

C. ALBERTSON, I. E. HOBSON & J. HOBSON
Machines for Cutting Locks in Hoops.

No. 153,033.

Patented July 14, 1874.

Fig. 1.

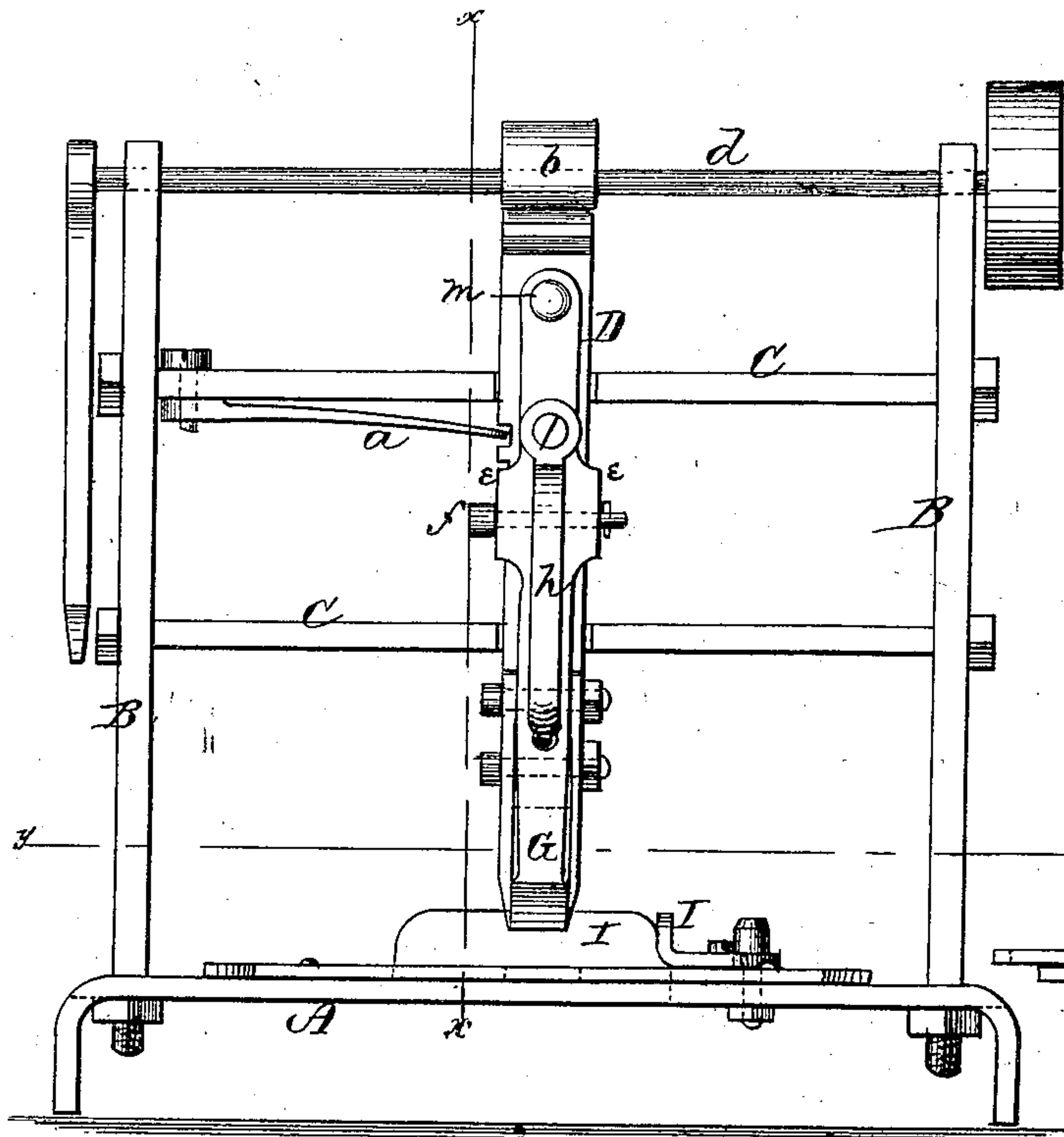


Fig. 2.

