

(No Model.)

T. COYLE.
FENCE PICKET MACHINE.

No. 300,958.

Patented June 24, 1884.

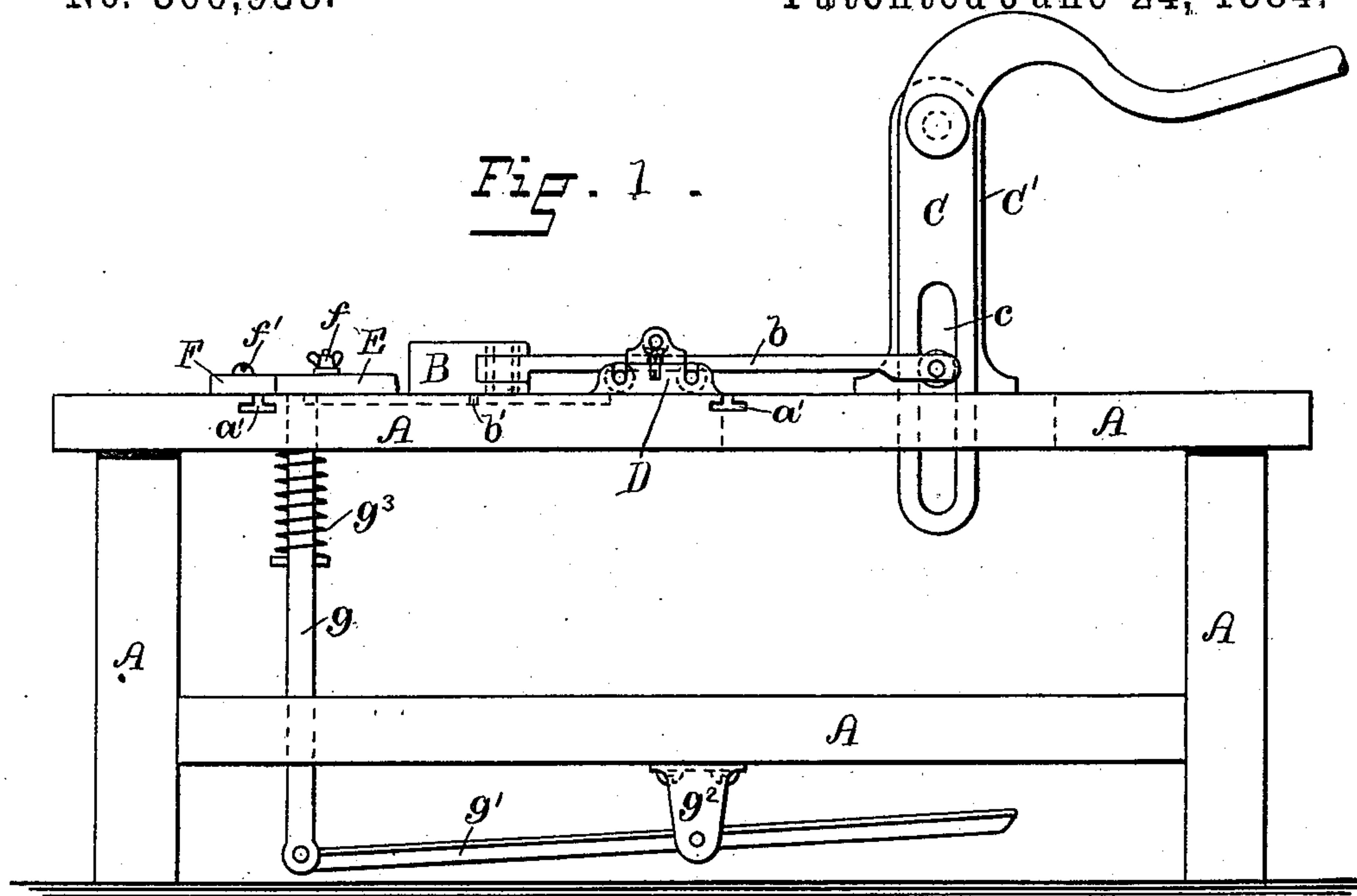


Fig. 2.

