

## WEEKLY SUMMARY OF INVENTIONS.

The following inventions are among the most useful improvements patented this week. For the claims to these inventions the reader is referred to the official list on another page:—

## BONNET CLASP.

To explain the object and nature of this invention we shall first briefly describe the old plan of making the wire frames of bonnets. These frames are made upon a shape constructed of buckram or other stiff fabric or material, with an outwardly projecting margin, which serves as a guide or gage around and within which to lay the wire in proper form to make a frame; and the wire as it is laid around this margin is tacked or stitched to it with a needle and thread to confine it in proper form; and when the frame is so far completed as to permit it been taken off the shape, the tacking-thread requires to be cut and pulled out. The object of this invention is to dispense with the tacking or stitching and to provide a more convenient means of confining the wire to the shape and removing it therefrom when the frame is so far completed as to permit it; and with this end in view, the nature of the invention consists in a metal clasp of an elastic character and of a peculiar construction, which enables it to be readily applied to secure the wire to the margin of the shape at suitable intervals and as readily removed when the confinement of the wire is no longer necessary. The credit of this contrivance is due to H. A. Reynolds, of this city.

## SEPARATOR.

This invention relates to an improvement on a machine for separating garlic from wheat and other grain, for which machine Letters Patent were granted bearing date December 21, 1858. The machine previously patented consists of rollers and a feeding device so arranged that the grain and garlic seed would both be crushed separately from each other by the rollers; the moist garlic seed adhering to the rollers and the crushed grain falling between them; the separation of the garlic seed from the grain, being due to the adhesive tendency of the crushed garlic seed. The object of the present invention is to effect the separation of the garlic seed from the wheat or other grain without crushing the latter. This result is obtained by substituting rollers with an elastic surface, sufficiently soft to yield to the wheat or grain and allow it to pass through uncrushed, but at the same time sufficiently hard to crush the garlic seed, so that it may adhere to the rollers as before, and be scraped or stripped therefrom. This device has been patented to Philip C. Fritz, of Barrytown, N. Y.

## SEWING MACHINE.

This invention consists in so applying the feeding device in combination with the needle of a sewing machine, and with the device or devices operating in conjunction with the needle to enchain the loops of a single thread carried by it through the fabric to be sewed, that the feed movement is imparted to the fabric only after every second passage of the needle into the cloth and corresponding operation of the looping or enchaining device, for the purpose of producing a stitch as herein described. It also consists in certain novel means of combining the needle arm or needle-operating lever with the main shaft or other rotating shaft of the sewing machine which carries the feeding cam, for the purpose of producing two vibrations of the said lever back and forth by every revolution of the said shaft. This machine is for making the stitch patented last week by the same inventor. This improvement was designed by James S. McCurdy, of Brooklyn, N. Y.

## SHARPENING VENEER-CUTTERS.

The object of this invention is to obtain, by a simple means, a device by which the proper level or basil may be given the knives of veneer-cutting, and similar or analogous machines. The invention is designed for sharpening knives for those machines in which either the bolt or the knife moves in the arc of a circle, and which consequently requires, in order to do perfect work, that the basils of the knives have a curvature corresponding to the arc in which they or the bolts move. To this end a rotary and traversing grinding wheel is employed, and the same applied to the bolt bar, or stock of the machine, so that it will have the same vibratory motion as the bolt bar when in operation for cutting the bolts, whereby the grinding wheel is presented to the knife so as to sharpen it with a proper concave basil. This device has

been patented to J. H. Goodell and A. F. Goodell, of this city.

## COOKING RANGE.

This invention relates to an arrangement in that class of ranges, for which a patent was obtained by the same inventor in the year 1849, and it consists in arranging on the rear end of the fire-chamber a hinged water-back on one side, and a hinged fire-brick on the other, to be operated by a certain combination of rods and levers in such a manner that either the water-back or the fire-brick can be brought in the proper position to form the back of the fire-place. It consists also in combining with the ovens, the fire-place and draft-chambers leading from the same to and around the ovens, a passage to admit cold air, which, by coming in contact with the heated walls of the ovens and draft-chambers, becomes heated so as to serve for warming the house, thereby rendering this range complete as well for cooking and baking as for heating. The inventor of this improvement is Fred. S. Merritt, of this city.

