

No. 644,285.

Patented Feb. 27, 1900.

A. EK.

MACHINE FOR POINTING PICKETS.

(Application filed Nov. 20, 1899.)

(No Model.)

Fig. 1.

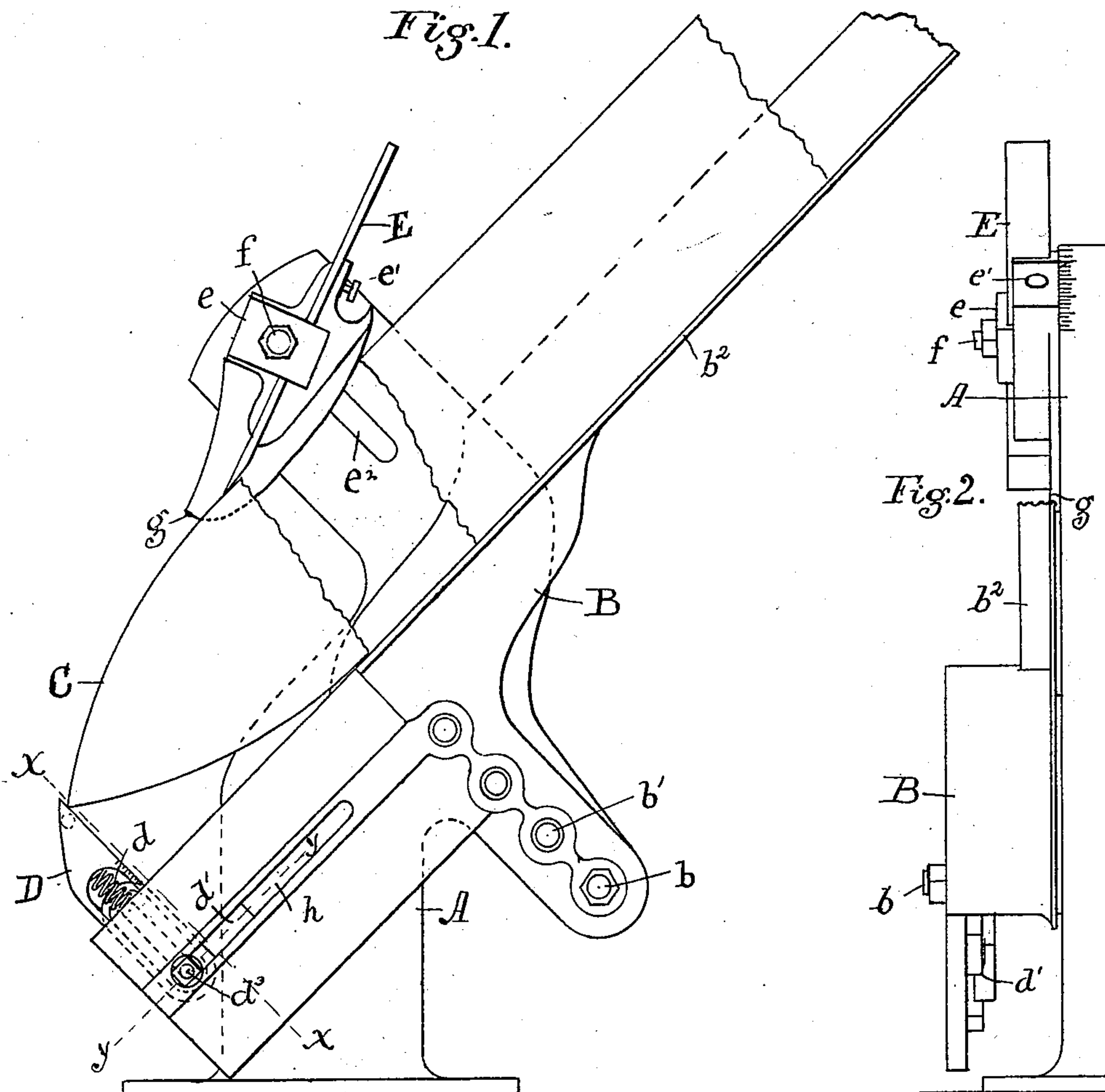


Fig. 2.

