

**New Inventions.**

**Improvement in Brick Presses.**

Within the past two months two patents have been secured for improvements in Presses for making Brick. The one was taken out by R. Wilson, of Houston, Texas, and the other by J. W. Ward, of Cambridge, Mass. The patent of the former is for a combination of the feeding gauge with the pounder and a horizontal gauge in the hopper, and also the arrangement of a cam and lever to operate the mould plate. The patent of Mr. Ward is for the combination of a water tube to wet the vent of the clay from the hopper to the mould—something very necessary to make good Press Brick.

**Pneumatic Steam Gauge.**

Mr. Augustus King, of Southington, Conn. has planned and put in operation a very simple Steam Gauge. It is a combination of a water and compressed air gauge, and works with great correctness.

**Hardening Hides.**

The following patented process for hardening hides, extracted from Examiner Page's Report, will be found to be not a little interesting. The hide is hardened and rendered transparent as horn.

In the first place they are submitted to the sweating operation or the liming, for removing the hair. They are then submitted to the action of powerful astringents, such as sulphuric acid, alum or salts of tartar dissolved in water at a high temperature. During the operation of clearing the hides of the oil, they are rubbed, or friction is applied in any convenient way, whereby the hide becomes thickened; and after this process is finished, they are rinsed in warm water and dried.—After being dried they are submitted to the action of boiling linseed, or any other drying oil, and retained in the hot oil until a yellow scum appears on the surface of the hides, when they are withdrawn. If it is desired to impart color to the material, as staining it in imitation of tortoise shell, it is done while in the oil bath, and when removed from the bath it is submitted to pressure in moulds for the formation of various articles, as knife handles, &c. For the article, when it comes hot from the oil bath is very soft and pliable, but when allowed to cool, it becomes hard and susceptible of a high polish.

**Fitzgerald's Braiding Machine.**

In reply to a correspondent, a few weeks since, we stated that we were not aware that there were any contrivances in existence for braiding leghorn, &c. for bonnets. It escaped our memory at the time that Mr. Elisha Fitzgerald of this city, was the inventor of a most wonderful and ingenious machine for this purpose, and has had them in constant operation for some time. His establishment, corner of Hester and Elizabeth streets, was destroyed by fire not long ago, by which twenty two of these machines were destroyed—Each machine turns out in one day about as much braid as one good workman can do by hand in two weeks.

**Great improvement in Filtering Water.**

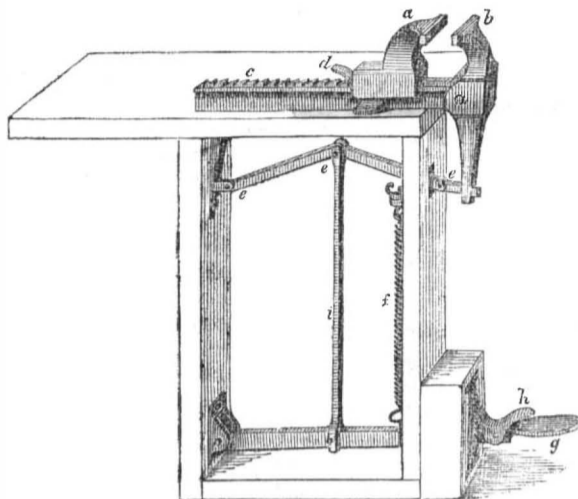
A new and original invention has been introduced in England. It is a cylindrical filter made of stone, and so constructed as to supersede all cleansing. The passing of the water through the stone frees it from all impurities in suspension, and, according to the testimony of an eminent analytical chemist, is calculated to benefit the public health materially. The filter is now in operation in many of the mansions of the principal nobility of the metropolis. The Lords of the Admiralty, struck with the utility of the invention as a means of preserving the health of the officers and seamen, by rendering the water at all times on board ship pure and soft, irrespective of climate or time, have introduced it into the Royal Navy.

