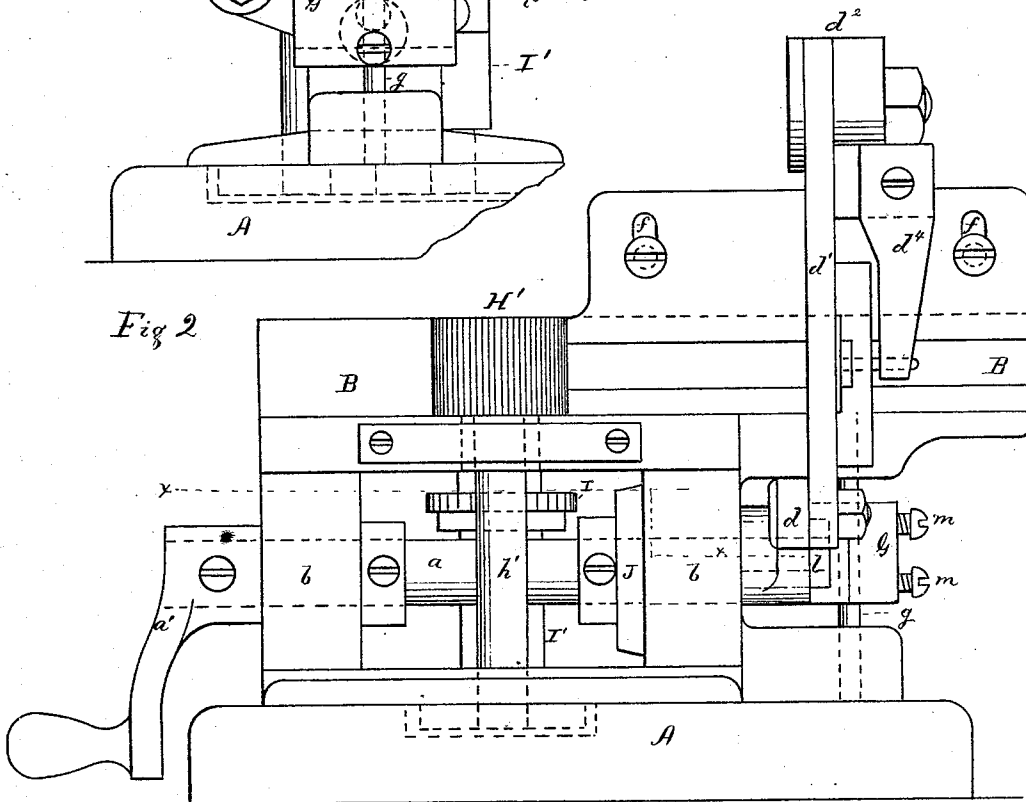
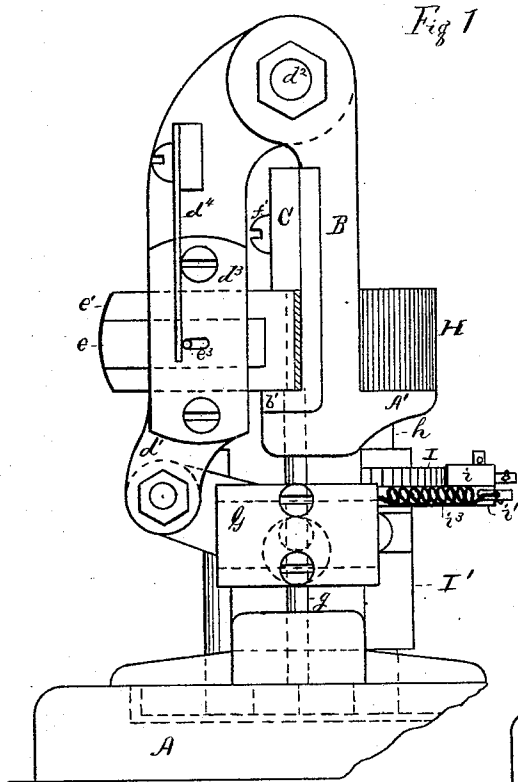


B. F. STURTEVANT & F. M. SHAW.
Machine for Forming Points on Pegs.

No. 159,287.

Patented Feb. 2, 1875.



