REISSUES

REISSUES.

2,144.—Power Press.—Chirles W. Johnson, Waterbury, Conn. Patented Nov. 7, 1865:
First, I claim the combination described of the gear, I, and plate, P. or their equiv. lents, constructed and arranged to operate together substantially as and for the purpose specified.
Second, The combination of the cam, S. lever, N, and bolt, x. in the manner substantially as and for the purpose specified.
Third, The combination of the bolt, r. and lever, N. or their equivalents, substantially in the manner specified, as and for a cutoff, or stop motion.

f, or stop molion.

145.—Stone Breaker.—Eli W. Blake, New Haven, Conn. Patented June 15, 1858:

I claim. First, The combination in a stone-breaking machine of eupright convergent laws with a revolving shaft and mechanism rimparting a definite reciprocating movement to one of the jaws om the revolving shaft, the whole being and operating substanally as set forth.

from the revolving shaft, the whole being and operating substantially as set forth.

Second, The combination in a stone-breaking machine, of the upright movable law, with the revolving shaft and fly wheel, the whole being and operating substantially as set forth.

Third, in combination with the upright converging jaws and the revolving shaft, imparting a definitely limited vibra ion to the movable jaw, so arranging he jaws that they can be set at different distances from each other at the bottom so as to produce fragments of any desired size.

EXTENSIONS

Instrument for Cure of Stammering.—Robert Bates, Pa. Patented Sept. 30, 1851. Extended Sept. 29, Pa. 1865:

1865:
I claim, First, The employment of a tube in the mouth which will admit of speaking, and the passage of air when either the tongue or lips would prevent the passage of air substantially as heremabove set forth.

Second, The employment of the adjustable spring pad, substantially as heremabove set forth.

annually as heremabove set forth.

Third, The joint employment of the mouth tube, and the adstable spring pad, at the same time curing the guitural, lingual
and lablal disease of stammering, substantially as hereinabove

set forth.

Machine for Sawing Volutes.—Elijah Whiten, Hingham,

Mass. Patented Sept. 30, 1851. Extended Sept.
29, 1865:

I claim the manner in which I produce the two motions necessary to be given to the block in order that it may be sawed in
the required form, viz. the screw rod, F, and its right and left
screws cut upon it mashing into the pinions. tt, by which motion
is communicated to the horizontal rods, G G, the toothed wheels,
pinions or spurs, u u, grasping the edge of the block and causing
it to rotate in combination with the bevel pinions, I m, screw rods,
k, and arm, o. by which a rectilinear motion toward the saw is
given the carriage and block, producing the result described.

Machinery, for Frankeling, Moldings, Ftc. Pobort

given the carriage and block, producing the result described.

Machinery for Enameling Moldings, Etc.—Robert
Marcher, Cornwall, N. Y. Patented Oct. 21, 1851.

Rel and March, 15, 1859. Extended Oct. 21, 1865.

First, I claim in coating or enameling the surface of moldings, the employment of a plane whose lower daye is formed the reverse of the transverse form of the molding to which it is applied, when such plate is made self-adapting to the surface of the molding during the longitudinal movement, substantially as herein described and for the purpose set forth.

Second, I claim the employment of a hopper to contain the composition for enameling when the lower edges of the end plates thereof are formed the reverse of the transverse form of molding, and the molding to be enameled is employed as the bottom of such hopper, substantially as described, and for the jurpose set forth

Machinery for Shaving, Nicking and Reshaving
Wood Screws.—Thomas J. Sloan, New York City.
Patented Oct. 21, 1851. Extended Oct. 21, 1865:
I claim so combining the shifting mandrel that carries the blanks with a shaving and mcking apparatus substa tially as secribed that the blank site pelag shaved to give the required form to the bead, and with the same machine, may be shifted to the nicking apparatus to have the burrs removed by the same cutter that performed the first shaving operation, as herein set forth.
I also claim the employment of two shifting mandrels, substantially as specified, in combination with the shaving and nicking operation can be performed on one block, while the first and second shaving operations are being performed on dearth of the blanks as specified.
I also claim giving to the mandrel or mandrels, end play in the

shaving operations are being periodical specified.