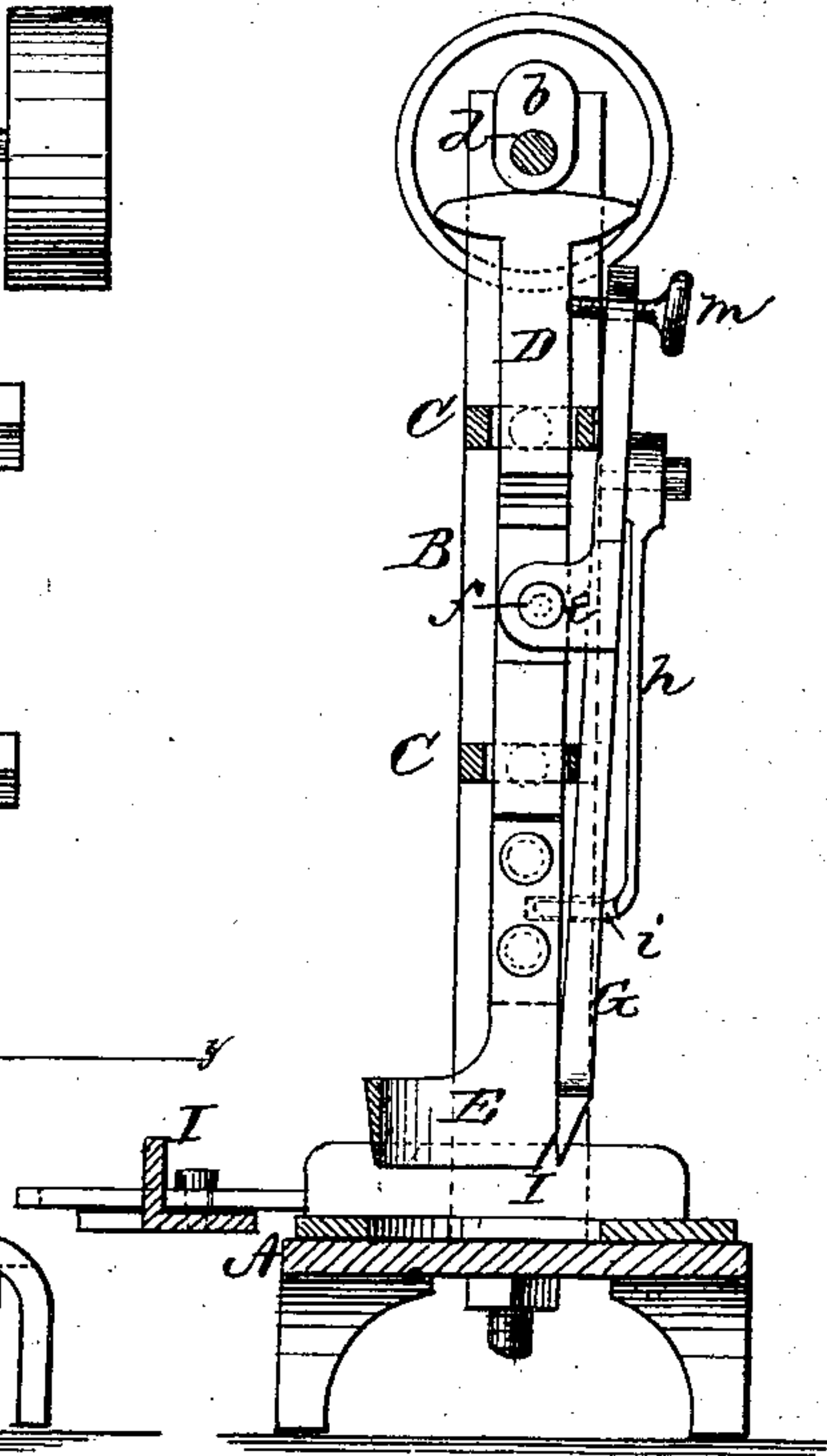


Fig. 3.

