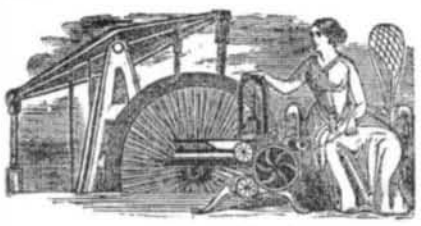


New Inventions.

Machine for making Emery and Sand Paper.

A machine has been projected by Mr. Gilbert Gorries, of Troy, N. Y., for the rapid and economical manufacture of sand and emery paper. It embraces the whole process of grinding the sand, glass and emery and applying it to the making of the paper in one machine. It will, therefore, be of great advantage to manufacturers to have the whole apparatus thus connected and combined together in a neat and compact manner. There is one thing to which we would desire to direct attention in the grinding of such substances as sand, plaster, snuff, glass or emery for manufacturing purposes, viz. some perfect apparatus to prevent the fine dust from destroyso many lives of operatives that attend to the machinery.

New Last Machine.

Mr. E. Webber, of Gardiner, Maine, has invented a new machine for turning irregular surfaces and duplicating copies of lasts, &c., upon a principle entirely different from those in common use. This machine has not a pattern to take merely a duplicate, but has simply a block of wood or iron as a gauge for a cone of saws by which the last is cut out in a very simple and perfect manner.

Machines for turning irregular surfaces are not new, as may be seen from some of the old Encyclopedias, but there is much about the arrangements which Mr. Webber's machine new, at least in the manner in which the principle is appplied.

New Mitre Box.

Mr. Arthur Huston, of Bristol, Maine, has invented a very simple and convenient Mitre Box most excellently adapted to saw bevils correctly and quickly to any angle It will be a good companion to the Joiner and Millwright and Cabinet maker, and can be got up at a small expense. It is well adapted for cutting mouldings, &c., and no doubt will yet be much used by workers in wood. We will be able to give a more lengthy description in another number along with an engraving.—Measures have been taken to secure a patent for the invention.

Improvement in the Turning Lathe.

Mr. Joseph Willard, of Grafton, Mass., has made a very ingenious and simple improvement in the Turning Lathe. It consists of a collar to be attached to the arbor of the pulley to hold and adjust axletrees for turning, and which operates very correctly and beautifully.

A New Musical Instrument.

The Saturday Courier, of Philadelphia, states that the celebrated Æolian attachment to the Piano, which was invented by the late Mr. Coleman, has been constructed in a distinct form from the Piano, and is now sold as a separate instrument. It may be justly considered, in this form, a church instrument, and will be a most acceptable affair for those who are conscientious with regard to the ordinary Piano. It makes a handsome piece of furniture, and may be constructed to suit the taste of the purchaser.

New Propeller.

A new mode of propelling steamers has been invented by Mr. Benj. Barker, of Ellsworth, Maine, which appears to be a great improvement, as it is a combination of the screw and paddle wheel, and named the *Inclined Tortuous Paddle Wheel.*

New Life Boat.

The British Admiralty have adopted the use of life boats made of a stuff called Kamptucas, invented by Lieut. Lucas of the Navy.—It is a close combination of ground cork and India rubber.

Improvement in the Power Loom.

Mr. R. P. Cunningham, of Abington, says the Norwich (Conn.) Courier, has for some time past been at work upon an improvement which promises, so far as we can judge, to be of no small importance to manufacturers. The improvement consists mainly in this, that with a given amount of power, any ordinary loom can be made to do much more work with, than without the improvement.

If we are rightly informed, the average speed of the power loom commonly in use, is about 100 picks per minute, while the improved loom will bear a variation in speed very much below or above—even as high in cases as 200 picks per minute;—and Mr. Cunningham is entirely confident that a loom with his improvement may be increased in speed from at least 15 to 30 per cent, without any increase of breakage of yarn, or wear and tear of machinery.

[It would be well in all cases, in describing improvements on the power loom, especially in relating the number of shots thrown per minute, to mention the quality of weft used, whether 20's, 36's or 40's or 50's, and also the number of picks in the *glass.* We do not care how well a loom may be constructed, we defy a weaver to make any more than 80 picks per minute, with some kinds of weft but we know of some looms working at this moment averaging 30 per cent, above the average speed mentioned in the above paragraph, with good weft—Ed.