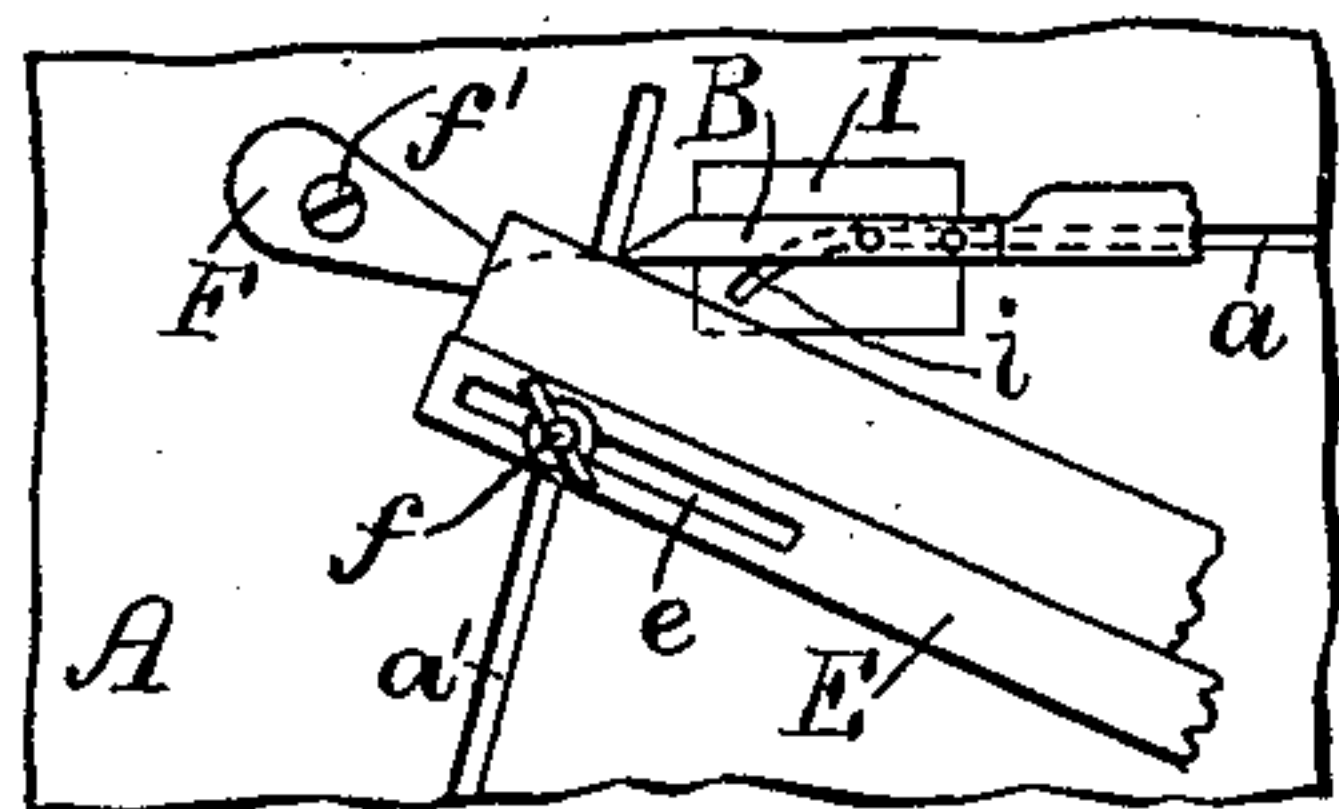