Witnesses
Alfred C. Mudge
W. P. Pratt

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Fig 4

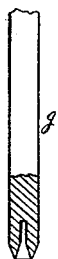
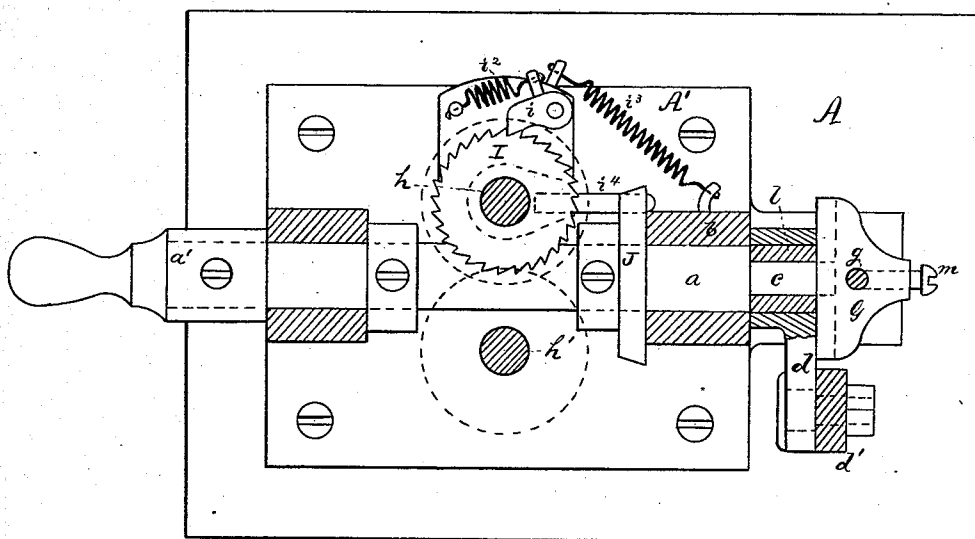


Fig 5



Fig 3



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UNITED STATES PATENT OFFICE.

BENJAMIN F. STURTEVANT, OF BOSTON, AND FRANCIS M. SHAW, OF BROCKTON, ASSIGNORS TO BENJAMIN F. STURTEVANT, OF BOSTON, MASS.

IMPROVEMENT IN MACHINES FOR FORMING POINTS ON PEGS.

Specification forming part of Letters Patent No. **159,287**, dated February 2, 1875; application filed December 18, 1874.

To all whom it may concern:

Be it known that we, BENJAMIN F. STURTEVANT, of Boston, in the county of Suffolk, and FRANCIS M. SHAW, of Brockton, in the county of Plymouth, all in the State of Massachusetts, have invented Improvements in Machines for Forming Points on Pegs, of which the following is a specification:

Our invention relates to improvements in machines for forming points on pegs; and consists in a reciprocating plunger having at top a pyramidal depression, which is thrust against one end of the peg resting in a channel or way, and which fashions or shapes the end of the peg into a pyramidal point by compression of the substance of such end; also, in the combination, with the channel or way in which the peg strip or blank moves, of a reciprocating holder controlled by a spring to hold the peg while being pointed by the action of the plunger; and also in the combination, with the plunger, of the spring and reciprocating or yielding holder for the peg, and a cutter for separating the peg from the strip.

In the drawing forming part of this specification, Figure 1 is an end view of our peg-pointer. Fig. 2 is a side view. Fig. 3 is a section taken through line *xx*, Fig. 2. Fig. 4 is a view of the pointing-plunger, and Fig. 5 a view of a peg.

A designates the base or frame of the machine, having bearings *b b* to support the driving-shaft *a*, moved by the handle *a'*, or by suitable pulleys. *B* is a vertical plate, forming part of the channel or way in which the peg ribbon or strip is placed and moved. *C* is an adjustable plate, secured to *B* by means of screws *f'*, passing through elongated slots *f* in plate *C*, so as to allow such plate to be adjusted so as to bear on or control the upper edge of the peg ribbon or strip while the lower or opposite side of the strip rests on and moves over the ledge *b'*, projecting from plate *B*, feeding-rollers *H H'* acting to move such ribbon or strip along between *C B b'*. There are two feeding-rollers, *H H'*, between which the peg ribbon or strip is grasped. The roller *H* is mounted at the top of and secured to a shaft, *h*, which is passed down through the frame *A'*;