**Novel Clock.**

The most improved clocks now in use, only indicate (in point of time) the hour, the minute, the second, and the day of the month which last indication requires to be attended to, and altered at the end of every month of less than thirty-one days. An invention has just been made in Leeds, England, of a clock which will indicate the year, thus:—"Monday, July 17th, 1848:" and at twelve o'clock at night, the clock will alter the indications all at once, and exhibit, "Tuesday, July 18th

1848," and so on, day by day, for hundreds of years. All the attention required, is to keep the clock in motion by winding it up regularly as usual. Whether the month has thirty or thirty-one days, or as in February, 28 and in leap year 29 days, the indications will be found to be always correct. This newly invented piece of machinery, says the Leeds Mercury, is at present contained in a small box, which may be attached to any ordinary clock.

**NEW PATENT LEVER VICE.**



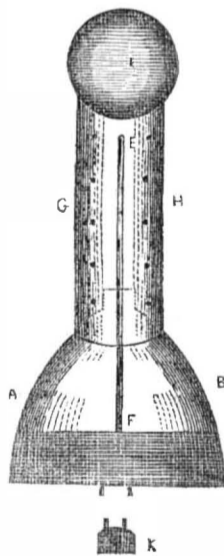
This is an engraving of a new Vice, invented by Mr. J. Peck, and improved by Mr. L. Pardee, of New Haven, Conn. It is patented and possesses great strength and great power. It is made of wrought iron and is claimed to have better qualities than any now in use. It is worked entirely by the foot without laying down a tool for that purpose, and it can be changed to receive work from one-sixteenth to eight or ten inches in width as quickly as any other Vice can be moved one-fourth of an inch.

DESCRIPTION.—a, sliding jaw. b, jointed or swing jaw. c, rail on which the sliding jaw moves. d, click which catches in ratchet on rail c, and holds the sliding jaw firmly where placed. E, jointed lever (elbow joint) which turns on pins e e, and is attached to prong of rail c, and the lower end of the swinging jaw. g, foot lever with joint attached to leg of bench, and connected by rod i, with jointed lever h, click which catches in

ratchet at the foot of the forward bench leg, and holds the jaws firmly as forced up by the combined levers; it is easily tripped with the foot. f, is a spiral spring which lifts the foot lever and throws open the jaw.

It will be recollected that when this Vice is forced up it becomes very firmly attached to the bench and very solid for chipping and other heavy work that is required to be put into a Vice, and heavy work requiring both hands to lift can be very easily placed in it. It is certainly much easier for the mechanic, for the strain upon the breast in turning the screw is avoided. This Vice has been tested and found to be a useful invention, and one of them weighing fifty pounds has been found to possess as much power as an English Vice weighing seventy pounds. They are now manufactured by J. S. Griffing, State street, New Haven, Conn., and sold by Quincy & Dillapeere, at No. 81 John street this city.

**Mode of Measuring the Depth of the Sea.**



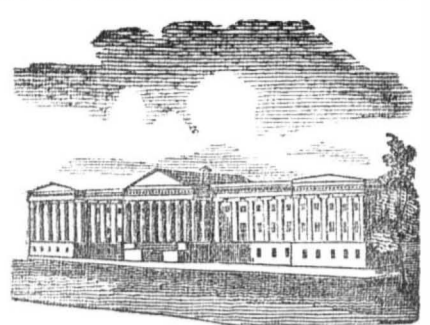
This cut is the figure of the ordinary sea-gauge, employed when the fathomline cannot be conveniently used. A B, is a gauge bottle into which is fixed the gauge-tube E F, the upper end of which is hermetically sealed, and the lower immersed in mercury. This is enclosed for protection, in a tube G H, pierced with holes which admit the water into the bottle; and the whole is crowned with a large empty ball, or a full blown bladder. To the bottom of A B, a large weight K, is connected by a spring. The weight being attached to the instrument, they both sink until, striking on the bottom of the sea, the weight is detached, and the globe I, allowed to bring up the gauge to the surface. In the descent, the water pressing to the surface of the mercury

causes it to rise in the gauge tube. By placing a small quantity of viscid matter on the surface of the mercury in the tube, the instrument becomes self-registering; the viscid matter will adhere to the tube at the highest level to which it is raised, and will, therefore, indicate the space into which the air in the tube has been compressed; consequently the depth of the water, which is reciprocally proportional to the space occupied by the air, may be ascertained.

