

New Inventions.

Ingenious Key.

Mr. F. G. Goffins, of Philadelphia, has invented a Key of a very ingenious character, which in our opinion cannot be counterfeited without a *key* to its mode of operation. It has a number of moveable fingers or projections, which fit into grooves in the lock, to operate it, but those fingers are so combined between two clamps at the top operated by a nut in the handle, that one or more fingers can be projected or drawn in to suit the number of grooves in the lock, whatever that number may be. When the key is not used, the fingers are therefore out of gear kept loose, and a small guide pattern for the lock has therefore to be carried in the pocket to set the number of fingers to the number of grooves in the lock before the key will work at all.—One key of this description can fit a hundred locks, each lock of a different pattern upon the same principle. All that is required is a pocket guide pattern, the cost of which is but a trifle, and the variations of which may be numberless—10,000 varieties, which can all be fitted by the one key.

Improved Planing, Tongueing and Grooving Machine.

Mr. Daniel Stearns, of Rome, Oneida county, N. Y. has just made an improvement for tongueing, grooving and planing, for which he has made application for letters patent.—The improvement consists, first, in a new tongueing and grooving cutter. The cutters can be changed in a moment to a tongueing and grooving knife, or vice versa. The central cutter is moveable, sliding in a slot between and in the two matching knives, and is regulated by a set screw. When the cutters have to be sharpened they can be taken out and all ground at once in line like a common planing iron. This is a valuable improvement. The next is, he sets his tongueing and grooving cutters on a metal belt made of an endless chain of planes, the joints of which fit into grooves in two vertical rollers to carry the belt and planes firmly around to operate upon the edge of the board.

The next improvement is a smoothing knife on the lower edge of the planing horizontal disk, to finish the board, the said knife being of a crescent form shaving off the wood while the other cutters take off the rough, moving across the board like Daniel's machine.

New Coupling Joint.

Mr. Albige W. Cary, of Brockport, Livingston Co. N. Y., has invented a very neat, useful and ingenious Clasp, well adapted for coupling pipes, in fact for cheapness of construction and for the simplicity of its operation, we think it unrivalled. The invention consists simply in having a small round steel band turned up at the ends and holes drilled in them. Through these holes pass a screw which draws the ends of the band firm together, thus forming a perfect coupling. For lengths of hose it is far more convenient to couple in this manner than by male and female butts, and it is not one half the expense.

Invention for Accountants and Book-keepers.

Mr. A. J. Folger, of Nantucket, Mass. has invented a neat Index box for which he has applied for a patent. The invention consists of a neat box, perforated with 677 slits to receive small strips of cards folded so as to have a shoulder each which suspends it in the slit of the box. A scale of all the letters in the alphabet is arranged on one tier of cards in the side row of slits, and another row of exactly the same letters along the top, at right angles to one another. On the cards are written the names of the Debtors and Creditors with the page of the Ledger on which each name is to be found. Therefore if we want Daniel Webster, we look at D on the side row of alphabetical characters and find it to be the fourth from the top, and then look at W

on the top row of letters and pull out the the fourth card below it and on it is to be found Daniel Webster, page 176, and so on with any other name. It is certainly a very cheap and convenient apparatus and no person who has accounts to post up should be without it.

Improvement in the Talbotype.

The Philadelphia Ledger says that Mr. Langenheim of that city, has experimented for some eight years upon the Talbot method of producing pictures and has now brought the invention to such perfection as to warrant him in bringing it before the public. The advantage attending the Talbotype is, that after the first impression, which is taken with an accuracy that is surprising, in about a minute's time, any subsequent number may be taken without any sitting at all, and may be colored like a water color painting, an artist being employed for this purpose.

