

New Inventions.

Recent Foreign Inventions.

FRESH WATER FOR MARINE STEAM BOILERS.
—James Biden, of Gosport, Eng., has obtained a patent for feeding fresh water to marine steam boilers, which water he obtains by the condensation of the steam after it has been employed in the cylinders of the engines. This he carries into effect as follows: He leads a pipe from the cylinders into the water outside of the ship at one side, and after carrying it round the stem of the vessel, he causes it to enter the vessel at the other side, and open into a reservoir in the hold of the ship. A pipe opens from the reservoir to the atmosphere, to allow any uncondensed steam to pass off. As the steam from the cylinders passes through the water of the ocean outside of the ship, it becomes condensed, and the fresh water thus produced flows into the reservoir, from which it is pumped into the boilers. This invention is really an outside condenser—the ocean being made the grand cooler. The condenser pipe must be set on an incline to allow the condensed water to flow into the reservoir. An engineer in this city proposed to us some years since, a method of obtaining the same result in an iron steamer, making the lower part of the hull a huge surface condenser. The plan of Mr. Biden, we think, is preferable, as he can use any number of pipes to accomplish the perfect condensation of the steam. Each pipe should be provided with a cock, so as to be shutoff, if damaged, from communication with the cylinders.

CUTTING PILED GOODS.—G. Whyatt, of Okenshaw, Eng., has obtained a patent for causing the bed plate, with its straight edge, to be raised and depressed alternately, in order to present the pile of the cloth closer to the cutting shears at such places and at such intervals as may be desirable, to produce the effect of strips in the pile or velvet by cutting the pile shorter in places so presented to the shears. This is a very simple improvement to effect the object specified.

Improvement in Cutting Wood Moldings.

The accompanying figures represent the improved machine of H. & R. S. Schevenell, of Athens, Ga., to whom a patent was granted on the 25th of Sept. last. Fig. 1 is a longitudinal vertical section, and fig. 2 is a transverse vertical section of the machine taken at *y y*, fig. 1. Similar letters refer to like parts.

The nature of the invention consists in the combination of rotary patterns, a reciprocating gate with cutters attached, and inclined planes underneath it, all arranged to effect the cutting out of the moldings in a peculiar manner.

A represents the base of the machine, the sides of which metallic plates, *a a*, are attached to the upper parts of the plates have projections on them at right angles with the plates, in order to form guides, *b b*, which fit in grooves, *c c*, in a carriage, B. The plates, *a a*, and guides *b b*, may be cast in one piece. Underneath the carriage, B, there is attached a longitudinal rack, C, in which a pinion, D, on a transverse shaft, E, gears, said shaft having its bearings in the plates, *a a*. To each plate, *a*, there is attached an upright, *d*, between the two uprights, *d d*, a gate or slide, F, is fitted, the uprights having guides, *e*, on their inner edges, which fit in grooves in the ends of the gate or slide. The upper ends of the uprights are connected by a cross piece, *f*. To the upper end of the gate or slide, F, there is attached a rod, G, which passes through the center of the cross piece, *f*. The upper end of this rod has a screw thread cut upon it, on which a nut, H, is fitted, the nut being above the cross piece. Around the rod, G, and between the under surface of the cross piece and the gate, F, there is placed a spiral spring, I. To the front side of the gate there is attached a plate, J, the ends of which project a short distance beyond the uprights, *d d*. To this plate the cutters, K K, are attached; two are represented, but more or less may be used. The cutting edges of the cutters are made of a form corresponding to that intended to be given to the moldings, fig. 2. To each end of the shaft, E, there is hung a pattern, L. These patterns are constructed by cutting indentations of proper

length into the peripheries of circular plates, so as to form a series of curved projections on the peripheries of the plates. The form of the peripheries of the plates may be varied, however, so as to form different styles of moldings.