Eliptographic Compass.

I forward you a sketch of a simple instrument for drawing ovals, which I made several years ago from an old work, and which only requires to be known, to come into general use, as from its simplicity and ready action, it will be found of great service to the perspective draughtsman. The construction is so simple, as not to require a detailed description. To use it, set the point of the leg on which the pencil slides, in the centre, and the pencil to the half breadth of the eclipse, then extend the steadying leg until the pencil, as in the position in the figure cuts the length; steady the instrument with one hand, and with the other turn the pencil round, allowing it to slide up or down its guide, so as to keep the point pressing lightly on the paper. It must be clear that the figure described by the revolution of the pencil is a perfect ellipse, as it is an oblique section of a cylinder. When the ellipse is very long, this instrument will not answer well, but for a large proportion of those which occur in perspective, it will be found very useful. in this I can speak from experience.

I have shown both legs adapted to receive the pencil, and those of different lengths, as it will be more convenient than the old form with one round leg, if the ellipse is wanted nearly circular.

This engraving is sufficiently minute and clear to explain itself, and will only require good workmanship to make it a most perfect instrument.

Yours, &c., G. S.

[We have seen a drawing of the above instrument before, but we presume it will be new to many of our readers.—Ed.

Asphalte Felt Roofing.

T. J. Croggin has secured a patent from the English Government for Asphalte Felt. He describes it as principally made of hair, completely saturated with asphalte, without pitch tar or rosin, and consequently more durable, a good non conductor of heat, entirely impervious to rain, frost and snow, and superior to all other descriptions of roofing on account of its lightness, elasticity, economy and durability, because it may be laid on by unpractised persons. Its price 1 penny the superficia foot, or 9 pence the square yard,—and it may be manufactured of any required length, 32 inches wide.

[We are not able to state whether this is native asphaltum or retinite, or a new composition.—Ed.

New Washing Machine.

We like to see some attention paid to machinery for abriging the severe labors of the good housewife. In ancient days, the gentle female, as is now the custom in barbarous nations, had to grind all the food for the family. This was very severe labor and the man who invented the first meal mill was a great benefactor to the human race. The invention was so much esteemed by an ancient poet, that it was the subject of one of his sweetest songs. A good washing machine we think should be as indispensable a piece of household furniture as a pot, or a pan—the washing of clothes is just as essential to health as the eating of bread. We never expect to see a machine so perfect as to wash lace or fine muslins. The human hands in some things will stand unapproachable, but for washing common clothing safely and easily, we think that Messrs Whitman & Pratt, of Weedsport, N. Y., have invented a most simple and beautiful washing apparatus. The motion is rotary and can be easily prepared. Measures have been taken to secure a patent.

Improvement in Casting Pipes.

Mr D. Y. Stewart of Montrose, Scotland, has taken out a patent in Britain for a new mode of casting iron water or gas pipes, or other cylindrical tubes, by which a far more superior material is produced, at a much less cost than the usual method. The mould consists of a perpendicular cylindrical iron box, of the required size, with a shaft in the centre, longer than the mould, and communicating with the machinery above, by which it is kept revolving, and, as it revolves, it gradually rises. At the bottom of the shaft is an instrument which may be termed a "presser" or rammer," consisting of an iron block having inclined tabular faces; of such smaller diameter than the box as to leave the sand of the required thickness for the mould. On feeding the sand at the top of of the box, it is distributed towards the sides, and the shaft or rammer gradually revolving and rising press it with great force against the sides of the box, leaving the mould finished and perfectly cylindrical on its arrival at the top, ready for the insertion of the core. The amount of pressure against the sides is regulated by means of a counterpoise weight.

The following are the advantages claimed by the patentee:—1. A perfectly straight cylindrical pipe of uniform thickness. 2. No parting of any kind. 3. Dressed at one half the ordinary cost: 4. Less sand used than in any other way, and consequently easier dried if required. 5. The casting and sand easier removed from the boxes than in the ordinary way 6. The flasks, or boxes, better calculated to resist the pressure of the metal than any now in use. 7. This method is the best for casting pipes perpendicularly that has hitherto been employed. 8. The greatest recommendation of all is, the simplicity of the apparatus which requires the attention of a boy only; who, with the machine as at present working, turns out easily six pipes of six inches bore per hour. Two miles of water pipes have been laid by the patentee at Montrose, and the town council passed him a vote of thanks.

