J. H. Brown,

Pegging Machine,

No. 50,298, Patented Oct. 3, 1865.

Fig. 3.

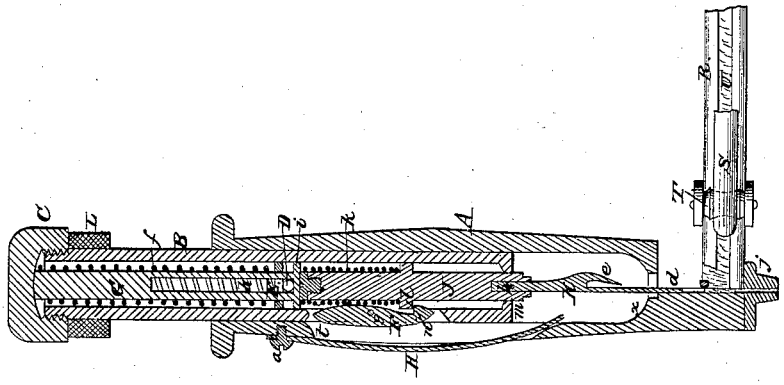


Fig. 2.

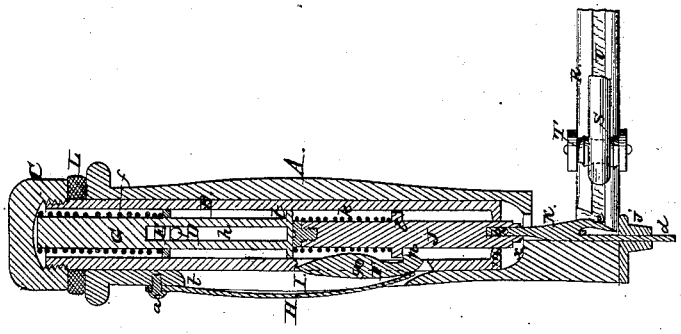
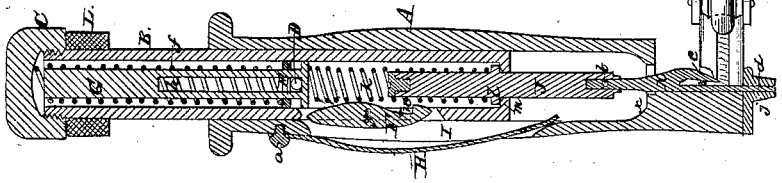


Fig. 1.



Witnesses:
N. Ames
D. H. Briest.

Inventor:
J. H. Brown.

UNITED STATES PATENT OFFICE.

J. H. BROWN, OF BOSTON, ASSIGNOR TO ALFRED B. ELY, OF NEWTON, MASSACHUSETTS.

IMPROVED HAND-PEGGER.

Specification forming part of Letters Patent No. **50,298**, dated October 3, 1865.

To all whom it may concern:

Be it known that I, J. HAMILTON BROWN, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improved Hand-Pegger; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, forming a part of this specification.

Figures 1, 2, and 3 are longitudinal central sections in the line of the peg-wood guide, the latter being in elevation, Fig. 1 representing the parts in the position occupied by them before the blow is given by the hammer to punch the hole for the peg, Fig. 2 representing the parts in the relative position assumed at the end of the blow, or when the awl and driver *d* is buried to its full extent in the leather, and Fig. 3 representing the parts in the relative position assumed after the blow has been struck and the plunger has been thrown up by the retracting-spring *f*, the awl and driver *d* being also raised by a catch, F, into the position to be forced down to drive the peg into the hole just made for its reception.

Like parts are indicated by the same letters in all the drawings, which are full-sized.

The nature of my improvement consists in so constructing a pegging or a hand-pegging machine that a single blow of the hammer will punch the hole and drive the peg, the latter operation being performed by means of the recoil of a spring which has been compressed by the blow of the hammer, the said spring being held compressed by means of a catch until the plunger has nearly reached the limit of its upward motion, having raised the spring and the awl and driver with it.

To enable others skilled in the art to make and use my improvement, I will now proceed to describe in detail those parts not found in other hand-pegging machines in general use and the operation of the same.

A is the hollow case or handle, (the general shape of which is clearly shown in the drawings,) constructed of cast-iron or other suitable material.

B is the plunger, consisting of a hollow cylinder, of metal, fitted so as to slide freely in the case A, its upper end being provided with a metallic cap, C, confined by means of a screw, while its lower opening is contracted at *m*, so as to form a bearing for the shaft J of the awl and driver *d*. Inside of the plunger B is a loosely-fitting shaft, G, the lower extremity of which is provided with a head or flange, *i*, to form an abutment for the spring *k*.