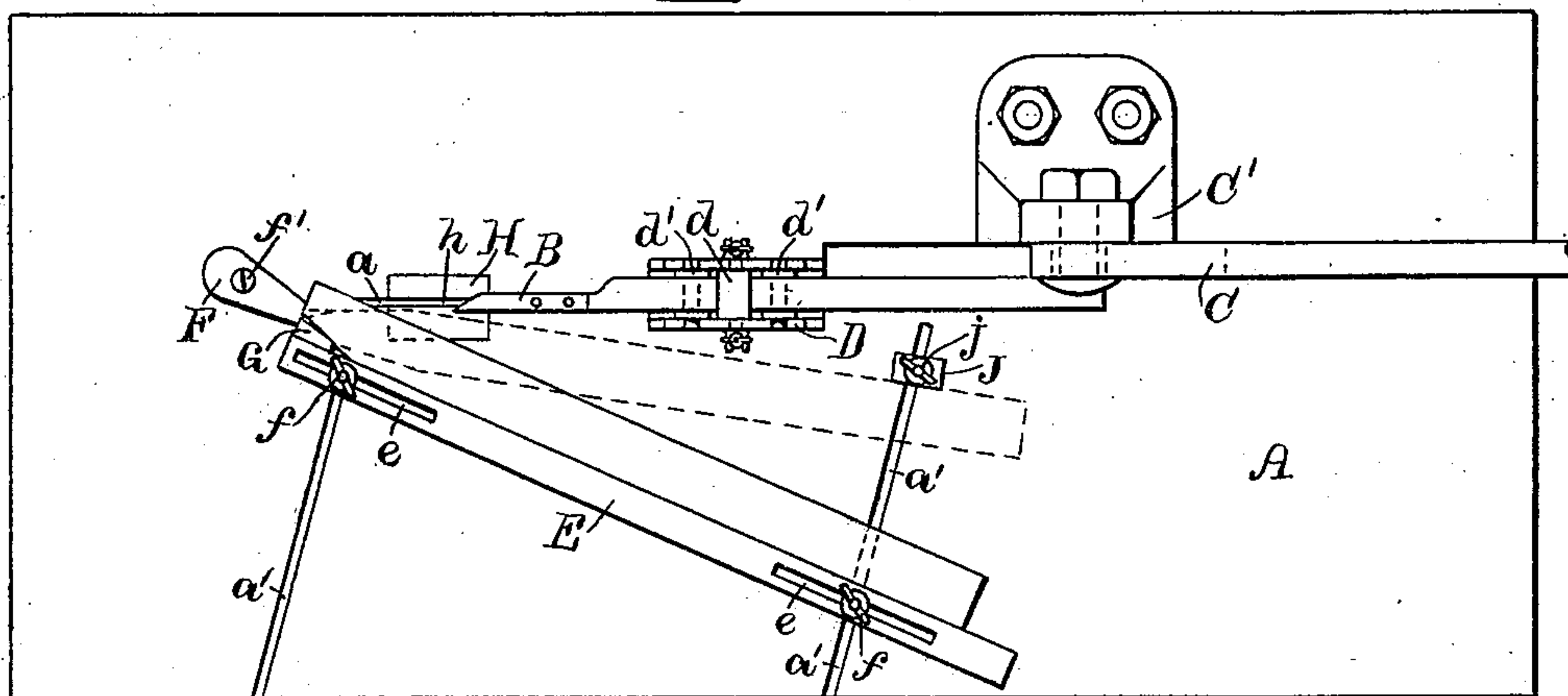


