

G. H. DAVIS.

Peg-Boxes for Pegging-Machines.

No. 156,918.

Patented Nov. 17, 1874.

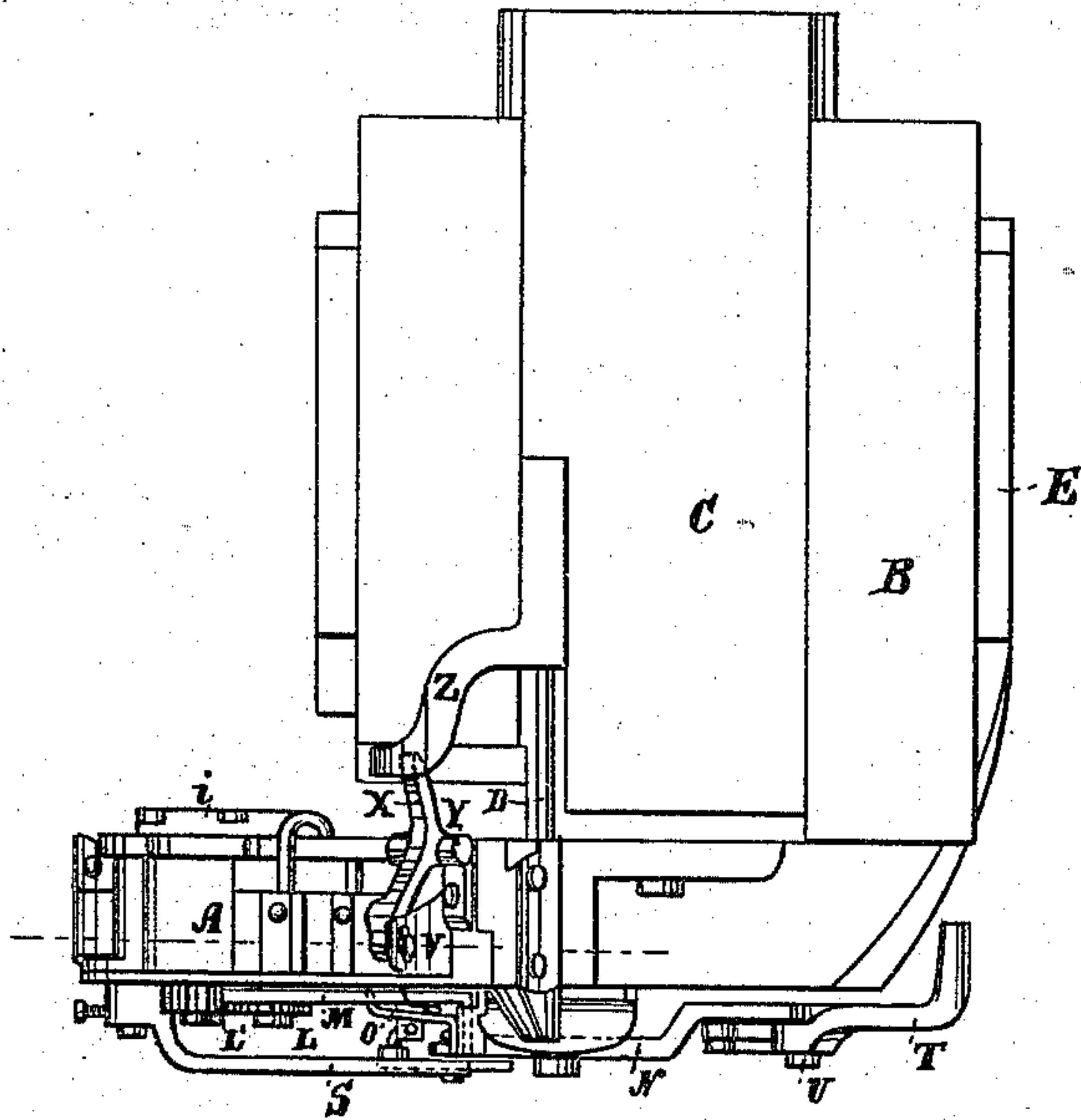


Fig. 1.

Fig. 4.