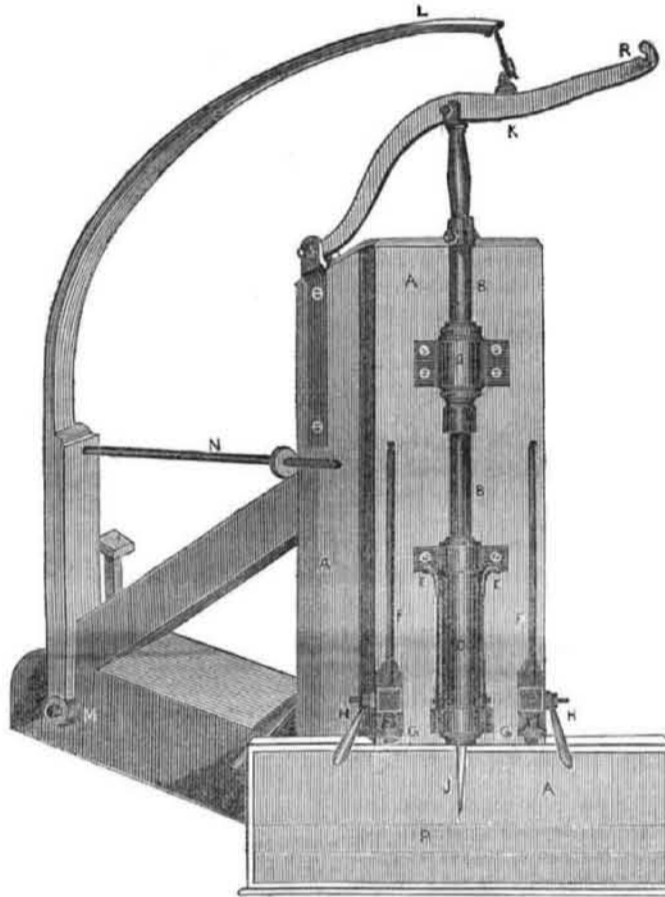
Musical Travelling Bridge.

A Mr. Robison of Cincinnati, has got up the project of a rope bridge on which to run a car across the river propelled by an endless screw. By the labor of one man it is supposed that twenty passengers may be carried across the river for five cents a piece. The inventor intends that the endless screw will also be the means of driving a kind of hand organ on the car, so that the passengers will have the accompaniment of the tune "over the river to Charlie," as well as going over the water on the rope walk.

Ship Lightning Protector.

A thin strip of copper, three or four inches in width (the breadth and thickness of course depending on the size of the vessel) set in, up and down the after part of the mast, from truck to kelson—with the addition of branches led along the beams below, abreast the masts, and down the sides to the water, if preferred.

PORTABLE MORTICING MACHINE.



This is a very neat arrangement and combination to operate a morticing chisel or drill, invented by Mr. J. C. Macomber of Plymouth, Michigan. A, is a standard or frame. B, is the drill or chisel spindle. C, is a guide box through which the spindle works. D, is another guide box or tube farther down—both are secured to the standard A. E E, are two side springs, the heads of which pass into openings in D, to act as brakes to arrest the spindle when required. F F, are two metal posts with flat lower heads, G G, to hold the work to be morticed on the table. They can therefore be raised or lowered and retained firm at any point by the set screws, H H, to work off different thicknesses. J, is the chisel or drill. P, shows the transverse section of the table, and the lower A, is a guide board which can be pushed forward or back by set screws behind, for different kinds of work.—M, is a strong beam behind, to which is secured the standard of the spring pole L, which

may be made of good hickory or elm. The standard of the spring pole is secured to the frame A, by a screw rod, N, which can regulate the tension of L. The spring pole is secured by a metal loop at K, to the arm R, which operates the drill. This arm or lever may be attached by a stirrup to a treadle below and operated by the foot, thus making it a very easily managed and convenient machine for joiners and carriagemakers in country places. The lever R, it will be noticed, is secured to the spindle B, by a flexible joint arm, which enables it to work with ease. The inventor has made application for a patent on some of the combinations herein represented which makes the machine a very desirable one to many men who do a small business.—To such persons it will no doubt commend itself, and every person will at once comprehend its construction and operation by the engraving and the description we have given.

Arnold's Patent Sash Lock.