I also claim giving to the mandrel or mandrels, end play in the boxes in combination with the permanent rest at the back of the mandrel and with the cutter, substantially as specified, by means of which the same position of the blank relatively to the quiter is obtained for the second shaving operation, which it had for the first as described.

Oil Presses.—David Louis Latourette, of St. Louis Oil Presses.—David Louis Latourette, of St. Louis,
Mo. Patented Oct. 28, 1851.—Extended Oct. 28, 1865.
Iclaim the combination of the heating plates with the steam
chamber, substantially as herein set forth, the plates being moved
parallel, and the steam tubes connecting them with the steam
chamber selding in staffing boxes in a line with the motion of the
plates as above set forth, said steam chamber being placed in
proper relative position with the plates for that purpose.

Tanner's Oil from Rosin.—Louis S. Robbins, New York
City. Patented Nov. 4, 1851. Extended Nov.

4 1865:

City. Page 1865:

4, 1865:

1. A land the new and original products of manufacture which land the new and original products of manufacture which land the new land the

Lubricating Oil from Rosin.—Louis S. Robbins, New York City. Patented Nov. 4, 1851. Extended Nov.

4, 1865:
I claim the neward original product of manufacture which I denominate, Robbins lubricating oil, the process of producing which I have herein fully set forth.

which I have herein fully set forth.

Distilling Acid and Naphtha from Rosin.—Louis S. Robbins, New York City. Patented Nov. 4, 1865:
First, I claim the process of separating the acid and water, arising from the decomposition of rosin, at the temperature of 325, degrees fabrenhets, or thereabout by means of fire heat, substantially in the manner herein set forth.

Second, I claim in combination with the above, the process of separating the naphtha from the other components parts of the rosin by presaving the temperature of the liquid mass within the xill at about the range of 325 degrees fabrenhelt, as above stated, and injecting steam into the same, by which I am enabled to inrow off the naphtha at the same temperature employed for the naphtha at the same temperature process of distillation as hereinbefore described to the production of oil from rosin, but shall employ it for redistilling the crude article known as rosin oil.

rosin oil.

Stove-grate Bars.—Philo P. Stewart, Troy, N.Y., assignee of George W. Gardner, Albany, N.Y. Patented Nov. 18, 1851. Reissued May 31, 1864. Extended Nov. 18, 1865:
First, I claim the detaching of c nders, clinkers or ashes from coals or solid burning fuel, by means of parallel grate bars having an oscillating or vibrating motion in the horizontal plane impartic thereto by means of a frame. or yoke, and lever or equivalent therefor, in the manner substantially as herein described and set orth. Second, I also claim the employment of parallel grate here of

forth. Second, I also claim the employment of parallel grate bars, so constructed, arranged, and combmed with a frame or yoke, as to be operated or vibrated in a horizontal blane by means of a lever, substantially as herein described and set forth.

Railroad Car Brakes.—Francis A. Stevens, Chicago, JH. (formerly of Burlington, Vt.) Patented Nov. 25, 1861. Extended Nov. 25, 1865.; claim the combination and arrangement of the levers, links, rods, and shops or Tubbers, substantially as herein described,

wherehy each wheel of both trucks of a car is retarded with a uni-form force, when the brake is but into operation.

Drop Press .- Milo Peck, New Haven, Conn. Patented

Nov. 25, 1851. Extended Nov. 25, 1865:
First. I claim the general arrangement and combination of the rank and shaft with the sweeps, moving always in the same direction with the moving gear or pulley, and the ratchet wheel jointed together and running loose upon the shaft, constantly in the same direction, substantially as I combine them, for the purposes herem describe!

describe!. Second, I also claim the lock in combination with its sweep and springs, and with the crank to stop its motion not too abruptly, and to full it until it is unlocked by the hand or foot of the workman, substantially as described.

substantially as described.

Machinery for Making Kettles and articles of like character from Disks of Metal.—Hiram W. Hayden, Waterbury, Conn. Patented Dec. 16, 1851. Extended Dec. 16, 1865:
First. I claim the application of a rotary metallic form or mold, or successive forms or molds, in combination with a proper tool or tools, roller or rolle; a sustained, moved and drected in a proper path by competent mechanical means for the purpose of operating on a disk blank or plate of metal, so as to reduce it gradually from the center to the edge, at the same time forming it with straight sides, by successive stages, into a complete kettle, or into any similar articles, to the firming of which his apparatus can be applied, substantially as described and shown.