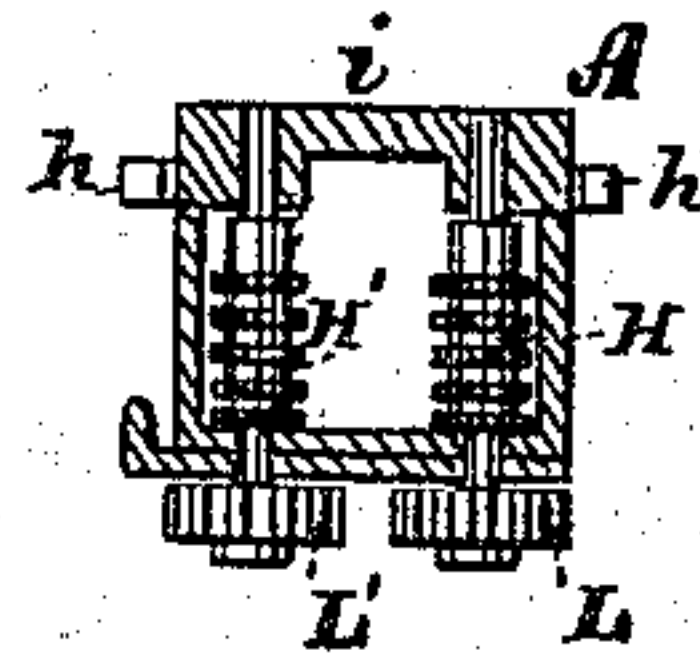


Fig. 5.

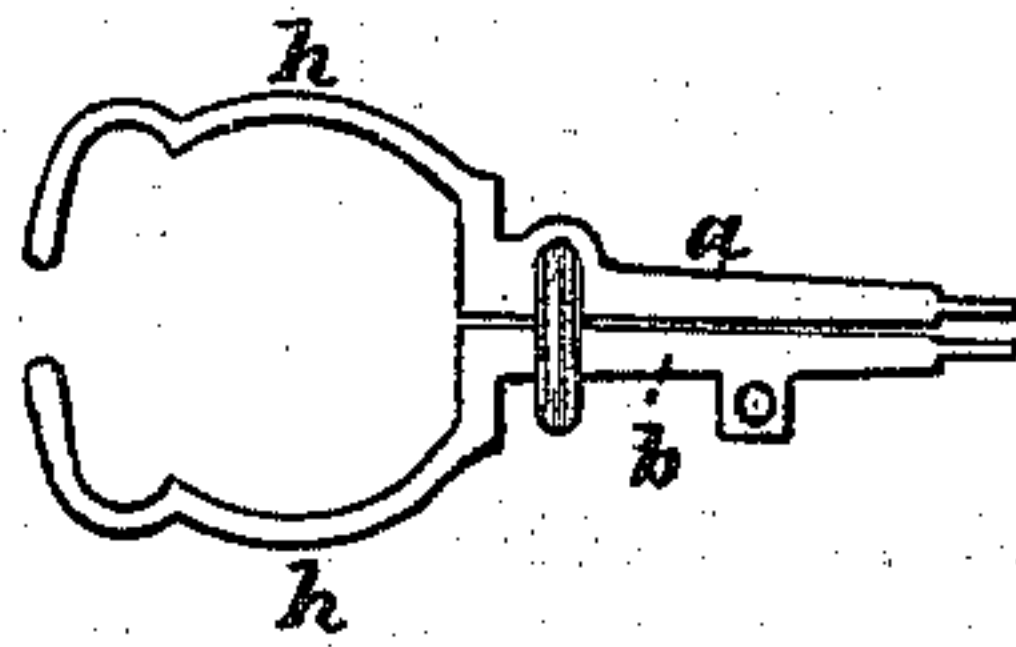


Fig. 2.

