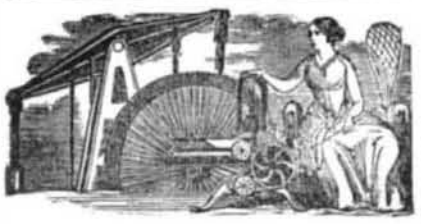


New Inventions.

Improvement in Safes and Warehouse Doors.

Mr. Barnard A. Warren, Gold Pen manufacturer, Brooklyn, N. Y. has invented a plan for making Safes and Vaults and Doors perfectly secure against being cut open by any mechanical instrument. It must be of great importance to Banks where large quantities of money are deposited and to Warehouses where valuable goods are stored. The late, almost successful robbery of the Seventh Ward Bank, where the iron plate of the Safe was cut through like cheese, has excited the mind of the inventor to make something that would be proof against burglars' cutting tools and the result has been a safe, made for himself, to answer the desirable purpose. The improvement is not expensive, and letters patent have been applied for.

New Street Railroad.

Mr. Leander Rodney, of Philadelphia, proposes a new plan for a street railroad, which has some novelty at least. The tracks are to be laid with convex rail several feet under ground; two concave wheels, to each car, to run on the said convex rail; a number of iron bars or shafts, having one end attached to the wheel frame, or axletree, under ground, and extending perpendicularly through an opening only a few inches in width to the springs of the cars above ground, said opening along and through which the shafts must pass, to be strongly built up on both sides with rough hewn stone, and the top covered by a series of valves attached by hinge joints to the cheek or top of one side of the opening—the valves to be raised by a projecting lever or shear, something like a plough share, and closed again as fast as the shafts and car shall pass along—the top of the valves to resemble the pavement, rendering them almost imperceptible, and offering no obstruction whatever; the cars to be two stories high—the first or lower story to be only wide enough for one row of seats, leaving sufficient room for two carriages or carts to pass at the instant the two trains are passing,—the second or upper story to have two rows of seats and a passage way, the stairway to be inside. The cars will always incline to the right, and be regulated by two small wheels, called governors, running on a side rail just below the top of the opening.

Preserving the Dead.

James S. Scofield, chemist of Division st., this city, professes to have discovered a chemical process to preserve from decomposition the body after death. So efficient it is said is the process that the ravages of time and decay are completely frustrated—the body remaining in a state of perfect preservation, without change even in color. One of the many advantages of this process is that the body may be kept for any length of time, thereby permitting the arrival of distant relatives before consigning it to the tomb.

Another Washing Machine.

Mr. Dennis Newton, of Homer, Ohio, has invented a new washing machine whereby he combines a swinging or pendulum lever with the rubbing board, so as when the end of the lever is raised and lowered the clothes are turned and squeezed so that the washing is performed in a very short time.

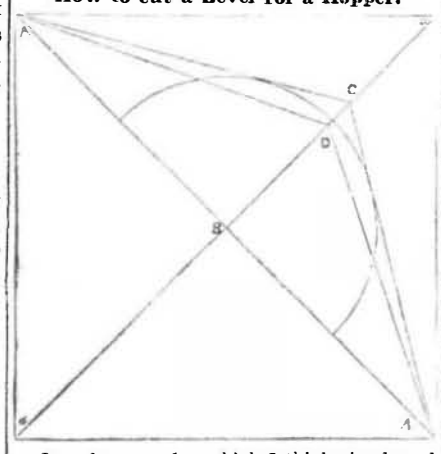
The Pneumatico Hydraulic Engine.

Professor Bigham, of Covington, Ky., says the Cincinnati Atlas, claims to be the inventor of a machine, to which he has given the above name, which by the application of merely a one horsepower, will raise water 300 feet, and in quantity sufficient to supply the whole city of Cincinnati! He says he can fill a reservoir on Mount Adams of any capacity and keep it always full for less than $2000 a year. Too good news to be all true.

Improved Harrow.

Mr. Francis Kent, of the township of Chinguacousy, Canada West, says the Hamilton Gazette, has invented and is now patenting, what has long been considered a desideratum —a perfect harrow. It is 14 feet in width, and is in three parts; a centre, to which the horses are attached, and a wing on each side, coupled to the centre piece by an iron rod. In passing among stumps, or large stones, one or both wings can be lifted as occasion requires, and they, of course, accommodate themselves while being dragged along to every inequality of surface. The harrow being drawn by the centre, brings the draft near the horses, making it easier to draw, and also causes the same depth of harrow to pass on all the ground that it embraces, which is not the case with any other harrow; and in order to prevent the harrow from rising, in consequence of the horses being hitched so closely, they draw by a beam, turning up in front like a sleigh runner, into which the butts of the centre piece are morticed.