Fig. 3.

Fig. 5.

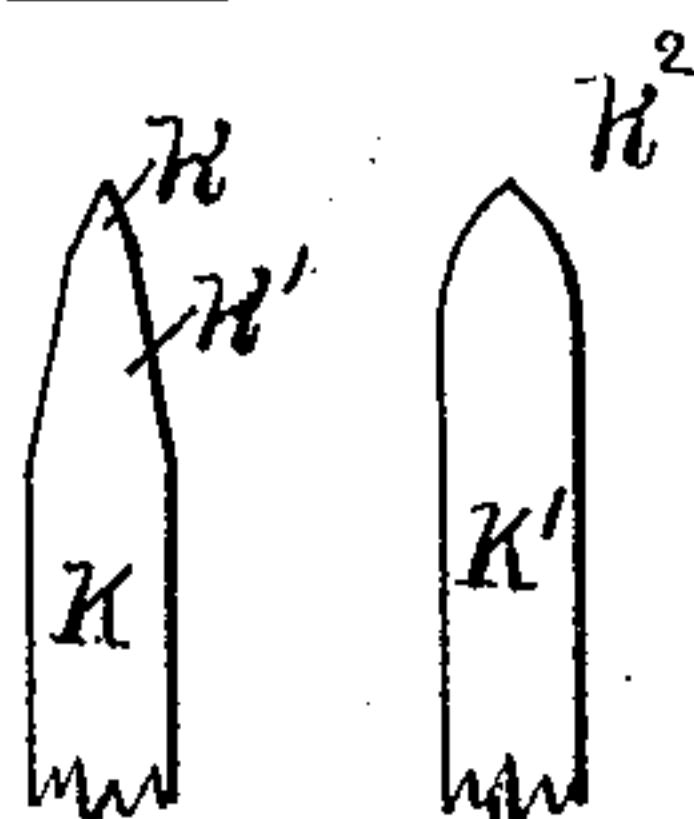
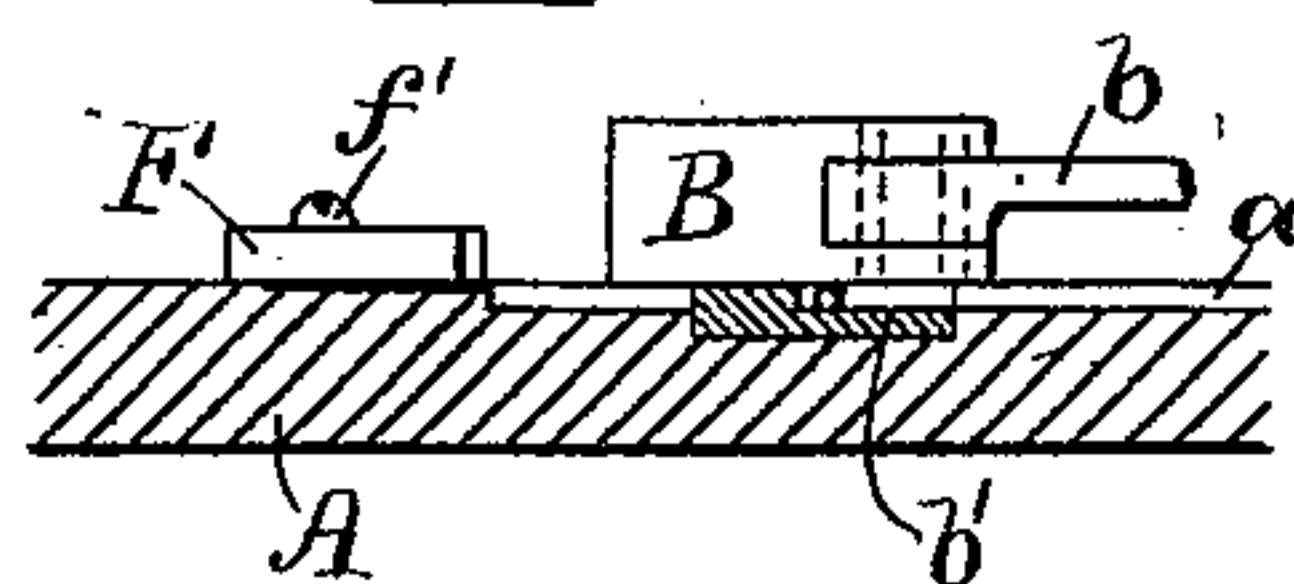


Fig. 4.



WITNESSES:

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THOMAS COYLE, OF APPONAUG, RHODE ISLAND.

FENCE-PICKET MACHINE.

SPECIFICATION forming part of Letters Patent No. 300,958, dated June 24, 1884.

Application filed April 18, 1884. (No model.)

To all whom it may concern:

Be it known that I, THOMAS COYLE, of Apponaug, in the county of Kent and State of Rhode Island, have invented certain new and useful Improvements in Machines for Shaping the Ends of Pickets, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

My invention relates to machines for forming the pointed or rounded upper ends of fence-pickets; and the object of my invention is to produce a machine which shall form picket ends by a knife-cut in lieu of a saw-cut, as heretofore.

My invention consists in certain peculiar and novel features of construction and arrangement, as hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a side elevation of my improved machine. Fig. 2 is a plan view of the same. Fig. 3 is a detached view of a portion of the machine, showing a curved groove-guide for the knife. Fig. 4 is a detached view in vertical longitudinal section, showing the straight groove-guide for the knife. Fig. 5 is a side view of the upper end of a pointed and rounded picket.