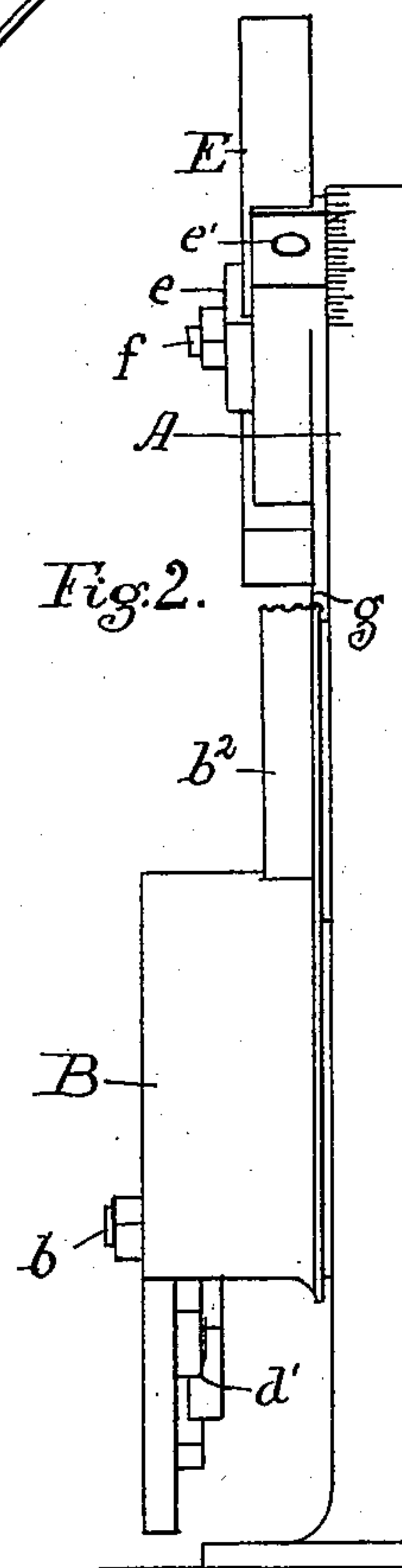


Fig. 3.