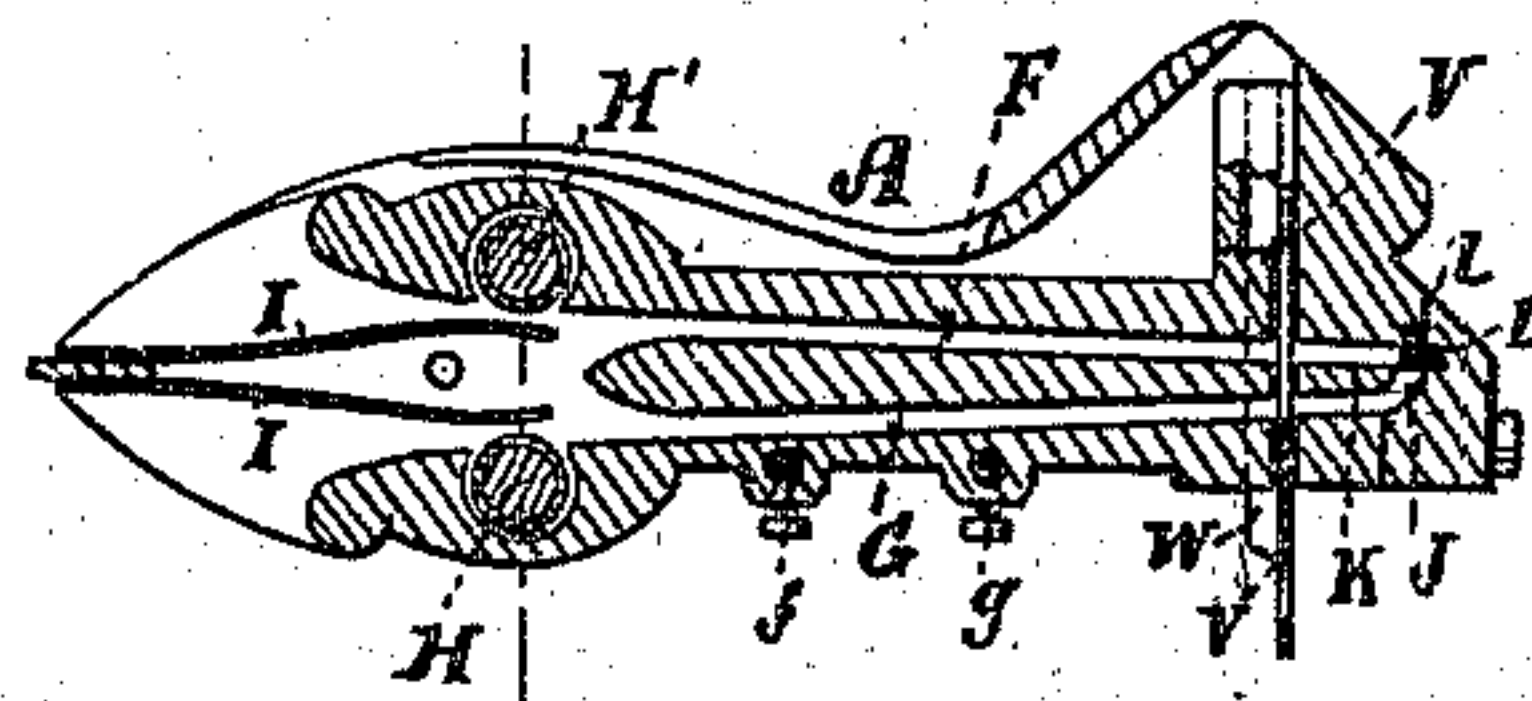
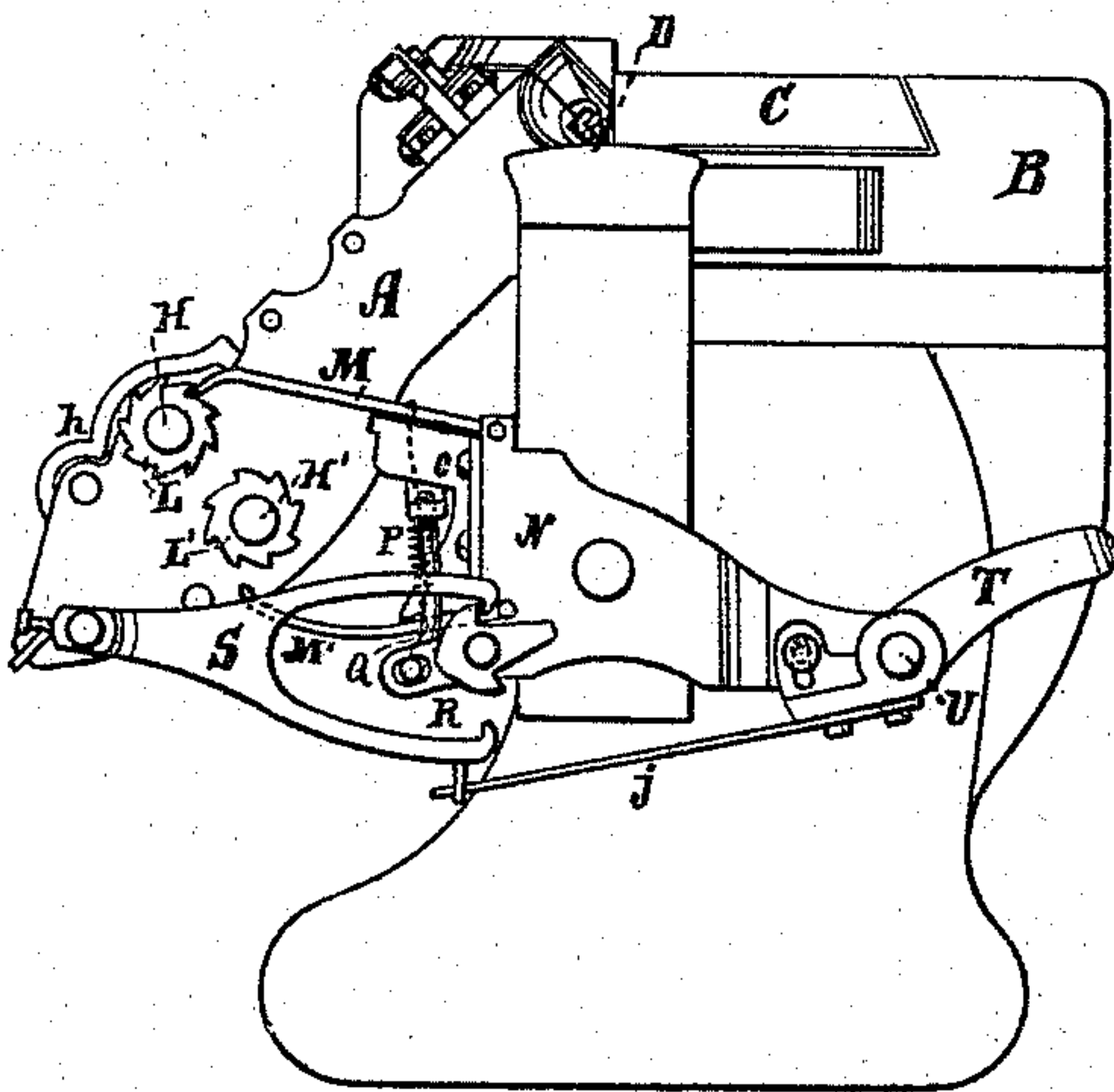