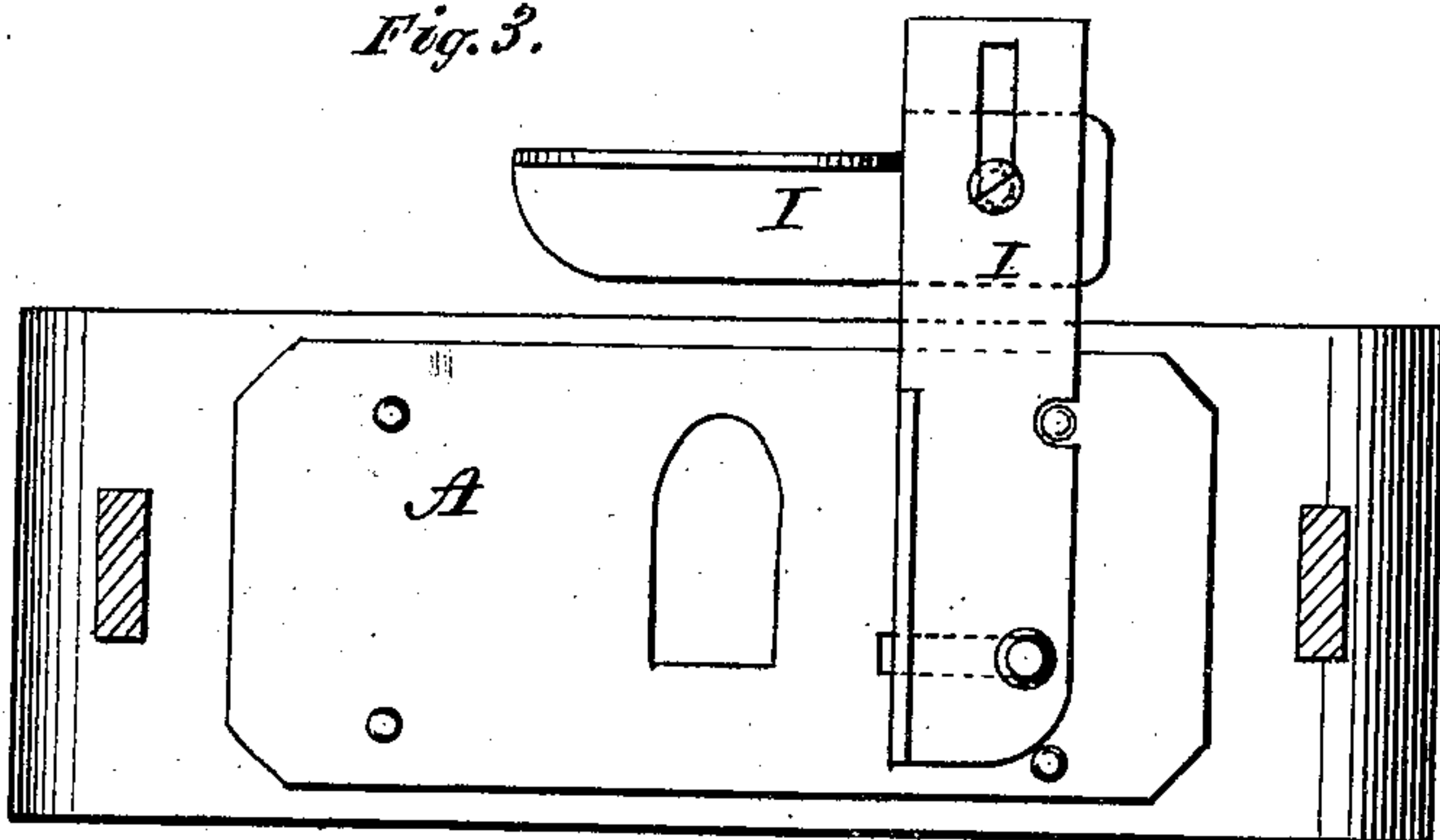


Fig. 4.