Second, I claim the construction of the mandrel, f. 3, part of which is cylindrical, and part fitted with a short screw, 13, to take the screws of the hand wheel, f. 2, so that great pressure may be made at the point de-ired, while at the same time the mandrel can be easily and quickly moved through a long distance for the purposes as described and shown.

Grain Sleve — Rebecca C. Wheeler, administratrix of.

Grain Sieve.—Rebecca C. Wheeler, administratrix of Thomas B. Wheeler, deceased. Albany, N. Y. Patented Dec. 16, 1851. Extended Dec. 16, 1865: I claim forming sieves for separating grain from straw chaff, and all extraneous matter, and for other analogous purposes, of sheet metal. with apertures, B.B. cut or otherwise made in it, and inclined leaves, A.A. under the said apertures, of corresponding form with the apertures themselves, substantially as herein set forth.

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On application for Patents. \$30
On granting the Extension \$30
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- of Mass.—It is not a new idea to use an air pump to exhaust fruit jars, instead of heat. It has been tried and fou not so good as cooking the fruit slightly
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- G. U., of Mass.—Dr. Grace Calvert says that the best material for making cloth or leather waterproof is parafine with the addition of a "few per cent" of linseed oil. See his state-ment on page 369 of our last volume.
- E. L., of N. J.-Parchment paper, as well as bladder and other animal membrane, is used as a dialyser. This process separates gummy from crystaline substances. As soda and quartz are both crystaline, they would not probably be separated by dialysis. Soluble glass would not be a permanently waterproof
- A. H. C.—The treatment of the ends of paper collars as you propose could probably be patented, if the useful result which you describe is really obtained.
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- M. H. S. of N. J.-The French meter contains 39:36850535 American inches.
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- such unmeaning puffs we are always distrustful of.
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- MCL, & G. ask:—"Is a man obliged to show his claim to selected article, if it is demanded for information?" Ars.— J. H. E.-Combination locks, without key hole, are
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- scribe in your city. R. E., of Mo .- The parties you inquire about are re-
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Improved Horse Rake.

The ordinary horse rake is so made that it has to be turned over by hand. At each winrow, the mechanism which prevented the rake from revolving is withdrawn, and thrown in again when the hay is deposited. It has occurred to the inventor of this rake that the machine might be made self-acting, so that no hand labor whatever would be required, and the team merely drawn over the field. In this plan he has succeeded, and the engraving illustrates the means by which the end is accomplished. The details are quite simple, and while the rake is made capable of doing the work efficiently alone, it is readily converted into the ordinary rake, and the crystals contain a large portion of this water, which

load can be discharged at any time or place, as in the old-fashioned machines. The frame of this machine has a shaft and crank wheel, A, which is driven by gearing from the main axle. The crank wheel has a slotted connecting-rod. B. which is attached to the lever, as shown.

This lever works on the shaft the rake teeth are attached to, and has a joint, at C, where the teeth pass through the slotted guide. When the team advances, therefore. the crank wheel will revolve, and the rake be caused to move up and down, thus discharging its load without any action on the part of the driver. The time of discharging the hay can be regulated by altering the length of the slot in the rod, so that more play will be given to it before it commences to lift.

When it is desired to use the rake as an ordinary one, the stop, E, is thrown into the crank wheel; this also disengages the coupling, G.

the rake can then be used at pleasure. There are also bars affixed behind, so that the teeth pass by them as they rise, thus preventing the hay from being scattered, and causing it to drop in one place, making a compact winrow. The pedal, H, is for the purpose of depress ing the teeth of the rake when desired, and the same may be held up when proceeding to work by the chain, I. This seems to be a well-designed and efficient machine.

A patent was allowed it through the Scientific American Patent Agency, December 29, 1865, to Daniel G. Adelsberger, of Emmetsburgh, Frederick Co., Md. Address him at that place.