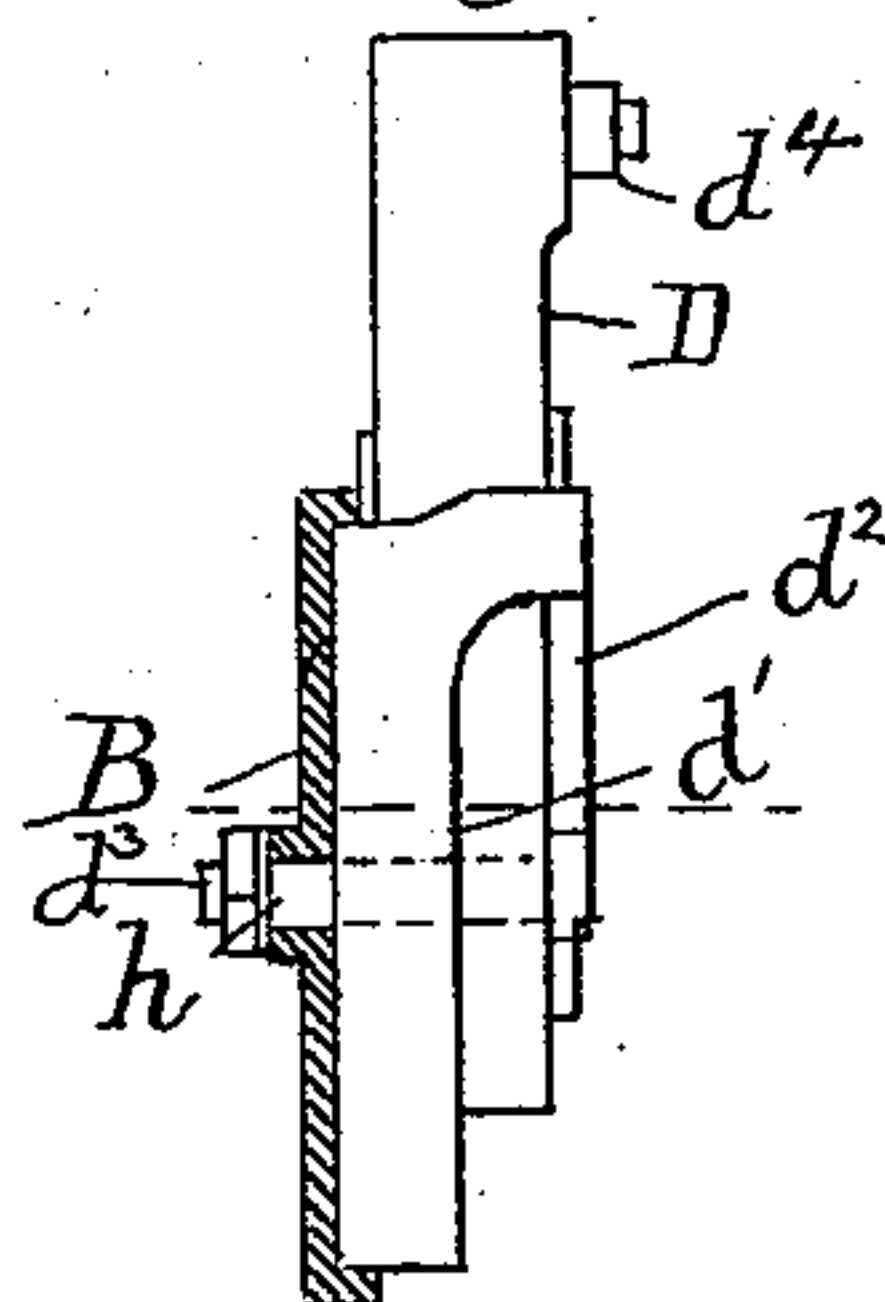
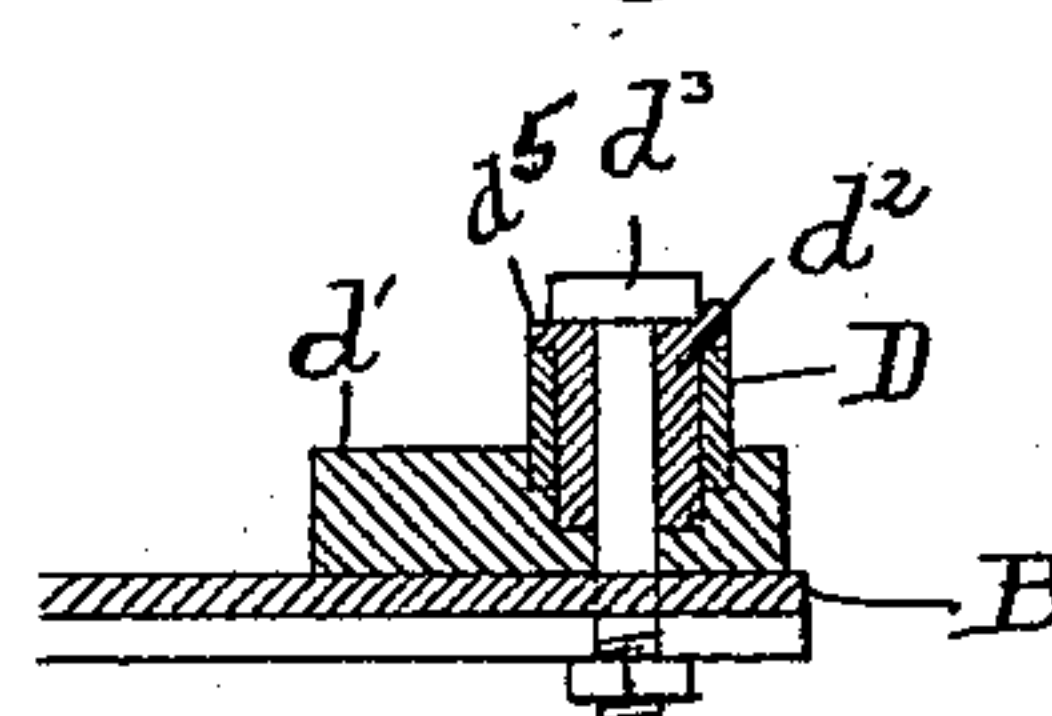


Fig. 4.



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UNITED STATES PATENT OFFICE.

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MACHINE FOR POINTING PICKETS.

SPECIFICATION forming part of Letters Patent No. 644,285, dated February 27, 1900.

Application filed November 20, 1899. Serial No. 737,576. (No model.)

To all whom it may concern:

Be it known that I, ARVID EK, a citizen of the United States, residing at Portland, in the county of Cumberland and State of Maine, have invented new and useful Improvements in Machines for Pointing Pickets; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to a machine for forming on pickets and other like articles a curved and tapering point by means of a knife. In the machine which has been in most common use for this purpose the picket was held stationary and the knife was on a movable arm, and in operation the machine required the labor of two men, one to hold the picket and the other to manipulate the knife.

The object of my invention is to so construct the machine that one man can readily operate it and so that points of different lengths may be formed. With this end in view I secure the knife rigidly to a standard, and adjacent to the knife I pivot a lever having a rest or support for the picket edgewise, so placed that when the picket is in place the knife will be at the base of the point. The lever is pivoted to the standard on the other side of the support from the knife, so that when the lever is depressed the knife will cut a curved tapering point or half of a point at each operation of the lever. A stop is provided against which the picket abuts when it is being cut, and this stop is so arranged as to descend out of the path of the knife when the latter approaches the end of the picket. In a machine thus organized the picket as it rests on the lever may be used as a handle in operating the machine, and in this way labor is saved and the machine made to do much work.