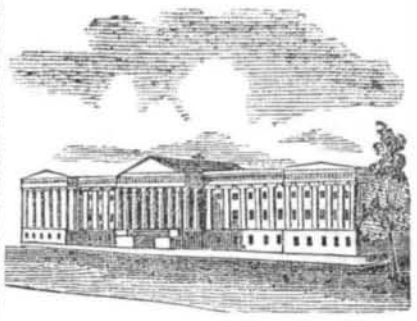
First Patent for Water Conveyance.

In 1716, Mr. Hugh Middleton, a citizen, and goldsmith, having obtained a patent, he brought water by means of pipes into all the streets of London.

Tripoli.

A mineral, pronounced by geologists to be pure Tripoli, has been discovered in this country, and is now being manufactured by a company formed for that purpose For cleansing the surface of glass, or removing the oxide from metals, it is certainly without an equal. Windows can be cleansed with this article with one half the labor that is required with water, and the work is done much more effectually.—*Cambridge, Mass., Chronicle.*

We should be glad to learn where it is manufactured.—Ed.



LIST OF PATENTS

ISSUED FROM THE UNITED STATES PATENT OFFICE,

For the week ending Jan 18, 1848.

To Starr Fairchild, of Trumbull, Conn for improvement in hanging Carriage Bodies. Patented Jan. 18, 1848.

To George Wood, of Boston, Mass., for improvement in Folding Shower Baths. Patented Jan. 18, 1848.

To William Jackson, of Syracuse, N. Y., for improvement in Cooking Stoves. Patented Jan. 18, 1848.

DESIGNS.

To William P. Cresson, S. H. Sailor, Jacob Beesley, David Stewart, of Philadelphia, Pa., for Design for Stoves, (having assigned their right to William P. Cresson, aforesaid.) Patented January 18, 1848.

To Elihu Smith, of Albany, N. Y., for Design for Stoves. Patented Jan. 18, 1848.

INVENTOR'S CLAIMS.

Chimneys.

By John B. Kelsey, of Newburyport, Mass. Improvement in construction of chimneys. Patented 11th September, 1847. Claim—I am aware that for the purpose of preventing chimneys from smoking, the external air has been heated and made to pass into them above the throat of the fire-place. I am aware also that a chamber has been made in the rear of a fire-place and jambs for heating air to be admitted into a room for heating it, and that said chamber has communicated with the external atmosphere, or that of the room or cellar below, by means of pipes. I am aware that the air to be warmed has been introduced between the mantel and arch of a chimney, such having been the subject of a patent granted to one Joseph Gilbert on the thirteenth day of November, A. D. eighteen hundred and forty four. I therefore do not lay claim to any such modes of preventing chimneys from smoking, as separately considerad, but that which I do claim is, First. The combination of the air chamber in rear of the back and sides of the chimney, or any part thereof, with the inlet air pipes or passages, and out-let pipe leading into the room, the said pipes having dampers in the valves in the manner as described. And for the purpose of distributing the heated air, and using part of it for the chimney and part for heating the room, I claim the combination of the two separate chambers card their respective inlet and discharge pipes, valves, &c., as arranged and made to operate together substantially as specified.

Compositions for Machinery.

By Philip Zeber, of Reading, Pa., John Hancock of Philadelphia, Pa, and Patrick S Devlan of Reading, Pa.. Improvement in Compositions for lubricating Machinery. Patented 11th September, 1845. Claim—What we claim as our invention and desire to secure by Letters Patent is the combination or admixture of water, sal soda and gum tragacanth, the ingredients herein named, in the manner and for the purpose as herein specified.

Door Knobs.

L. R. Livingston, John J. Roggen and Calvin Adams, of Pittsburg, Pa., for improvement in the shanks of Door Knobs. Improvement added Dec. 11, 1847. What we claim as our additional improvement is the connecting the respective shanks of the knob to the lock by means of the tooth in the halved portion of one shank fitting to an aperture in the halved portion of the other, and confined to each by the tumbler, the tube projecting from the side of the lock, and the escutcheon secured to the door, combined and operating with each other.