## CAR BRAKE.

This invention consists in arranging the car body, the track and the brake-shoes, in such relation to each other that the inertia of the car body serves to operate the brakes. This object is effected by arranging slotted arms or rockshafts, which are actuated by a strong motion imparted to the car body by its momentum or inertia independent from the truck, in such relation to the brake-shoes, that the brakes are applied as soon as the speed of the truck is checked, and taken off on suddenly increasing the speed of the truck. By these means the engineer has perfect control over the brakes of the whole train. This improvement was designed by E. F. Jewett, of Plainville, Ohio.

## LOOMS.

This invention relates to that loom known as the "narrow-ware" loom used in weaving tapes and other narrow fabrics. In these looms it is well known several webs are woven at the same time. The object of the invention is to weave articles or fabrics composed of a series of narrow webs united together at intervals by a filling running through the whole series, such as horse-nets and skeleton skirts, and to this end the nature of the invention consists in a certain construction of the raceway of such looms to provide for the introduction of a filling which will extend through the whole or any portion of the series of narrow webs. The inventor of this improvement was Aaron Williamson, (now deceased) of this city. The assignees are B. Hardy & T. France, same place.

## PIANO-FORTE.

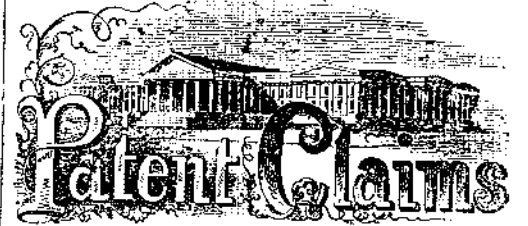
The object of this invention is to simplify the construction of piano-fortes, at the same time to give increased firmness and durability, and to allow a longer or more extended scale to be used in a case of a given size; and to this end the invention consists in so constructing, of a single casting, and applying what is termed the full iron plate, as to make it constitute the upper part of the sides, back and front of the case. James A. Gray, of Albany, N. Y., is the inventor.

## REGULATOR FOR GAS-BURNERS.

This improved regulator consists of a combination of a valve, an independent weight or its equivalent and a stop, the whole applied, arranged and operating very effectively within a burner to produce a uniform issue of gas therefrom and consequently a uniform light, under all variations of pressure in the main or in the pipe which supplies the burner. The credit of this contrivance is due to G. W. Thompson, of this city.

RECEPTION OF THE JAPANESE.—The city government of New York has appropriated \$30,000 for the reception of the Japanese embassy which is now on its way to this city. Extensive apartments are to be fitted up in the Metropolitan Hotel, which will be furnished, as much as possible, to accommodate the strange islanders in the mode to which they have been accustomed. It is announced that the *Niagara* is to be sent round to Panama to take these foreigners home when they are ready to return.

THE *Times* Paris correspondent says:—"The Emperor Napoleon has approved the model of a gunboat constructed on a system to be propelled without steam, and has ordered boats to be built on this plan. The power intended to be substituted for steam is hot air. The inventor of this power is a French engineer employed at Lyons. Great results are anticipated from the invention.



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\* \* Pamphlets giving full particulars of the mode of applying for patents, size of model required, and much other information useful to inventors, may be had gratis by addressing MUNN & CO., Publishers of the SCIENTIFIC AMERICAN, New York.

28,044.—James Aiken, of Natchez, Miss., for an Improvement in Metal Ties for Cotton Bales:

I claim the formation of the bent plate, with the holes to receive the hoop, and also the form of the rivet catches, as aforesaid, with the mode of fastening the hoop to the plate.

28,045.—E. G. Allen, of Boston, Mass., for an Improvement in Steam Gages:

I claim, first, The use of gas for indicating the pressure of steam or other fluids of a volute spring, the coils of which are of uniform width throughout, and which taper in the thickness only, in combination with the rubber disk, or diaphragm, as set forth.

Second, The thin, flexible metallic disk interposed between the rubber diaphragm and the outer surface of the coils of the volute spring, for the purpose specified.

28,046.—Wm. M. Amall, of Sperryville, Va., for an Improvement in Grain Separators and Cleaners:

I claim the combination of the distributing and equalizing cylinder, I, with the cylinders, D and E, and with the brush, F, when the same are used and arranged substantially in the manner and for the purpose described.