How to cut a Bevel for a Hopper.



I send you a plan which I think simple and easily understood, and one which I know to be perfect for any angle whatever.

RULE FOR A HOPPER.

First draw the size of the top of the hopper, A a A a; then draw lines across it diagonally, or across from corner to corner; then measure up from the centre B, at the intersection of these diagonal lines, on one of the lines, the depth of the hopper to C; then draw two lines from the corners A A, to C; then set the dividers at B, and describe a circle just so as to cut the lines A A and C; then draw lines from A A, to the point D, where the circle crosses the line B C, and which will be the right bevel for the corner piece.

E. Bishop.

Improved Carriage Hub.

Mr. A. E. Lyman, carriage maker, Williamsburg, Mass., has invented a new and most useful improvement in the manner of combining the axle and hub of a carriage wheel.—The invention consists in having a groove cut on the axle just inside of the hub and by having a coupling box bolted on the inside of the hub also, through which the axle slips into the hub and is fastened to it by a spring in the coupling box which catches the rim of the groove of the axle and holds it fast while it works in the groove smoothly as the wheel spins round. The outside of the hub is box'd over and no dirt enters. To gear and ungear the wheel on the axle for greasing or any thing else, is but the work of a moment, by turning the spring. Application has been made for a patent. We shall present an engraving of it next week.

Improved Hoe Rake.

Mr. Lyman has also invented a combination of the hoe and rake, very useful for gardeners and for florists Every person who has a taste for gardening should have one. There are some t for ladies for decorating the parterre, and they are neat instruments. They are for sale by Clark & Wilson, Platt street, this city, and at a number of the hardware stores in Pearl street.

New kind of Brick.

A gentleman of Woodbridge, England, has invented a new kind of brick, so shaped as to form internal channels for the passage of air, and by this means produce a complete wall ventillation, a counterpart to the ventillating glass windows noticed a long time since in our columns.

New Application of Atmospheric Pressure.

I beg to suggest to some of your mining engineers the application of air-pumps and an exhauster to be fixed close to the water-wheel or other motive power, and to select a spot whereon to fix a drawing machine, that any shafts already sunk, or any hereafter to be sunk, may be worked to the greatest advantage. This machine to consist of two cylinders, say of 16 in. diameter, with slide-valves and a double crank, so fixed as to turn the centre; and the communication between the exhauster and this machine to be by means of a close pipe, laid under the surface. to exhaust these two cylinders, and to allow the pressure of the atmosphere to act on the pistons; this could be worked with a 5-ft stroke to about 36 horse-power. The size, of the air pumps. and cylinders, of course, to be governed by the power available, and by the duty required to be performed. One cylinder and a fly-wheel may be used instead of two cylinders, and I think it will be obvious to any engineer, that the machinery requisite to work this will be very trifling, as there will not be any water wanted to the machine, condensing gear, and other parts, as in a steam engine, but merely the cylinders, cranks, eccentrics, sliding-valves and hand-gear, to regulate the power and speed. It may be worked on the expansive principle, or, by having an inverted safety-valve in the exhauster, loaded to any pressure required: and this machine may be either reversed, or struck out of gear to lower the kibble. I have no doubt but some of your many readers can, on a little consideration, see where this principle can be applied to a very great advantage.

C.

Humane Invention.

The Boston Bee says that Mr. E. N. Morse of that city has recently patented an excellent invention of an apparatus intended to be applied to stables, for the purpose of freeing horses from the stables and taking them therefrom in cases of re, and this, too, without any danger to the person liberating them, and with the utmost certainty of success Very liberal offers have already been made to the inventor for the privilege of vending his apparatus in the different States. Persons owning horses, from humanity to their animals as well as regard for their property, will undoubtedly apply this humane apparatus to their stables.

To estimate Corn in Bulk.