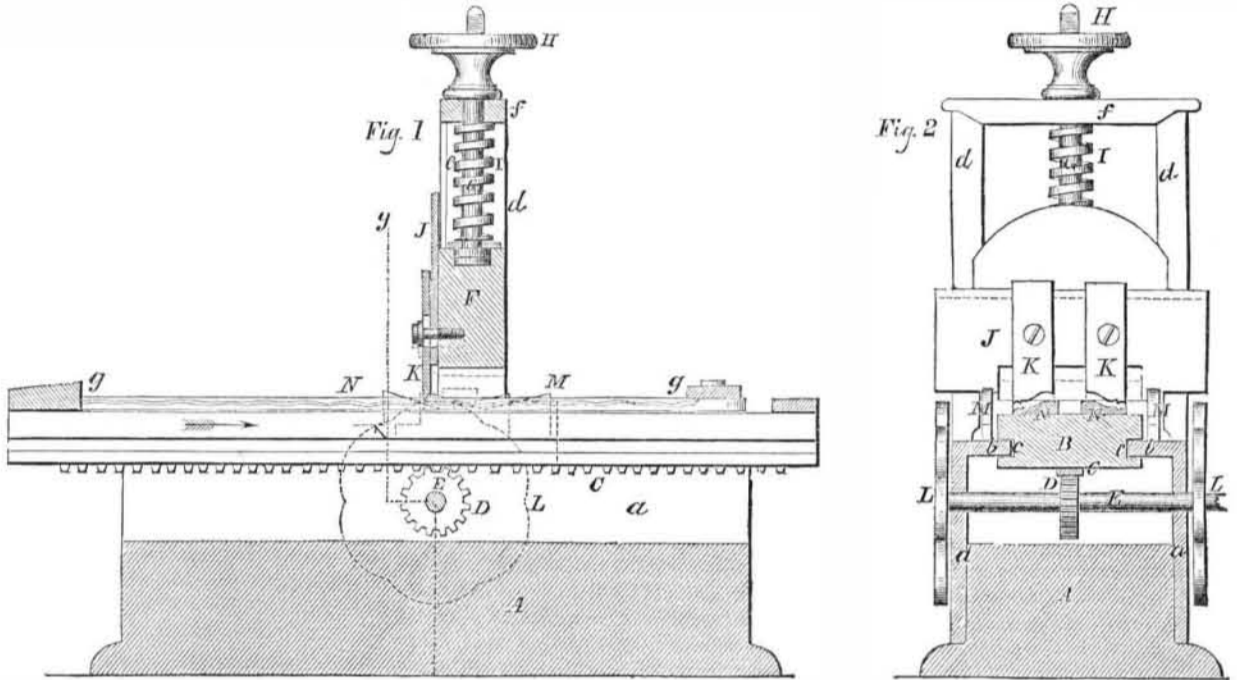
On the upper surfaces of the guides, *b b*, there are placed inclined planes or wedges, M M. These are directly underneath the plate, J, at

each side of the carriage, B. Each end of the carriage, B, has a projection, *g*.

OPERATION.—The strips designated by N, to be operated upon are clamped upon the carriage, B, directly underneath the cutters, K K; the spring, I, presses the edges of the cutters, K, upon the strips, N, and the ends of the plate, J, upon the peripheries of the patterns, L L. Motion being given the shaft, E, the carriage is fed along by the rack, C, and pinion, D, in the direction indicated by the arrow, and the patterns, L L, as they rotate in connection with the spring, I, give the gate or slide an up-and-down motion, and the strips, N, will be cut in a waved manner thereby, as shown in fig. 1. When the ends of the strips have passed the

cutters, K K, the projection, *g*, on the carriage back of the gate or slide, F, will strike the inclined wedges or planes, M M, and the gate or slide, F, will be forced upward beyond the reach of the patterns, L L. The finished strips are then removed and others secured to the carriage which is moved back to its original position by turning the shaft, E, in the reverse direction, and the stop, *g*, on the opposite end of the carriage will strike the inclined planes or wedges and throw them out from underneath the plate, J, thereby allowing the spring, I, to force the cutters, K K, down upon the strips, and the ends of the plate, J, upon the patterns, L L. The operation as described is then repeated. See advertisement on another page. More information may be obtained by letter addressed to the patentee.

PATENT MACHINE FOR CUTTING ORNAMENTAL WOOD MOLDINGS.