RENDERING CLOTH UNINFLAMMABLE.

A correspondent from Danville, N. Y., asks us to tell him what is the best preparation to render cloth incombustible; in reply we must say that we know of no substance that will do this. Cloth may be prevented from burning with flame, but it cannot be protected from destruction by heat; it may be saturated with substances which will render it, under ordinary conditions, uninflammable, but they will not make it incombustible. The substance that has been most used for this purpose is alum, though the tungstate of soda has been highly rec

Alum acts in two ways to prevent cloth from burning with flame. It has a strong affinity for organic substances, and when applied to cloth it adheres very firmly to the fibers, partly combining with them, and partly covering them with a film which shields them from contact with the oxygen ot the atmosphere. When cloth thus protected is subjected to the action of sufficient heat, it undergoes decomposition, the hydrogen and oxygen are Parties wishing to oppose the above extension must

driven off, and the carbon remains, in the form of charcoal or tinder; the cloth is charred. Burning is the combination of some substance with oxygen, and flame is the burning of a gas. The reason why hydrogen does not burn when it is expelled from cloth protected by alum is, it is driven off so slowly that the particles are scattered, and before they come in contact with the oxygen of the atmosphere they are cooled below the temperature at which combination takes place.

Another action of alum in preventing the rapid combustion of cloth, is the cooling effected by the expulsion of the water of crystalization. Alum

ADELSBERGER'S HORSE RAKE,

from the crank wheel, so that the rotation is stopped; | is of course in the solid state, and the first action of heat upon alum is to expel the water of crystalization. In escaping, the water is changed from the solid to the gaseous form, absorbing and rendering latent in the change both the heat of liquefaction, 140°, and the heat of vaporization, 960°, in all 1100°. So long as this change is going on, it tends to keep the cloth cool, and thus to prevent combustion.

. Cloth protected by a wash of alum, is, however, merely prevented from burning suddenly with flame; if subjected to sufficient heat, it is completely decomposed and destroyed; though the heat acts only on the portion of the fabric subjected to its influence; it is not propagated throughout the whole mass, as in the case of unprotected cloth.

SPECIAL NOTICES,

Samuel Fox, of Deep Car, near Sheffield, England, has petitioned for the extension of a patent granted to him on the 17th day of May, 1853, for the term of fourteen years from the 6th day of April, 1852, for an improvement in umbrellas and parasols.

Parties wishing to oppose the above extension must appear and show cause on the 19th day of March next, at 12 o'clock, M., when the petition will be

Jonathan S. Turner, of Fair Haven, Conn., has petitioned for the extension of a patent granted to him on the 13th day of July, 1852, for an improvement in alarm clocks.

Parties wishing to oppose the above extension must appear and show cause on the 25th day of June next, at 12 o'clock, M., when the petition will be heard.

Ebenezer W. Phelps, of Elizabeth, N J., has petitioned for the extension of a patent granted to him on the 6th day of April, 1852, for an improvement in moth traps to bee hives.

appear and show cause on the 19th day of March. next, at 12 o'clock, M., when the petition will be

Exceedingly Hard Iron.

Some years ago, M. Gaudin found that by heating iron, tolerably free from carbon, with a small quantity of boron, to a very high temperature, he obtained a product which could not be forged, bu1 which possessed extraordinary hardness. He has now found that an equally hard metal may be obtained by adding to ordinary cast iron, in tusion, phosphate of iron and peroxide of manganese-he does not mention in what proportions. The product

cannot be forged, but it casts easily, and is therefore readily applicable to the construction of such machines, or parts of machines, as require in their material extreme hardness rather than tenacity. The metal 'so produced is, moreover, singularly sonorous, and M. Gaudin, accordingly, proposes it as a material for bells. He finds that a still harder metal is produced by the addition of tungsten-again he omits to say in what amount—to ordinary cast iron. He states that this tungsten iron surpasses everything previously known as a material for tools for cutting rocks, and that crystals 'of it will cut glass as readily as the diamond.-London Mechanics' Magazine.

IT requires as many as 2.009 tuns-of coal to preduce a small circular block of a niline 20 inches high by 9 inches wide. This quantity is sufficient to dye 300 miles of silk

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