Among the latest improvements in the way of window fasteners, is the Patent Sash Lock invented by Mr. William E. Arnold, of Rochester, N. Y. of which the above cut is a representation. Of all the various kinds of fasteners now in use, some of which are exceedingly ingenious, we know of none which recommends itself more thoroughly by its simplicity than this. The Lock consists simply of a bolt of iron or brass B, within a sheet iron box A, the latter being mortised into the sash, leaving but a small part of the bolt C,

perhaps three-fourths of an inch, projecting, by which it is moved.

About this lock or fastener, there is no complicated machinery, no springs or screws, and the bolt being moved by its weight, forms a complete lock for the window, either up or down. When once in the window they will last until the material of which it is composed wears out. The great fault with many other fasteners, is their liability to get out of order. Not so with the one represented above, for the simple reason that there is no machinery to require fixing or springs to be renewed. Those who know any thing of the perplexity of a bad fastener, will appreciate any invention which promises an improvement.

We understand that Mr. Arnold, who is a

gentleman not unknown as an inventor, has now a large number of men employed in the manufacture of his Sash Locks, and that the demand for them can scarcely be supplied.

Nautical Telegraph.

Mr. E. A. Dayton, of Madrid, St. Lawrence Co. N. Y. has invented a new combination of the Chemical Telegraph with the compass of a ship to indicate the variations of the vessel from her course. A small fillet of chemical paper is combined with the compass, and it is drawn forward slowly by clockwork. The fillet is marked with parallel lines and a small steel point in connection with the wire of the battery rests on it. This will make a straight line always if the vessel does not diverge from her track, but every divergence of the vessel from her direct route will be indicated by the point marking either angular or curved lines on the fillet. The invention is a beautiful one and the author of it intends to secure it by patent.

Instrument to assist the Blind in Writing.

Mr. Thos. S. Martin, the Principal Teacher in the Pennsylvania Institution for the blind, has invented and introduced into the Institution, a neat and ingenious apparatus for writing, which we consider very valuable to that very unfortunate class of our fellow beings. The invention is a flat board somewhat larger than half a sheet of foolscap paper, and is covered with soft leather drawn tightly over it. Two catches are placed at one end to hold firmly a small brass plate which is cut into small squares at equal distances apart, there being no less than about a thousand perforations in the plate. When it is desired to be used a sheet of paper is placed on the leather, over it the brass plate is laid, and the writer by the aid of a pencil, pen or bold steel point marks in the squares the letters, the difference in words being secured by passing a square and commencing the new word in the next one. The process is so simple, and the perforated plate is so effectual a guide, that the writer cannot go wrong, and his manuscript has not only a fair and regular appearance, but such as it is almost impossible to gain by any other process.

The advantages of this neat apparatus for the Blind are great. They are enabled to print on paper by a steel point, so that their fellows may read by feeling it with their fingers, which are exceedingly sensitive, they have an acuteness of feeling almost incredible. By it they can also write with a pencil for those to read who have the organ of vision, and it is easily carried about and not liable to get out of order.

Another advantage is, that it excites the faculty of the Blind to write in short expressive words.

Invention for Cotton Manufactures.

The Providence (R. I.) Journal mentions a very useful machine recently invented by Messrs. J. & H. Higgins, of East Greenwich, which trims the surface of cotton cloth of the threads or parts usually removed by the hand and which smooths the cloth whilst it thoroughly performs its office. It is a simple power machine, tended by a boy, and does the work of seven or eight hands, and costs but \$100. Successful use in several large establishments in the best proof of its excellence.

American Inventions in England.

Foreign Papers say that an exhibition of four American Pontoons recently took place before the Duke of Wellington, Sir Charles Napier and others. The Duke and several other distinguished military gentlemen present were so satisfied of their superiority, and adaptation to transporting artillery and troops over rivers, that an order was immediately given to forward the pontoons to the seat of war in India; and the East India Company have announced their intention of giving a further order for a large supply of them. It is worthy of notice, thus to find English power using American skill, in carrying out its projects of foreign acquisition, and it is a wise policy in that Government to adopt the best things to suit the ends desired, whether the production of their own, or that of other people.

A New Magnetic Discovery.

Dr. Plucker a Professor of the University at Rome, has discovered a new Magnetic condition in the optic axis of Crystals.