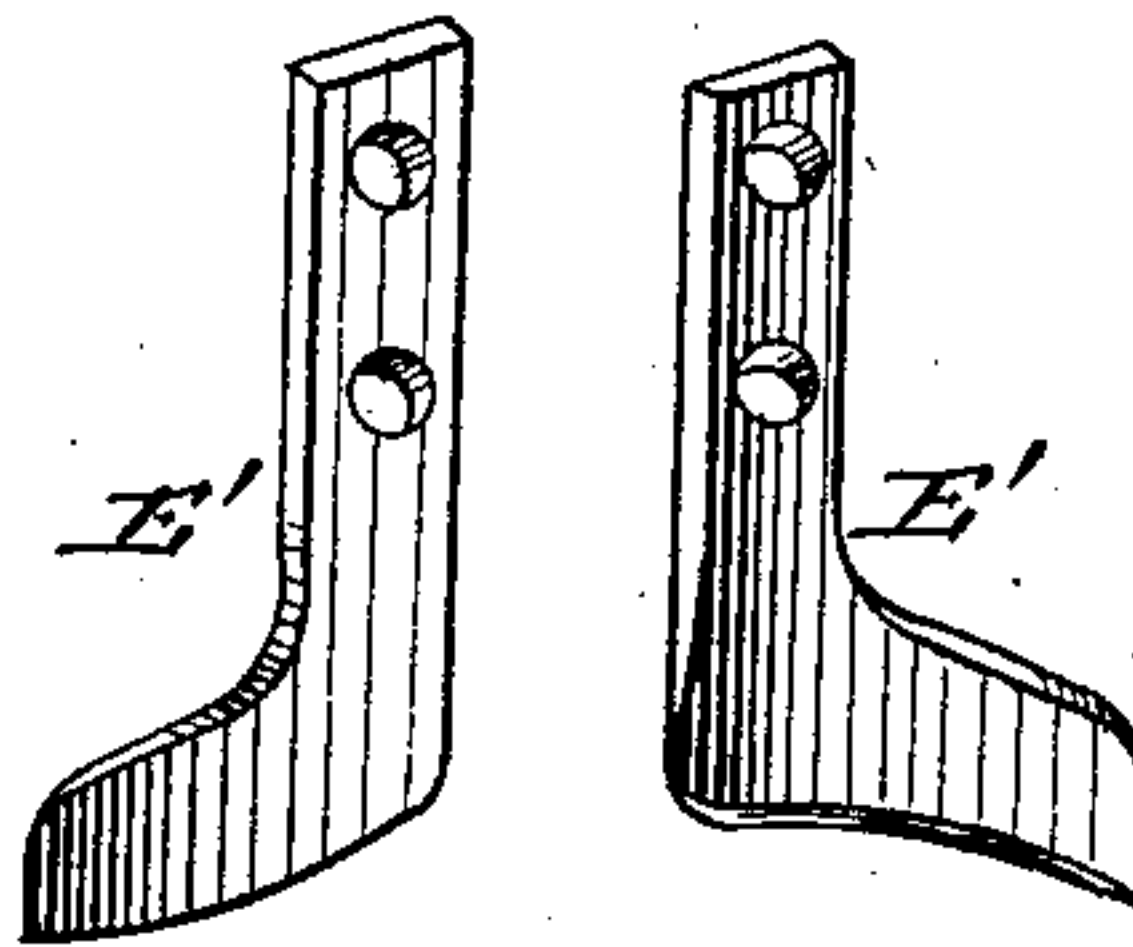
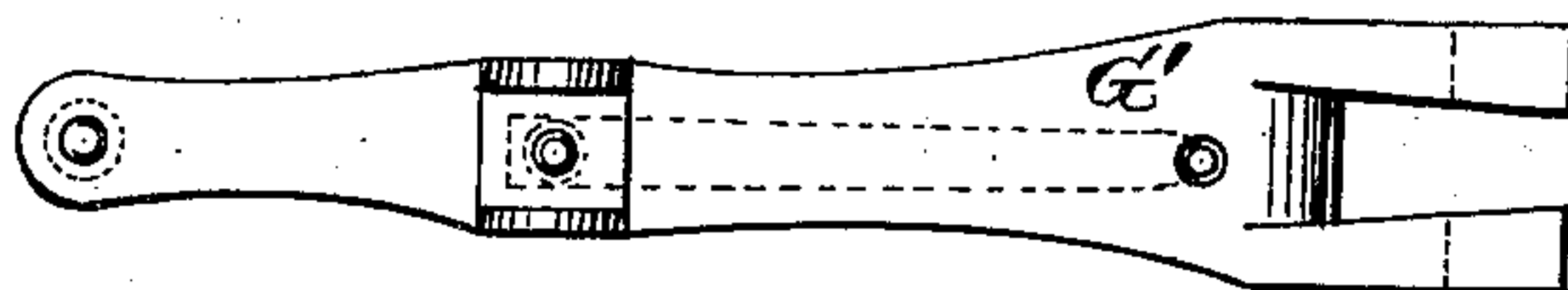


Fig. 5.