I illustrate my invention by means of the accompanying drawings, in which—

Figure 1 is a side elevation with a picket shown in position. Fig. 2 is a rear elevation. Fig. 3 is a section on the line X X of Fig. 1. Fig. 4 is a section on the line Y Y of Fig. 1, looking from beneath.

A represents a standard, to the upper portion of which is fixed the cutting-knife E by

means of a bolt *f* and knife-block *e*. An adjusting-screw *e'* holds it in the desired position longitudinally, and the knife-block may be adjusted vertically by means of the slot *e*², through which the bolt *f* passes, to accommodate pickets of different widths. Beneath the knife is pivoted a lever B, which is provided with a ledge or rest *b*², on which the picket is adapted to be supported edgewise, and when the picket is in position the knife is at the base of the point ready to make the cut. The lever B is pivoted to the standard on the opposite side of the rest *b*² from the knife by means of a bolt *b*, so that as the lever is swung on its pivot the knife will cut in the arc of a circle toward the end of the picket to form a point.

In order to form points of various lengths, a series of pivoting-points are provided, on which the lever may turn, at varying distances from the knife, so that the latter may cut in curves with greater or less radius and so form a longer or shorter point. As here shown, I provide a series of holes *b'* in the lever and a corresponding series in the standard, (not shown,) so that by putting the bolt *b* in different holes various lengths of point may be made.

In order to support the picket while being cut against the thrust of the knife, I provide a stop D, adjustably secured to the lever and so placed that the end of the lever will abut against the stop. The stop is secured to the lever by a bolt *d*³, which passes through a slot *h* in the lever, thereby providing for adjustment toward and away from the knife. The stop is so secured as to be vertically adjustable, being kept normally in its upper position by a spring. As here shown, I form the stop D with a central recess, within which is the holder *d*², which is secured by means of a bolt *d*³ to the block *d'*, the latter resting against the lever. The holder has a vertical slot through which the bolt passes and which allows of vertical adjustment. The holder *d*² has flanges *d*⁵, which serve to confine the stop between them and the block *d'*; but the stop has a free motion to a limited extent and is pressed normally upward by the spring *d*. The upper end of the stop is designed to rest

against the end of the picket a little above its central point, and provision is made to depress it out of the path of the knife when it approaches near to the knife. For this purpose a cam-surface g is formed adjacent to the knife on the knife-block, and this strikes the antifriction-roll d^4 , which is pivoted on the stop, as the stop comes near the knife and depresses the top of the stop below the edge of the knife, so that the knife passes over it.

The machine is operated as follows: The knife is adjusted so that when the picket is laid on the rest b^2 and pressed down against the stop D the edge of the knife will come at the edge of the picket at the base of the desired point. The picket and the lever are seized together by the hand and depressed, the knife cutting the point in a circular arc, depending on the position of the pivot. As the block approaches the knife it is automatically depressed, as already explained, and the knife is allowed to pass over it. The picket is then turned and the operation repeated. The depression of the stop-block is made necessary from the fact that the first half of the cut removes half of the end, and when the picket is turned its upper end must extend above the center and into the path of the knife. The short time the block D is below the path of the knife the picket will be without end support; but the cut will then be quite or nearly completed, and the picket will be easily held by the hands.

Scales are provided, as shown, on the stop D and on the standard of the machine, by which the height of the stop may be adjusted

to conform to the position of the knife-block and to suit different widths of pickets.

I claim—

1. In a machine for pointing pickets, the combination of a standard, a pointing-knife secured thereto, a lever having a rest for holding the picket, said lever being pivoted to the standard on the opposite side of the rest from the knife, a stop on said lever against which the end of the picket abuts, said stop having a limited vertical movement and means for depressing said stop out of line of the knife as the knife approaches the end of the picket.

2. In a machine for pointing pickets, the combination of a standard, a pointing-knife secured thereto, a lever pivoted to the standard and having a rest for holding the picket, a stop against which the end of the picket abuts secured to said lever, so as to have a limited vertical movement, a cam-surface for depressing said stop as it approaches the knife and a spring for raising it.

3. In a machine for pointing pickets, the combination of a standard, a pointing-knife secured thereto, a lever pivoted to the standard and having a rest for holding the picket, a stop against which the picket abuts secured to said lever so as to have a limited vertical movement, an antifriction-roll on said stop and a cam-surface against which said roll strikes to depress said stop.

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Witnesses:

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