement for shooting and capturing whales. It is well known that there are some whales found on the coasts of the Pacific that cannot be approached with the harpoon in a boat, and at best the harpooning and lancing of whales is a very dangerous and difficult business, and sometimes on account of the sea, an impossible thing. The idea of firing the harpoon out of a gun prepared for that purpose, has been often advanced, and patents have been secured for the purpose. But the construction of the of the harpoon and the way in which it was attached to the line to be fired off, rendered all former attempts void, for want of accuracy. Capt. Brown has obviated all former difficulties, and his harpoon, with the line attached, can be fired as accurately as a musket ball. The invention is not a theoretical deduction, but has been tried by the hardy and determined Captain, and with great success. He has also made a valuable improvement on the lance, whereby it can be fired out of the same gun which is used for the harpoon, and be directed like the bolt of a Genoa Bow, to strike the monster of the deep in the vital parts. These inventions of Capt. Brown may be termed, "Whaling made successful and easy by a Yankee Captain."

Measures have been taken to secure a patent.

New Sash Supporter.

A substitute for weights and pulleys in supporting window sash has been invented and patented by Mr. J. A. Pease, of Philadelphia. The cheapness at which it can be afforded and the manner and ease with which it works, render it a valuable invention; it is very simple in its construction and admirably answers the purpose for which it is intended. It consists of a metal box with a shaft or roller covered in the centre with india rubber or other elastic substance; the ends of the shaft play in the journals of the box, which is placed in the frame of the window. The bearing of the elastic roller upon the sash holds it in any desired position, and at the same time allows the sash to be moved with ease; it is not liable to get out of order, and the roller being elastic does not wear the sash, it also keeps the sash from being shaken by the wind. We have no doubt but that it will come into general use, as the saving by its use over the weights and pulleys is from one to two dollars per window.

Improvement on Power Looms.

Mr. Thos. T. Wilcox, of Norwich, Mass., has invented an improvement on the manner of operating the picker staffs to box the shuttle, which has been pronounced to be an excellent invention, for two reasons:—First, both of the picker staffs are regulated in their tension to apply a greater or smaller power to the picker staffs by two flat steel springs, which are united together by a small chain working on two centres (one for each spring.) If, then, one spring has a greater tension than the other, as they work on centres, an amount of reaction is communicated to the other spring, thus equalizing the power to work both picker staffs.

Second,—The springs can be screwed up to any tension to box the shuttle, so as to adapt the power to box the shuttles for different speeds.

It is well known that a free and light, but correct motion is best for operating the shuttles, so as to enable a girl to attend four looms, (if it is coarse work), fairly. At any rate it is not the fastest loom that is the most profitable, but the smoothest working loom at an average speed. There are different opinions, however, about "what is the most profitable speed." Well, this cannot be set down as a rule for all, for that must depend on circumstances—such as the quality of the web, and the regularity of the whole machinery in the factory. But so far as it respects the regulating of the power to operate the shuttles, we consider that Mr. Wilcox's invention is both

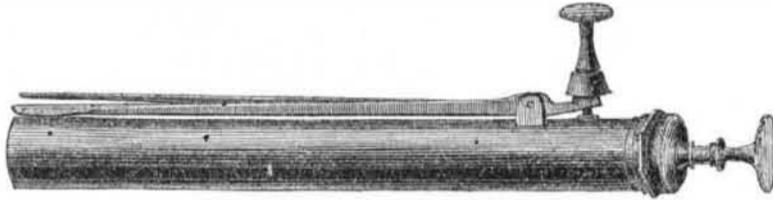
ingenious and useful, although a little more expensive than the plans at present in use for that purpose. A loom has been run with it at the rate of 200 picks per minute. Measures have been taken to secure a patent.

New Helical Railway and Circular Chartot.