D is a pin passing through the case A and longitudinal slots *h* in the plunger B and the shaft G.

E is a ring or washer encircling the shaft G and resting on the pin D, which is fast in the case A.

f is a spiral spring encircling the shaft G, its lower end resting on the ring E and its upper end on the bottom of the cap C. The design of this spring *f* is to throw up the plunger B and its appendages from the position represented in Fig. 2 to that represented in Figs. 1 and 3.

L is a rubber spring on the plunger B below the cap C, the design of said spring being to assist in withdrawing the awl and driver *d* from the leather into which it has been driven, as shown in Fig. 2.

J is a round metallic shaft inclosed within the plunger B, as represented in the drawings, its center being provided with a fixed ring, *l*, of such a diameter as to just slide with freedom in the barrel of the plunger, while its lower half passes through the contracted opening *m* in the bottom of the same.

k is a spiral spring encircling the shaft J, its lower end resting on the ring *l* and its upper end against the bottom of the shaft G, the purpose of this spring being to throw the shaft J, with the awl and driver *d*, from the position represented in Fig. 3 to that represented in Fig. 1, to drive the peg.

K is the shank of the awl and driver *d* and the knife or peg-splitter *e*, the said shank entering a hole in the end of the shaft J, to which it is confined by means of the pin *b*, as clearly shown in the drawings. The end of the awl or driver *d* is square, so as to answer the double purpose of a punch for making the peg-hole and a driver to force the peg into the hole.

e is the knife or splitter, constructed and arranged, as in several other pegging-machines in general use, to separate the pegs from the peg-wood U, which is placed in the grooved

guide R and fed along toward and under the knife *e* and driver *d* by means of a rubber spring, S, passing over the pulley T, as in other hand-pegging machines in use.

F is the catch by means of which the shaft J and its appendages are raised from the position shown in Fig. 2 to that of Fig. 3. This catch F is placed in a longitudinal slot in the plunger B and confined by a pivot, *g*, on which it is free to vibrate. The general shape of this catch F is clearly shown in the drawings, the inner side of the lower end being provided with a notch, *n*, which hooks onto the ring *l*.

I is a longitudinal slot in the case A for the reception of the catch F and the spring H. The upper end of this spring is attached to the case A by means of the screw *a*, its lower end extending downward so as to press upon the end of the catch F when the latter is in the position represented in Fig. 2 and force the notch *n* under the ring *l*, so as to be in readiness to raise the shaft J as the plunger B is thrown up by the spring *f* into the position shown in Fig. 3.

The operation of the machine is as follows: The various parts being in the position represented in Fig. 1, the end *j* of the case A is placed by the operator over the spot where it is required to insert a peg. He then strikes with a hammer upon the top of the cap C, thereby forcing the parts into the position shown in Fig. 2, so that the awl *d* shall punch the peg-hole and the knife *e* shall split a peg (to be next driven) from the peg-wood U. This action of the hammer also compresses the springs *f* and L, forces the bottom of the shaft G onto the top of the shaft J, thereby driving the latter downward, so that its lower end shall strike against the bottom *x* of the case-barrel, compressing the spring *k* and causing the notch *n* to catch onto the ring *l*. The hammer is now removed, the springs L and *f* withdraw the awl and driver from the hole in the leather, and the spring *f* throws the follower up into the position represented in Fig. 3, the catch F holding the shaft J with its upper end in contact with the lower end of the shaft G until the upper end of the catch F strikes the upper beveled end, *t*, of the slot I, which will obviously throw the lower end of the catch F outward, so as to withdraw the notch *n* from under the ring *l*, when the recoil of the spring *k* will force the shaft J and its appendages downward into the position shown in Fig. 1, the end of the driver *d* forcing the peg beneath it into the hole previously made by the driver, as described above. Thus a single blow of a hammer is made to punch the hole and drive the peg, whereas in all other hand-pegging machines hitherto in use two blows of the hammer have been required to perform the same operation; hence the saving of time and labor effected by my invention is obvious, enabling the operator to perform the same amount of labor in half the time required by other machines for a similar purpose in general use.

Having thus described the construction and operation of my invention, what I claim as new, and desire to secure by Letters Patent, is—

Driving the peg by the reaction of a spring compressed by the same blow that makes the peg-hole.

J. H. BROWN.

Witnesses:
N. AMES,
D. H. PRIEST.