Fig. 3.

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GEORGE HENRY DAVIS, OF OXFORD, MASSACHUSETTS.

IMPROVEMENT IN PEG-BOXES FOR PEGGING-MACHINES.

Specification forming part of Letters Patent No. **156,918**, dated November 17, 1874; application filed April 18, 1874.

To all whom it may concern:

Be it known that I, GEORGE H. DAVIS, of Oxford, in the county of Worcester and State of Massachusetts, have invented a new and Improved Peg-Box for Pegging-Machines, of which the following is a specification:

My invention consists of a peg-box with two feed-channels for stock, to make pegs of two sizes, and feed mechanism and shifting apparatus, adapted for use in connection with the pegging-machine patented by C. Varney, and so arranged that the operator can shift the feed mechanism at will without interrupting the operation of the machine, to use pegs of different sizes in different parts of the work. My invention also consists of certain improvements in connection with the cutter, and an improved form of the peg-driver, as hereinafter described.

Figure 1 is a side elevation of a peg-box, arranged according to my invention. Fig. 2 is a plan of the same inverted. Fig. 3 is a horizontal section of the peg-box, taken on the line *xx* of Fig. 1. Fig. 4 is a cross-section, taken on the line *yy* of Fig. 3, and Fig. 5 is a plan of the covers to the feed-channels.

Similar letters of reference indicate corresponding parts.