then through a ratchet-wheel, *I*, which is secured to *h*; then through a sleeve, *I'*, resting on *A*, and then through *A*, where it is provided with a toothed gear that engages a second toothed gear at the lower end of shaft *h'*, sustained in frame *A A'*, and provided at top with the feeding-wheel *H'*. The sleeve *I* is loose on the shaft *h*, and is provided with an arm, *i*, and, if desired, with a friction-roller, and with a pawl-plate, *i'*, provided with a pawl, *i*, controlled by a spring, *i''*, to keep it engaged with the teeth of the ratchet *I*. The arm *i* is held in contact with the cam *J* on the shaft *a* by means of a spring, *i'''*, preferably connected with the pawl-plate *i'*, and at each rotation of the cam *J* the sleeve, pawl-plate, and pawl are moved, moving the ratchet and shafts *h h'* and feeding-wheels *H H'* sufficiently far to feed the peg-ribbon forward to the cutter, the holder, and the point-former. The extent of motion of the feeding mechanism may be varied by changing the ratchet-wheel. The end of the shaft *a*, beyond the front side of the bearing *b*, is provided with an eccentric pin, *c*, that enters the socket or sleeve of a slide-plate, *l*. In Fig. 3 this sleeve of the slide-plate is shown in section, and its head or plate is shown in dotted lines. This head enters a channel cut to receive it in the face of a block, *G*, attached, by means of screws *m m*, to the plunger *g*. About this sleeve of the slide-plate *l* is placed the hub of a link, *d*, pin-jointed to the lower end of a radius-bar, *d'*, pivoted at *d''*, and carrying the cutter *e'* and the peg-holder *e*. The cutter *e'* is a beveled blade, held between the radius-bar *d'* and a cap-plate, *d'''*, grooves being formed in the cap-plate to allow the blade to be adjusted so as to project more or less. At the side of the cutter, and near the cap-plate *d'''*, is the peg-holder *e*, which is borne against the peg cut from the strip by the cutter *e'* by means of the spring *d''''*, attached to a lug on the radius-bar *d'*, and bearing against a pin, *e''*, projecting from the holder *e*, and through a slot in the cap-plate.

Rotation of the shaft *a*, through pin *c* and link *d*, moves the radius-bar, carrying the cutter *e'* and holder *e* toward the side of the ribbon or strip held between *B C*, and cuts from

such ribbon or strip a peg, and the holder holds such peg, the spring *d*⁴ allowing the holder to adapt itself to the thickness of the peg, and it also allows the cutter to be moved back slightly, and yet the holder holds the peg. This holder holds the peg while the plunger *g* comes up and puts a point on the peg. The top of this plunger is provided with a pyramidal depression, *o*, to receive the end of the peg and compress its substance so as to point or bevel it on its four sides, as shown in Fig. 5, which represents a peg pointed by this plunger.

This machine may be used independently to point pegs, or as an attachment to a pegging-machine. The shaft *a* may be geared in any proper manner with the machinery or shaft of the pegging-machine, and the parts herein shown for guiding the peg-ribbon may present the ribbon to the regular trough and to the action of the driver.

We have herein described a mechanism for feeding forward the peg-wood, mechanism for cutting it into pegs, and mechanism for pointing pegs so severed from the strip by compression; but these devices we do not, broadly, claim, either separately or in combination, as their combination forms the subject-matter of another application filed by F. M. Shaw, January 11, 1875. Nor do we herein claim, broadly, a holder for holding a severed peg while being pointed, or the combination, broadly, of a hold-

er with either a feeding mechanism or cutting mechanism or pointing mechanism, as the combination of these last-mentioned devices with a holder forms the subject-matter of another application made by F. M. Shaw, December 29, 1874. We herein only claim the yielding holder when combined with other devices, as herein described.

Having described our invention, we claim—

1. The reciprocating plunger having the pyramidal point-forming depression, substantially as set forth.

2. A yielding holder, operating substantially as described, to hold the peg, in combination with a plunger to point the peg, as set forth.

3. The combination, with the yielding holder and cutter, of the plunger, substantially as and for the purpose set forth.

4. The combination, with the yielding holder and cutter and the plunger, of the intermittent feed-wheels, as described.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

BENJ. F. STURTEVANT.
FRANCIS M. SHAW.

Witnesses:

G. W. GREGORY,
GEO. W. GREGORY.