**Locomotives for Inclines.**

A new and powerful engine has lately been built in Philadelphia, for mounting inclines on the Madison, Ia., line of Railroad. It was built under the direction of Mr. A. Cathcart, by Mr. Baldwin of Philadelphia. The incline for which it is built has a rack in the centre into which cog wheels on the engine bite their way up the hill. The grade is three hundred and seventeen feet to the mile. It mounts this incline with twenty two cars heavily loaded, with great ease. This engine is the most powerful for the same purpose ever constructed, but it is not new in principle, although Mr. Cathcart is both an ingenious and able engineer. Engravings of an engine to accomplish the same thing by the same means, are to be found in one of the numbers of the Illustrated London News for 1845, but we saw a model of the same invention three years previous to that, exhibited by a Mr. Harris. This new locomotive, however, is the first practical demonstration of the principle alluded to, and he that bringeth an invention into successful operation is deserving of great praise.

A large quantity of iron, over 1000 packages, was recently received in Liverpool, from Bombay, East Indies.



**LIST OF PATENTS**

ISSUED FROM THE UNITED STATES PATENT OFFICE,

For the week ending July 11, 1848.

To Alfred Swingle, of Galveston, Texas, for improvement in Boring and Morticing Machines. Patented July 11, 1848

To Vincent Baker, of Weedsport, N. Y., for improvement in Folding Bedsteads. Patented July 11, 1848.

To N. A. F. Brewer, of Camden, S. C., for improvement in Refining Gold and Silver.—Patented July 11, 1848.

To Samuel Rodman, of New Bedford, Mass. for improvement in the construction of Factory Chimneys. Patented July 11, 1848.

To James Young, of Jefferson, Me., assignor to William Young, of Washington, Me., for improvements in Rotary Ploughs. Patented July 11, 1848.

To Thomas C. Merrill, of Newbury, Mass. for improvement in Machinery for sawing irregular shapes. Patented July 11, 1848.

**RE-ISSUES.**

To Manoa Alden, of Ralston, Penn., for improvement in Blowers for Furnaces. Patented 18th April, 1848. Re-issued July 11, 1848.

To Frederick P. Dimpfel, of Philadelphia, Penn., for improvement in Furnace for economising Fuel and consuming Smoke. Patented 9th May, 1839. Re-issued July 11, 1848.

**INVENTOR'S CLAIMS.**

**Cast Iron Car Wheels.**

To Asa Whitney, of Philadelphia, Penn., for improvement in annealing and cooling Cast Iron Car Wheels. Patented 25th April, 1848. Claim.—I do not claim to be the inventor of annealing castings made of iron or other metal, when done in the ordinary way; nor do I claim to be the inventor of any particular form or kind of furnace in which to perform the process, but what I do claim as my invention, and desire to secure by Letters Patent, is the process of prolonging the time of cooling, in combination with annealing railroad wheels in the manner above described, that is to say: in taking them from the moulds, in which they are cast, before they have become so much cooled, as to produce such inherent strain on any part as to impair its ultimate strength, and immediately after thus being taken from the moulds, depositing them in a previously heated furnace or chamber so constructed of such materials, and subject to such control, that the temperature of all parts of the wheels deposited therein may be raised to the same point (say a little below that at which fusion commences) when they are allowed to cool as fast, and no faster than is necessary for each part of each wheel to cool and shrink simultaneously together, and no one part before another.

**Ploughs.**

To Frederick C. Smith, of Harper's Ferry, Va., for improvement in Ploughs. Patented 25th April, 1848. Claim.—Having thus described the construction and operation of my self-clearing brace coulter plough, what I claim therein as new and desire to secure by Letters Patent, is the combination of the inclined self-clearing coulter and point (in one piece) with the share and mould board, in such a manner that the coulter serves not only the purpose of a coulter, but also as a cutting edge for the mould board, and a support-brace for giving stiffness and strength to the share and mould board, substantially as herein set forth, not confining myself to the identical manner of accomplishing this as herein set forth, but to something substantially the same.