A represents the peg-box, which is attached to the head B, in which the stock C of the peg-driver D works. This block has a lateral motion on the support E, carrying the driver and the peg-box forward and backward to drive two rows of pegs. I propose to have two channels, F G, in the box, for peg-stock of different sizes, with a feed-roller, H H', for each; also, a double spring, I, to act with each feed-roll, to press the peg-wood against it to cause it to bind the wood, to insure the feeding of it regularly and uniformly. The channel F runs straight to the driver-channel, while the other runs a little to one side and turns into it at J, around the end of the partition K. The feed-rollers extend through the bottom of the peg-box, and have a ratchet-wheel, L L', to be turned by a pawl, M M', against which the ratchets are moved by the shifting-block B, the pawls being pivoted on a stationary support, N. The pawls are held against the ends

of a shifting-plate, O, by a spring, P, and the plate is connected by a rod, Q, to a shifting-dog, R, which is shifted by the crotched pawl S, to change the pawls in and out of gear with the ratchets for working one or the other, as required for changing the pegs. The crotched pawl is shifted by the operator with the hand-lever T, which swings right and left on the pivot U, so as to cause one or the other of the hooks of the pawl to engage the shifting-dog by one of its hooks when the box moves forward, and throw the dog around when it goes back. The plate O extends from one to the other of the feed-pawls, and is of such length that it prevents both pawls from engaging the ratchet-wheels at the same time; but when it throws one off its wheel, it lets the other onto the other wheel. V is the cutter for cutting peg-wood into pegs. It is arranged in a slot crossing the feed-channels near the driver, so that it cuts through the peg-wood sidewise, and thus cuts the pegs straight, whether the grain is straight or not; whereas the splitting-cutter, which works in the same direction that the driver does, makes crooked pegs when the grain of the stock is crooked, and they break and clog the machine, and make defective work. The cutter has a stiffening-flange, W, on the lower edge, for which a groove is provided in the box at the lower end of the cutter-channel, which allows it to be sufficiently broad and thin to do the work properly, and at the same time gives it the requisite strength and firmness. The cutter is connected to the double-inclined rock-lever X, fixed on the point Y, and worked by the arm Z, attached to the driver-stock C. When this arm rises it acts on the upper incline of the rock-lever and draws the cutter forward, and when it goes down it acts on the other incline, and forces it back through the wood. The cover of the feed-box is made in two parts, *a b*, which are adjustable up and down, to accommodate them to the height of the peg-wood by supporting-rods *d e*, and set-screws *f g*. At the front of the box they bend at *h* around the stationary top plate in which the feed-rollers are supported to guide the peg-wood.

In practice, the peg-channels will have a pressure-spring where the pegs come to the driver, to hold them steady and prevent them from falling over at the top into the driver-channel before being pushed into it.

A spring, *j*, is employed to connect the hand-lever *T* to the crotched pawl, so that the hooks of the pawl may spring over the hooks of the dog *R* after the lever has been shifted.

I propose to extend the driver *D* in two directions, *l*, opposite the feed-channels, beyond the size needed for the pegs, making it in the form of an angle-bar, for increasing the strength and wearing-surface.

It will be seen that pegs can be instantly changed whenever it may be wanted to do so, without interrupting the work of the machine.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination, in a pegging-machine, of a feed-box having two feed-channels with feed mechanism, as shown and described, arranged to shift instantaneously, to supply the pegs from either of the channels without interrupting the work, substantially as specified.

2. A peg-box having two independent feed-channels connecting with the driver-channel in different directions, substantially as specified.

3. The duplicate spring *I*, in combination with two feed-rollers and independent feed-channels, substantially as specified.

4. The cutter, provided with flange *W* on the lower edge, for stiffening and guiding it in the peg-box, as shown and described.

5. The double-inclined rock-lever *X*, and the arm *Z*, on the driver-stock, in combination with the cutter for operating it, substantially as specified.

6. The combination of lever *T* and spring *j* with the crotched pawl, as and for the purpose specified.

7. The feed-pawls *M M'*, shifting-plate *O*, spring *P*, and the shifting-dog *R*, combined with the two independent feed-rollers, substantially as specified.

8. The combination of the crotched pawl *S* and lever *T*, with the shifting-dog *R*, substantially as specified.

9. The driver, constructed in angle-form, substantially as specified.

GEORGE H. DAVIS.

Witnesses:

ALFRED W. LONG,
M. W. ROBINSON.