Fence-pickets as heretofore made have had their pointed or rounded upper ends shaped by sawing, and this method is objectionable, because the sawing leaves a rough surface, which does not take paint well, and which consequently has to be smoothed or finished by sandpapering before the paint can be properly applied. When painted without sandpapering, the paint has to be literally daubed onto the ends of the pickets, so as to fill up the open pores of the wood, before a finished appearance can be given to the end of the picket. This fact renders the painting of pickets expensive, because extra labor is involved in sandpapering; or, if sandpapering is dispensed with, a greatly-increased quantity of paint has to be applied. On the other hand, it is well known that a knife-cut in wood-working is greatly superior to a saw-cut, because, while the latter leaves the cut surface rough, the former leaves it as smooth as if sandpapered or planed. In accordance with my invention I shape the pointed or rounded

ends of the pickets by a knife-cut, thus cutting and finishing the picket end at one operation, so as to dispense with the operation of sandpapering and the objectionable daubing before referred to.

In the said drawings, A designates the table of my improved machine, and B designates the cutting-knife. This knife is provided with or secured to a stem, *b*, which extends backward to a connection with the operating-lever C. The lever C is mounted pivotally in a standard, C', and is formed with a slot, *c*, in its lower end, in which a roller upon the rear end of the stem *b* works. The stem works between one upper roller, *d*, and two under rollers, *d'*, which are mounted in a support, D, as shown, the rollers *d'* being each provided with a circular flange at each end to guide the stem in its movement. The movement of the knife is limited by a pin, *b'*, which works in a groove, *a*, formed on the upper side of the table A, and terminating at the point at which the thrust of the knife is to cease.

E designates a gage, which is formed at each end with a slot, *e*, through which passes a clamp, *f*, which works in a T-groove, *a'*, in the table.

F designates a stop, which is pivoted at *f'* to the table in such position that the end of the picket may be set against it.

G designates a block which is set in an opening in the table, and is supported on the upper end of a bar, *g*, the lower end of which is jointed to a foot-lever, *g'*, which is hung in the bracket *g''*, secured to the supporting frame-work of the table. A spring, *g'''*, may be arranged, as shown, so as to act expansively and hold the block G depressed and out of the way.

H designates a block, the upper side of which is formed with a straight groove, *h*, and which is set in a depression formed on the table A in such manner that its groove *h* shall be in line with the groove *a* of the table. When a pointed end is to be formed on the picket, this block H is used; but when the end of the picket is to be rounded the block I, having the curved groove *i*, is used in lieu of the block H.

J designates a stop which is set in the groove *a'*, and is provided with a clamp-screw, *j*.

The picket K is first laid in the position

shown in solid lines in Fig. 2, and the cut k is made. Then the picket is moved up against the stop J, and the cut k' is made. After the first cut has been made, pressure is applied to the free end of the lever g' , so as to elevate its opposite end, together with the rod g , and with it the block G, which is carried by said rod. The picket is now turned on its opposite side and its obliquely-cut portion forced against the block G, so that the latter will resist the thrust of the knife, and the second cut is made. During the first cutting the block is held depressed by the spring g^3 , and when the second cut has been made the pressure is removed from the lever g' , whereupon the block will be automatically depressed by the spring g^3 . For cutting rounded ends the block I is used, and two cuts are made—one on each side of the picket.

Having thus described my invention, I claim—

1. The combination, with the knife B, having a pin, b' , and the gage E, of the table having the groove a , placed in the line of movement with the knife, and arranged to receive the pin b' , and the grooves a' , arranged in the line of movement of the gage, substantially as described.

2. The combination, with the lever C, the knife connected to said lever, and the gage E, of the table having the groove a , arranged to guide the knife, and the grooves a' , arranged to guide the gage, substantially as described.

3. The combination, with the knife and the gage, of the groove a , arranged to guide the knife, and the grooves a' , arranged to guide the gage, the stop F to hold the end of the picket, and the stop J to limit the adjustment of the gage, substantially as described.

4. The combination, with the knife B and the gage E, of the table having the groove a to guide the knife, and the grooves a' to guide the gage, the stop F, the block G, and the foot-lever, with its connections to the block G, substantially as described.

5. The combination, with the knife B, having the pin b' , and the gage E, of the table having the groove a to guide the knife, and the grooves a' to guide the gage, the stop F, the block G, with its operating connections, and the removable block provided with a groove to guide the knife.

6. A machine for pointing pickets, consisting of a longitudinally-reciprocating knife, an adjustable gage to hold the picket, a pivoted stop and a movable block to hold the end of the picket, a removable grooved block to guide the knife, a lever for actuating the movable block, and a table having a groove to guide the knife and grooves to guide the gage, substantially as set forth.

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Witnesses:

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