M. Chamery, of Paris, has invented a new kind of railway, which presents some exceedingly novel features, but whether his invention will prove useful or not, is quite another thing. He applies it to the working of mines, to raise materials for building purposes, and for a communication between the upper and lower part of irregular built cities. For mines, &c., this mode of railway communication is effected by means of a helical rail affixed to the interior of a circular pit, and in which a platform is

fitted having three wheels at equal distances on the circumference, and at such differences of elevation as will conform to the helical form of the rail, and at the same time preserve the horizontal plane of the platform. A round vertical shaft is placed in the centre of the pit, and passes through the centre platform, and revolves in a suitable step at the bottom. This shaft extends upward to a considerable distance, and is operated by spur gearing, which, by revolving the central shaft, carries up the platform which is adapted to receive carriages, winding them up on the augur principle. The railway being a circular inclined plane, the carriages on the platform descend gradually by their own gravity. Arrangements are made to let the carriages out of the pit and down into it, and stop and set the machinery in motion at any moment.

DR. CAULKIN'S INTRA VAGINAL SUPPORTER.—Fig. 1.



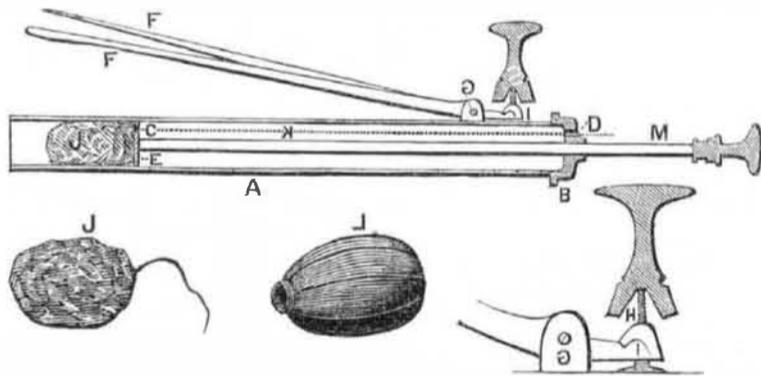
This excellent instrument is the invention of Dr. Russell Caulkins, of Sandusky City, Ohio, and was secured to him by letters patent on the twenty-ninth day of last January. Its fitness to the replacing of the Uterus and Vagina in all cases of Prolapsus Uteri and Vagina, without secondary aid, the afflicted person being perfectly capable by it of self-assistance.

Fig. 1 is a perspective view. Fig. 2 is a section with the elevators raised, and below the instrument is a capsule, L, (letter wrong way), a piece of sponge, J, and H is a detached section of a part of the tube, with the elevating screw and part of the fingers.

A is the tube; B is the cap which screws on to the top of the tube, to be easily put on and taken off. E is the plunger; D is a hole

to allow the cord, K, to pass up from the sponge, J, through the plunger at C. M is the plunger rod; S is a screw for the purpose of elevating, and at the same time extending the elevators, F F. These elevators work on a pin, G, which passes through bearings made on the tube. The backs of the elevators are made with a small knob each, at the end. The screw, S, enters into a hole in the tube, A, which has a corresponding thread to receive it, and there is a conical groove in the nut, which, as it works down on the shoulder, I, of the elevators, spreads them apart, and at the same time elevates them. They are now shown as elevated for clearer representation. The capsule is made of smooth india rubber, and covers the lower end of the instrument, and when

Figure 2.



used, the sponge is forced down into it, the elevators raised, and the instrument withdrawn, when the capsule forms with the sponge inside, as represented by L, and is retained in its situation for some time, when it can be withdrawn by the cord of the sponge.

It is well known that those who are afflicted with the weakness mentioned above, hitherto, have had great difficulty in receiving permanent relief. This instrument affords an easy remedy and permanent, as many are wil-

New Rail Road Invention.—Self-Acting Coupling.

Mr. David S. Neal, an ingenious blacksmith of Lynn, has invented what he terms a Self-Connecting shackle, for railroad cars, for which he has taken out a patent. It is so arranged that when two cars are pushed together they are immediately connected, without the necessity of any persons going between them.—[Ex-

[There are quite a number of "Self-Acting Couplings" in the world; the question is, "which is the best?" Mr. J. S. Graves of Springfield, Mass., has invented a self-acting coupling in combination with the old safe link and pin. None of our railroad companies like to give up the old link and pin coupling, on account of certain safety. Mr. Graves combines the link and pin to operate by a self-acting cam, to make the pin couple with the

link, when one car is pushed towards another, and then the link of one enters the coupling-box of the other. The arrangement is a simple, safe, and certain self-acting coupling.—Measures have been taken to secure a patent.