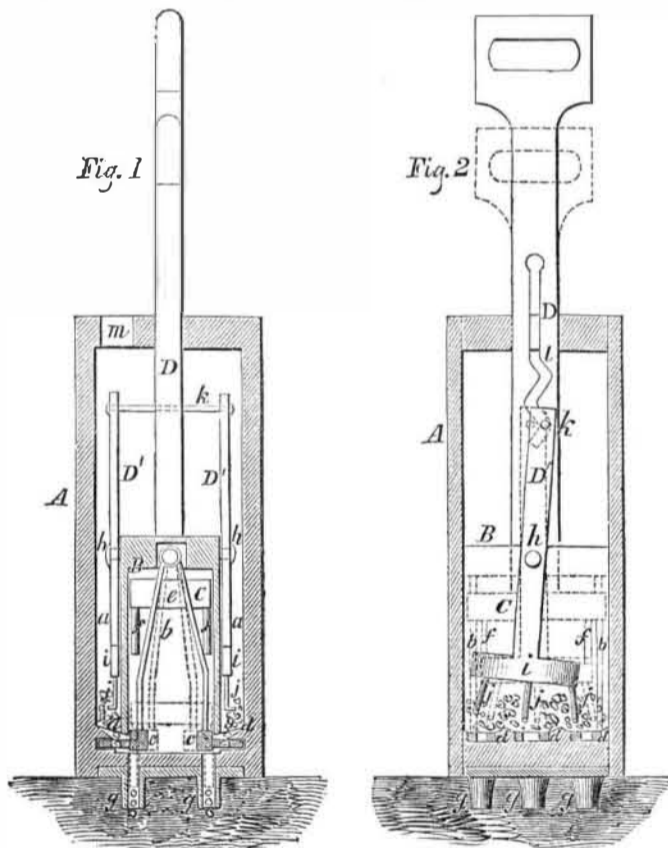


cutters, K K, the projection, *g*, on the carriage back of the gate or slide, F, will strike the inclined wedges or planes, M M, and the gate or slide, F, will be forced upward beyond the reach of the patterns, L L. The finished strips are then removed and others secured to the

carriage which is moved back to its original position by turning the shaft, E, in the reverse direction, and the stop, *g*, on the opposite end of the carriage will strike the inclined planes or wedges and throw them out from underneath the plate, J, thereby allowing the spring,

I, to force the cutters, K K, down upon the strips, and the ends of the plate, J, upon the patterns, L L. The operation as described is then repeated. See advertisement on another page. More information may be obtained by letter addressed to the patentee.

STODDARD'S PATENT HAND PLANTER.



The accompanying engravings represent the improvements in hand Corn Planters, for which a patent was granted to Oren Stoddard, of Busti, Chataque Co., N. Y., on the 26th of June last.

The two figures are vertical sections (taken at right angles to one another) of the implement, and the same letters refer to like parts on both.

A represents a rectangular case of a suitable size, having within it a smaller case, B. Within the smaller case, B, there is fitted a follower, C, to which a handle or rod, D, is attached, and passing up through the top or cover of the case, A. The smaller case B, in one direction is equal to the breadth of the case, A, as shown in fig. 2; but it is narrower in the other direction, as shown in fig. 1, so as to leave a space, *a*, at each side between them. To the upper

part of the smaller case, B, there are attached two springs, *b b*, at opposite sides. The lower ends of these springs are attached to bars, *c c*, to which bars perforated plates or dropping slides are attached, and working through apertures in the lower sides of the case, B, and over the bottoms of the spaces, *a*. The ends of the follower, C, has recesses or notches, *e*, made in it, in which the springs, *b b*, fit. To the under surface of the follower, C, there are attached a series of rods, *f*; any proper number may be used, (probably six would be sufficient—three at each side of the follower,) and through the bottom of the case, A, there are made a corresponding number of holes, over which short tubes, *g*, are secured. To each side of the smaller case, B, there is attached by a pivot, *h*, a lever, D'. The lower ends of each of these levers has a cross bar, *i*, attached to it, and

vertical rods, *j*, are attached to the lower surfaces of the cross bars. The upper ends of the two levers, D' D', are connected by a cross rod, *k*, which passes through a slot, *l*, in the handle or rod, D, of the follower, C. The upper part of the slot, *l*, is straight, and the lower part of zig-zag form, as shown in fig. 2. The top or cover of the case, A, has an aperture, *m*, made through it, as shown in fig. 1.

The implement is operated as follows: The case, A, is filled with corn, and the rod or handle, D, is drawn upward, as shown in the full lines. The tubes, *g*, are then forced into the ground, and the handle or rod, D, pressed downward. As the follower, C, descends, the springs, *b b*, are contracted, and the plates or distributing slides, *d*, are drawn within the smaller case, B. The apertures in the slides are then brought directly underneath the rods, *f*, attached to the follower, and the zig-zag portion of the slot, *l*, operates the levers, D' D', while the rods, *j*, attached to the cross bars, *i*, of the levers are vibrated, and cause the corn to enter the apertures in the plates or slides, *d*, previously to their being drawn within the case, B. As the follower, C, descends, the rods, *f*, force the corn from the apertures in the plates, *d*, down within the tubes, *g*, and leaves each kernel the requisite distance in the ground, (represented by dotted lines.) As the follower is drawn upward, the springs, *b b*, are allowed to expand, and the plates or slides, *d*, return to their original position.

The nature of this invention consists in the arrangement of the follower, C, the slide plates, *d*, and the levers, D' D', provided with the cross arms, *i*, and rods, *j*, operating as has been described. One of these implements with six tubes places six grains in a hill, and these at equal distances apart and at an equal depth throughout the field. It is used by a person planting the same as if he were walking through the field with a walking cane, it making the holes when set down, and covering the seed when raised. The first premium for hand planters was awarded to it at the late New York State Fair, held at Elmira.

More information respecting it may be obtained by addressing Mr. Stoddard, at Busti.

Some correspondent at Cannelton has sent us a communication containing \$32, without signing his name to it. Will he oblige us with his address immediately?