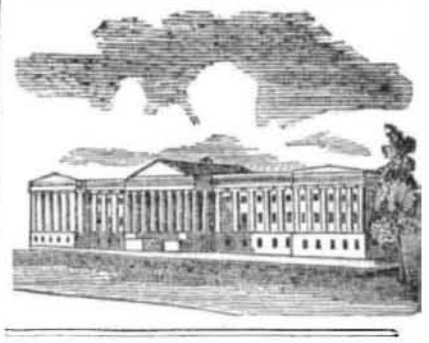
"The following rule for ascertaining the quantity of shelled corn in a house of any dimensions is by William Murray, Esq., of South Carolina, and was read before the St. John's Collection Agricultural Society,—and communicated by them for publication in the Southern Agriculturist:

"*Rule.*—Having previously levelled the corn in the house, so that it will be of equal depth throughout, ascertain the length, breadth and depth of the bulk; multiply these dimensions together, and their product by four, then cut off one figure from the right of this last product. This will give you so many bushels and a decimal of a bushel of shelled corn, substitute 8 for 4, and cut off one figure as before.

"*Example.*—In a bulk of corn in the ear, 12 feet long, 11 feet broad, and 6 feet deep, there will be 316 bushels and 8-10ths of a bushels of shelled corn, or 632 bushels and 8-10ths of ear corn; as 12 X 11 = 132 X 6 = 792 X 4 = 316-8; or 12 X 11 = 132 X 6 = 792 X 8 = 633-6. The decimal 4 is used when the object is to find the the quantity of shelled corn, because that decimal is one-half the decimal 8, and it requires two bushels of ear corn to make one bushel of shelled corn. In using these rules, half a bushel may be added for every hundred; that amount of ears results from the substitutions of the decimals. The term 'barrel of corn,' so much used by the southerners, means 5 bushels of shelled corn."

New method of manufacturing Bank Note Paper.

The paragraph in our last number relative to this invention by Messrs. Crane & Co., of Dayton, Mass., should have read "Dalton, Mass."



LIST OF PATENTS

ISSUED FROM THE UNITED STATES PATENT OFFICE,

For the week ending Nov. 20, 1847.

To George W. Campbell, of Belleville, N. J., for improvement in the manufacture of Bullets, &c. Patented Nov. 20, 1847.

To C, Augustus Smith of Cincinnati, Ohio, for improvement in Percolating Apparatus.—Patented Nov. 20, 1847.

To Adrien Olcott, of Newark, N. J, for improvement in machinery for preparing husks for Mattresses. Patented Nov. 20, 1847.

To Edward Harrison, of New York City, for improvement in Mills for Grinding. Patented Nov. 20,1847.

To James Haggart, of New York City, for improvement in Window Sash Fasteners.—Patented Nov. 20, 1847.

To Robert Commings, of Lima, Indiana, for improvement in Bog Cutters. Patented Nov. 20, 1847.

INVENTOR'S CLAIMS.

Improvement in Cotton Spinner

By Elijah M. Harris and James Cleghorn of Cass Co., Ga. Patented August 21, 1847. Claim—What we claim as our invention and desire to secure by letters patent, is the combination of the handles with the axle and hoe frame as described. The axle and hoe frame being independently attached to the axle which forms the fulcrum, and the relative position of the handle and hoe frame being adjustable the handles are converted into levers for elevating and depressing the hoes.

Saw Filing.

By Charles Laffertey, of York Springs, Pennsylvania. Improvement in machinery for Setting and Filing Saws. Patented 21st August, 1847. Claim.—What I claim as my invention, and desire to secure by Letters Patent, is constructing a Saw set in the manner described, by having one jaw raised above the other and bevelled on the face, with a rib behind, as described, by which teeth are set by a toothed lever that hooks over said rib and brings the tooth against the teeth of the saw, as above described—the width of the set of the teeth being determined by the guage substantially in the manner and for the purpose set forth. I also claim the filing apparatus constructed, substantially as herein made known, consisting of a file holder, consisting of a standard that slides parallel in front of the jaws of the clamp to which the file attached, as to have a free motion horizontally in any direction to which it is set, and so regulated as to file to any given depth the holder is set for, so that it will direct the file to the proper angle and depth on the saw, in the manner and for the purpose above specified.

Casting Ordnance.

Thomas S. Rodman, of Pittsburg, Pa., for improvement in casting ordnance, &c. Patented 14th August 1847. Claim.—Now, what I claim as my invention and desire to secure by Letters Patent of the United States, is the cooling from the interior of guns or other heavy hollow castings intended to resist [illegible] by circulating within the core a cooling fluid or gas, in combination with the application of artificial heat at the exterior of of the flash to prevent cooling from the without.

New Canal Boat.

The small steamer which was constructed at Bordentown, N. J. for the canal, as an experiment, as far as it has been tried, seems likely, it is said, to prove entirely successful. It is built after the model of a porpoise, and propelled ever so swiftly through the canal, causing no more wash upon the banks than does a common canalboat.