Steam Wagon.

The committee appointed by the citizens of Houston Texas, to examine and report upon the "principles and practicability of a steam wagon or locomotive engine, projected by Captain William Wood," have reported that they believe such a machine well adapted to the wants of this country, that a very small expense would put the roads in good condition to receive it; after which, from its construction, it would soon so consolidate and improve them as to render little expense necessary to keep them in repair.

More about the Stereotype Process. said to be Discovered in Paris.

Galignani thus describes the process:—In the ordinary process of stereotyping several hours are required, for the material used for receiving the impression of the type, and which serves as the mould in which the stereotype is cast, must be carefully and slowly dried. The mould for the stereotype by this new process is made of a few sheets of tissue paper, with a couple of sheets of common paper at back to give a certain degree of strength. The paper is wetted to the proper degree, and then pressed upon the type. The impression is perfect. The mould is then dried, which is the work only of a few minutes, and placed on a cylinder, with a sufficient space between it and an outer case to receive the metal. This metal which is very liquid, and which is prepared in a peculiar way, flows rapidly and evenly over every part of the mould, and by the application of a cold wet sponge to the exterior, it becomes almost instantly solid. The mould is then removed and transferred to the cylinder of the machine ready for printing. The whole of the stereotyping does not occupy more than from fifteen to twenty-five minutes.

An Extraordinary Invention.

Dr. Alexandre, from Paris, the inventor of the artificial leech, has lately brought out another invention, a sub-marine boat, in which a company of persons can go down to the bottom, have communication with the ground, performing any sort of work by digging or other wise, and return to the surface at will. This is the very thing for finding the gold at the bottom of the streams in California.—[Exchange.

[This paragraph has gone the rounds of quite a number of our exchanges and we must put "the saddle on the right horse." to use a common term. Robert Fulton employed a torpedo boat like the above, in 1802, and exhibited it on the Seine. The Earl of Stanhope, also, invented one at the same time. Fulton's Torpedo was to destroy the British fleet, and Stanhope's Torpedo was to destroy Fulton's.

Consumption of Smoke.

A firm in Cincinnati has offered a prize of \$500 for an apparatus by which the smoke from the fires in their manufactory will be consumed, and they offer the use of their boilers, chimney, and their premises generally, for the purpose of reasonable experiment. The difficulty is that smoke cannot be consumed; or any part of it except the wasted, volatilised portion of fuel, which badly managed fires in ill constructed furnaces throw away.

[The above is from an exchange. We cannot tell what firm has offered the above reward for the consumption of smoke, but we would like to know for the benefit of our readers.

American Cloth in France.

The French Minister of Commerce recently caused a specimen of cotton cloth, manufactured in the United States, to be exhibited in one of the rooms of the Bourse. It has been examined by several of the principal manufacturers from Rouen and Alsace, and they declared that, judging from the specimen, the American manufacturers have made great progress, and that they may become formidable rivals to them in the production of low-priced coarse articles, but that they are greatly inferior in point of taste in the pattern and durability of color, but they are produced much cheaper.

Maury's Wind and Current Charts.

Extract of a letter from Capt. Coupe, of the Rochester, dated Rio de Janeiro, February 1850.

"I take pleasure in forwarding my abstract to inform you that I came well to the westward, (Maury's route,) and made a very fair passage, considering the vessel I am in. I have beaten all the vessels that made an easterly passage, (old route.) Some I have beaten twenty and thirty days."

Quick Telegraph Work

We received a dispatch from New York this morning, over Morse's telegraph, consisting of nearly 1200 words, which was transmitted entire in the remarkable short space of twenty minutes.—[Boston Bee.