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UNITED STATES PATENT OFFICE.

CALVIN ALBERTSON, IRA E. HOBSON, AND JOHN HOBSON, OF DALTON,
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IMPROVEMENT IN MACHINES FOR CUTTING LOCKS IN HOOPS.

Specification forming part of Letters Patent No. **153,033**, dated July 14, 1874; application filed
March 14, 1874.

To all whom it may concern:

Be it known that we, CALVIN ALBERTSON, IRA E. HOBSON, and JOHN HOBSON, of Dalton, in the county of Wayne and State of Indiana, have invented certain new and useful Improvements in Machines for Cutting Locks in Hoops; and we do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

The nature of our invention consists in the construction and arrangement of a machine for cutting the locks in barrel-hoops, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which our invention appertains to make and use the same, we will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a front elevation of our machine. Fig. 2 is a transverse vertical section of the same through the line *x x*, Fig. 1. Fig. 3 is a horizontal section through the line *y y*, Fig. 1, showing a plan of the bed of the machine. Figs. 4 and 5 show some of the chisels used in the machine.

A represents the bed of our machine, from which rises two standards, B B, connected by flat horizontal bars C C. Through the bars C C passes a square plunger, D, having a T-head on its upper end, and held up by means of a spring, *a*, the outer end of which is secured to one of the bars C, and the inner end fitted in a groove in the side of the plunger. The plunger D is forced downward by means of a cam, *b*, on a shaft, *d*, operating against the T-head thereof, said shaft having its bearing in the upper end of the standards B B, and is revolved by crank, belt, pulley, or other suitable means. To the lower end of the plunger D is secured a chisel, E, constructed in such a manner as to cut the hole in the hoop, all but one end thereof, the part cut by said chisel E being cut perfectly straight through the hoop. The re-

maining part of the hole is cut by a chisel, G, the stem of which is provided with ears *e e* to project from the back on the sides of the plunger and pivoted thereto by a pin, *f*. The edge of this chisel is slanting, and, being hinged to the plunger, as described, it will, when the plunger is pressed down, move inwardly inside of the chisel E and cut the back part of the hole slanting, thereby allowing the hoop to fit closer together than it would if cut straight. The chisel G has a spring, *h*, attached to its rear side above the hinge, which spring extends down the chisel, and its end forms a pin, *i*, at right angles with the spring, said pin passing through a hole in the chisel, and bearing against the back of the plunger D, whereby the chisel G is turned to bring its edge out to the edge or end of the chisel E, when the plunger moves upward again. Through the upper end of the chisel G passes a temper-screw, *m*, to bear against the back of the plunger and regulate the position of the chisel. The other end of the hoop is cut by means of chisels E' E' and G', which are substituted for the chisels above described.

The chisel G' has two cutting-bits and works outside of the chisels or cutters E' E' for removing a part of the hoop from the sides thereof, so as to admit of its passing through the hole in the other end; also, cutting it slanting, so as to fit the other end.

This chisel G' is provided with the same spring and temper-screw as described for the chisel G.

The bed-plate A is provided with adjustable guides I I to regulate the width and length of the hoop.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The combination of the reciprocating chisel E and the reciprocating and oscillating chisel G, substantially as and for the purposes herein set forth.

2. The combination of the chisels E' E' and the double-bitted chisel G', constructed as

shown, and operating substantially as and for the purposes herein set forth.

3. The plunger D, with T-shaped head, spring *a*, cam *b*, and shaft *d*, in combination with the chisels E and G and guides I I, substantially as and for the purpose herein specified.

In testimony that we claim the foregoing as

our own we affix our signatures in presence of two witnesses.

CALVIN ALBERTSON.

IRA E. HOBSON.

JOHN HOBSON.

Witnesses:

ISAAC CORY,

RUFUS CORY.