28,047.—Frederick Ashley, of New York City, for an Improved Egg-beater:

I claim the combination of the beating or breaking wires, B, with the screw-threaded shaft, A, and nut, D, as and for the purpose set forth.

28,048.—S. F. Atherton, of Fitchburgh, Mass., for an Improved Machine for Splitting Hoops:

I claim the wedge, b, in combination with the levers, g, operating as described, for the purpose specified.

Second, I claim the vibrating knife, a, operating in the manner specified, for the purpose described.

28,049.—N. E. Badgley, of Gadsden, Ala., for an Improvement in Cotton Seed Planters:

I claim the arrangement of the bent bifurcated hooks, c c, slot, b, of hopper bottom, shafts S and S', opener, O, teeth T', and spring coverer, C, substantially as before shown and described.

28,050.—H. F. Baker, of Centerville, Ind., for an Improvement in Mode of Laying Drain Tiles:

I claim the employment of the slides, D D, constructed as described, the rear slide being provided with a shoulder, a, when the same are used in connection with the mole, B, for the purpose of drawing the tiles, E E, into the drain, substantially as specified.

28,051.—Wm. C. Banks, of Como Depot, Miss., for an Improvement in Corn Planters:

I claim the arrangement of the seeding wheel, F, with its flanges, b, spring cleaner, d, and adjusting device, c, connected together, substantially in the manner and for the purpose described.

28,052.—Wm. C. Banks, of Como Depot, Miss., for an Improvement in Corn Planters:

I claim the arrangement of the gage plate, m, for adjusting the size of the seed cell, when combined with the seed slide, n, or its equivalent, and when constructed and operating in connection with the other parts of the machine, substantially in the manner and for the purpose described.

28,053.—Wm. F. Beccher, of Chicago, Ill., for an Improved Pipe Wrench:

I claim, first, The thumb or tongue, d, having the recess, e, with the edges, f f, as set forth, and connected and arranged to the sliding block, g, and with the spring, a, as described.

Second, The sliding block, g, having clutches to traverse the grooves and the set screw, i, and arranged in relation to the other parts of the wrench, as shown and described.

28,054.—Dana Bickford, of Westerly, R. I., for an Improved Embroidery Sewing Stand:

I claim the arrangement of the work-holder clasp, B, with the heavy block, A, and the box, C, all substantially as and for the purpose specified.

28,055.—Horace Billings, of Beadstown, Ill., for an Improved Cement:

I claim a waterproof coating composition, whose peculiarity consists in its being mainly composed of resin and pulverized steel, incorporated with each other in about the proportions and in the manner set forth.

28,056.—S. Bourne, Jr., of New York City, for an Improved Trunk Lock:

I claim the arrangement of the horizontally sliding spring bolts, A A, in combination with the vertically swinging hasp, E, and cam, F, constructed and operating substantially in the manner and for the purpose specified.

[This invention consists in the arrangement of two horizontally sliding spring bolts, in combination with a cam attached to a vertically swinging hasp, in such a manner that by turning down the hasp both bolts are forced out simultaneously, and as soon as the hasp is turned up, both bolts fly back spontaneously by the action of the springs attached to them, thus producing a cheap, simple, and effective fastening of trunks, boxes, &c.]

28,057.—S. Bourne, Jr., and J. G. Cunningham, of New York City, for an Improvement in Locks for Traveling Bags:

We claim the combination with the plate, A, casing, B, and eyes, a a', of a long nose, e', when the said nose are attached to the extremities of a longitudinal bolt, C, and so arranged to operate that the long nose first enters one of the eyes, a, and then the short nose enters the other eye, a, and for the purposes shown and described.

[The object of this invention is to render the operation of a double fastening of the frames of traveling bags or valises practicable and easy. A double fastening of such frames is desirable, because, if the bag or valise is well filled, and the frame is fastened in the middle only, its ends spread, thereby exposing the contents. If, on the other hand, a double fastening of the usual construction is employed, it is difficult to bring both bolts to catch properly, it being requisite for this purpose to compress both ends of the frame simultaneously when the key is turned. By arranging the fastening in such a manner that