## J. H. OLIVER.

MACHINES FOR MAKING DOVETAIL SHOE PEGS.

No. 180,053. Patented July 18, 1876.

Fig. 1.

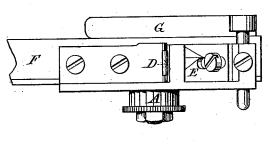


Fig. 2.

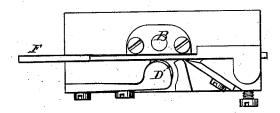


Fig. 3.

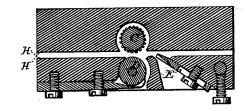
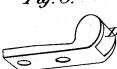


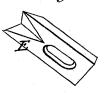
Fig. 5.



Witnesses:

C.Clarence Poole Chass. Goole

Fig. 4.



Inventor:

Ja H. Oliver

## UNITED STATES PATENT OFFICE.

JAMES H. OLIVER, OF BALTIMORE, MARYLAND.

## IMPROVEMENT IN MACHINES FOR MAKING DOVETAILED SHOE-PEGS.

Specification forming part of Letters Patent No. **180,053**, dated July 18, 1876; application filed December 1, 1875.

To all whom it may concern:

Be it known that I, JAMES H. OLIVER, of Baltimore, in the State of Maryland, have invented a new and useful Improvement in Devices for Forming Dovetailed Shoe-Pegs, of which the following is a specification:

which the following is a specification:

The object of my invention is to provide a mechanism for cutting a notch or angular groove in peg-wood strips preparatory to the division of the strip into pegs, which, when thus divided, constitute the dovetail shoe-peg, which mechanism is fully set forth in the accompanying drawings, representing all the parts of the ordinary peg-box used in the Varney shoe-pegging machine, with the variations and exceptions hereinafter noted and explained.

Figure 1 is a side view, Fig. 2 a top view, and Fig. 3 a section, of the machine; Fig. 4, a detached view of the angular edged knife, and Fig. 5 a similar view of the side spring or peg-strip guard with attached roller.

A is the ratchet-wheel, acted upon by a pawl, through which motion is communicated to the shaft B, and thence to its attached feed-wheel C. D is the side spring or pegstrip guard, with attached roller, designed to keep the peg-strip within the action of the feed-wheel C. E is the knife, with a re-entering angle in its edge, having the form of an expanded letter V, with one side elongated, and designed to cut the angular groove in the peg-strip as it passes along the peg-strip channel and between the parallel peg-strip guides. F is the peg-strip; G, the gage, to be adjusted to the width of the strip. H H are parallel upright peg-strip guides, which form the peg-strip channel, and hold the peg-strip steady and erect while passing between them. To one of these guides the angular knife E and side spring or guard D are attached, while the other supports the feed-wheel C and its connections.

The side spring or peg-strip guard D differs from those used in the Varney and other machines in having the roller attached, and it is so adjusted that the roller, being opposite, presses the peg-strip against the feed-wheel C, the teeth of which wheel engage and carry the peg-strip forward into contact with the

angular-edged knife E, by the action of which knife the notch or groove is cut or formed in one side of the peg-strip.

The difference in the side spring D, herein described, from the side springs in common use consists in the roller attachment, whereby the necessary pressure to keep the peg-strip in position is secured, and the friction common to the old side springs is obviated by the revolutions of the roller.

The grooving-knife, being attached by means of a screw to one of the guides H, is so adjusted that its cutting-edge projects into the peg-channel formed by the peg-strip guides H H at a cutting angle, so as to engage and groove one side of the peg-strip as it passes. This knife does not form a part of the Varney box referred to.

It is evident that when motion is imparted to the feed-wheel C, and the peg-strip F is placed between it and the side spring or guard D, the teeth of the feed-wheel engage it and carry it forward in contact with the angular grooving-knife, after which it passes under the severing-knife, and the divided dovetail peg thus formed is ready to be driven into the shoe by the driving hammer of the ordinary shoe-pegging machine. The form of the groove thus cut in the peg-strip is such as to impart to one side of the peg a dovetail figure, diverging from the center of the notch toward each end of the peg, which is more fully described in Letters Patent granted to me for dovetailed shoe-pegs, No. 148,575, dated August 29, 1873.

This device is to be used as an attachment to shoe-pegging machines as they are ordinarily operated in shoe-factories.

Having thus described my invention, I

The combination of ratchet wheel A, shaft B, feed-wheel C, side spring D, angular-edged grooving knife E, gage G, with peg-strip guides H H, substantially as described, and for the purposes hereinbefore set forth.

JAS. H. OLIVER.

Witnesses: Chas. H. Poole, John W. Frazee.