

(No Model.)

J. P. HILL.
FLOOR CLAMP.

No. 354,418.

Patented Dec. 14, 1886.

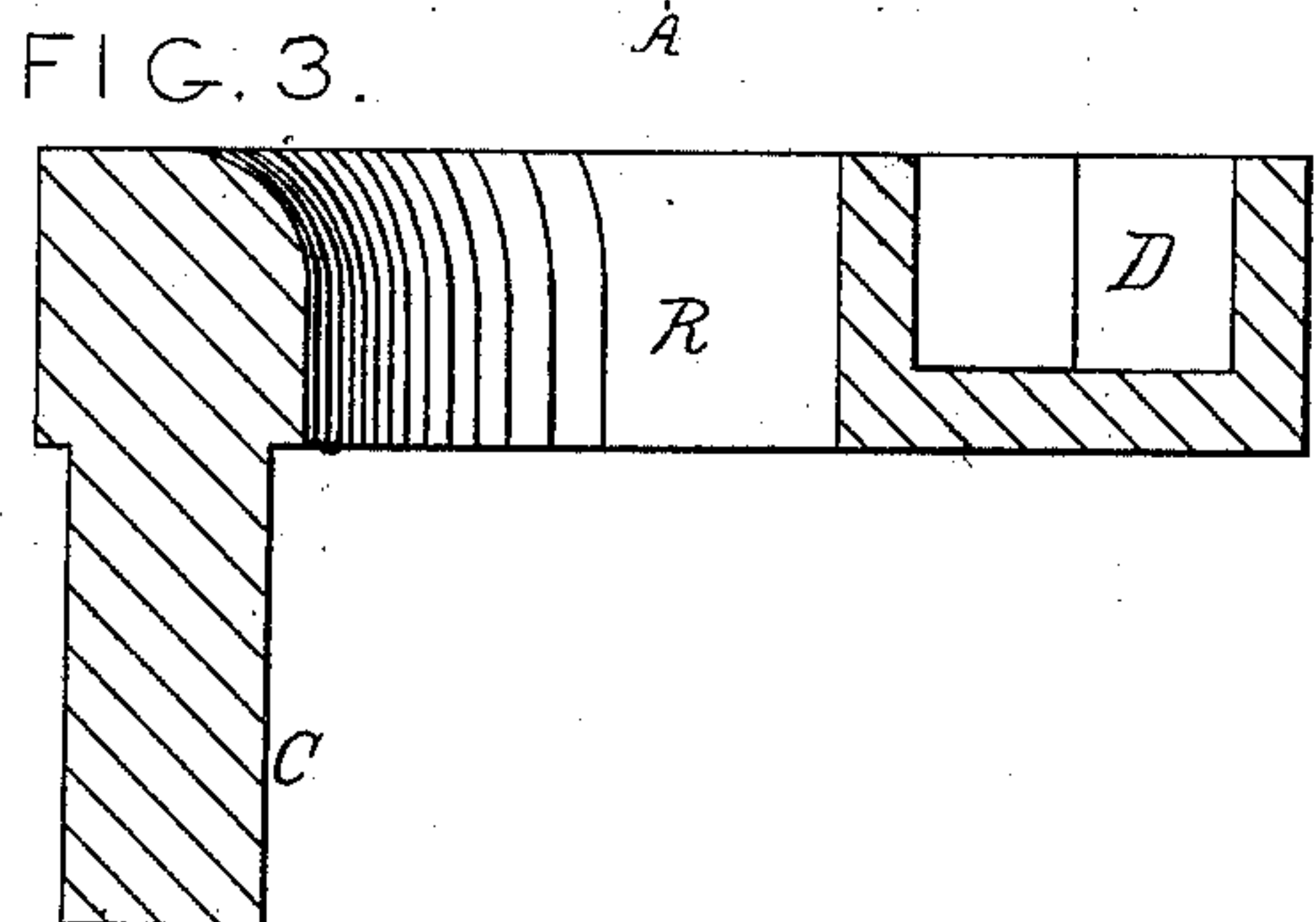
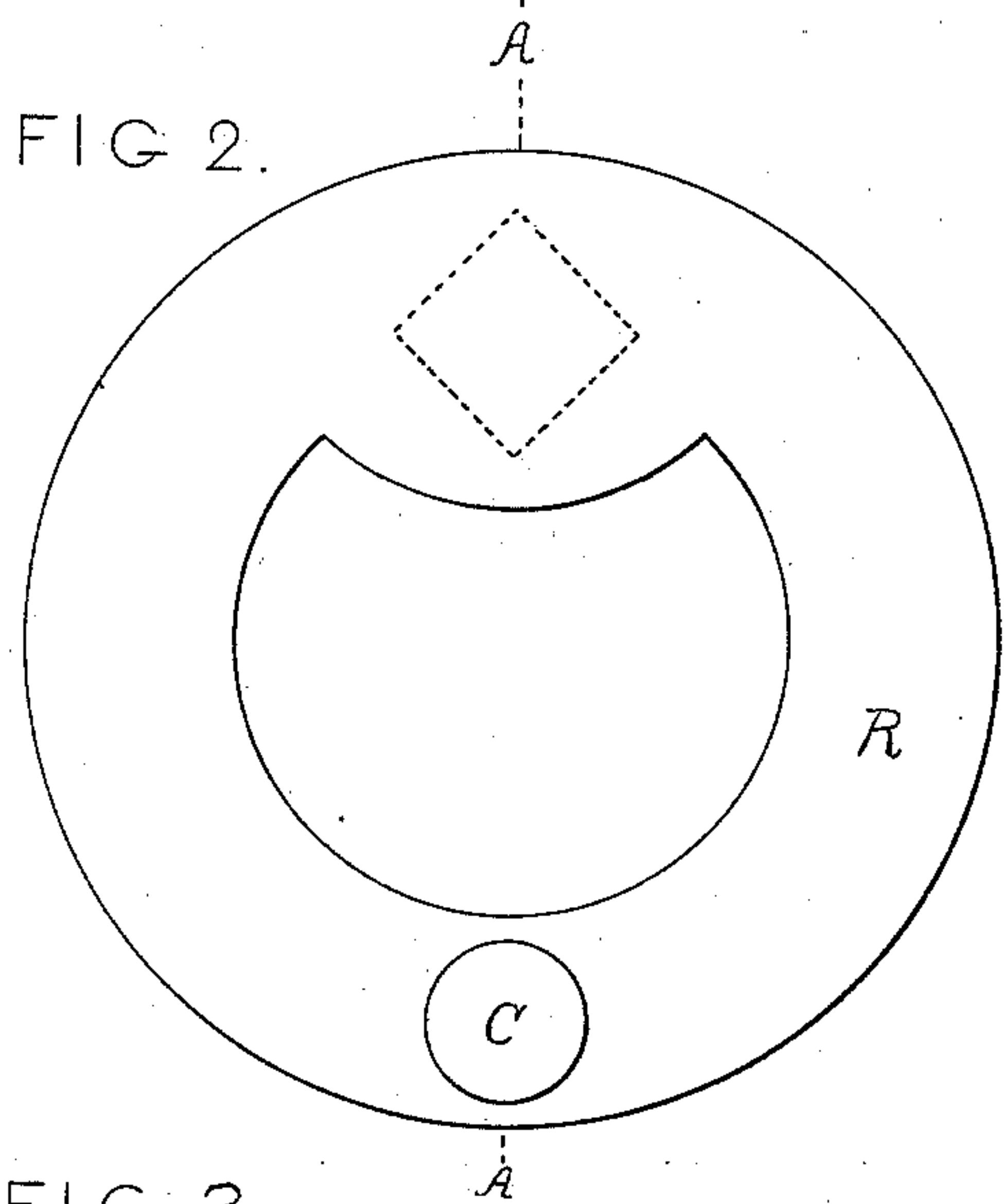
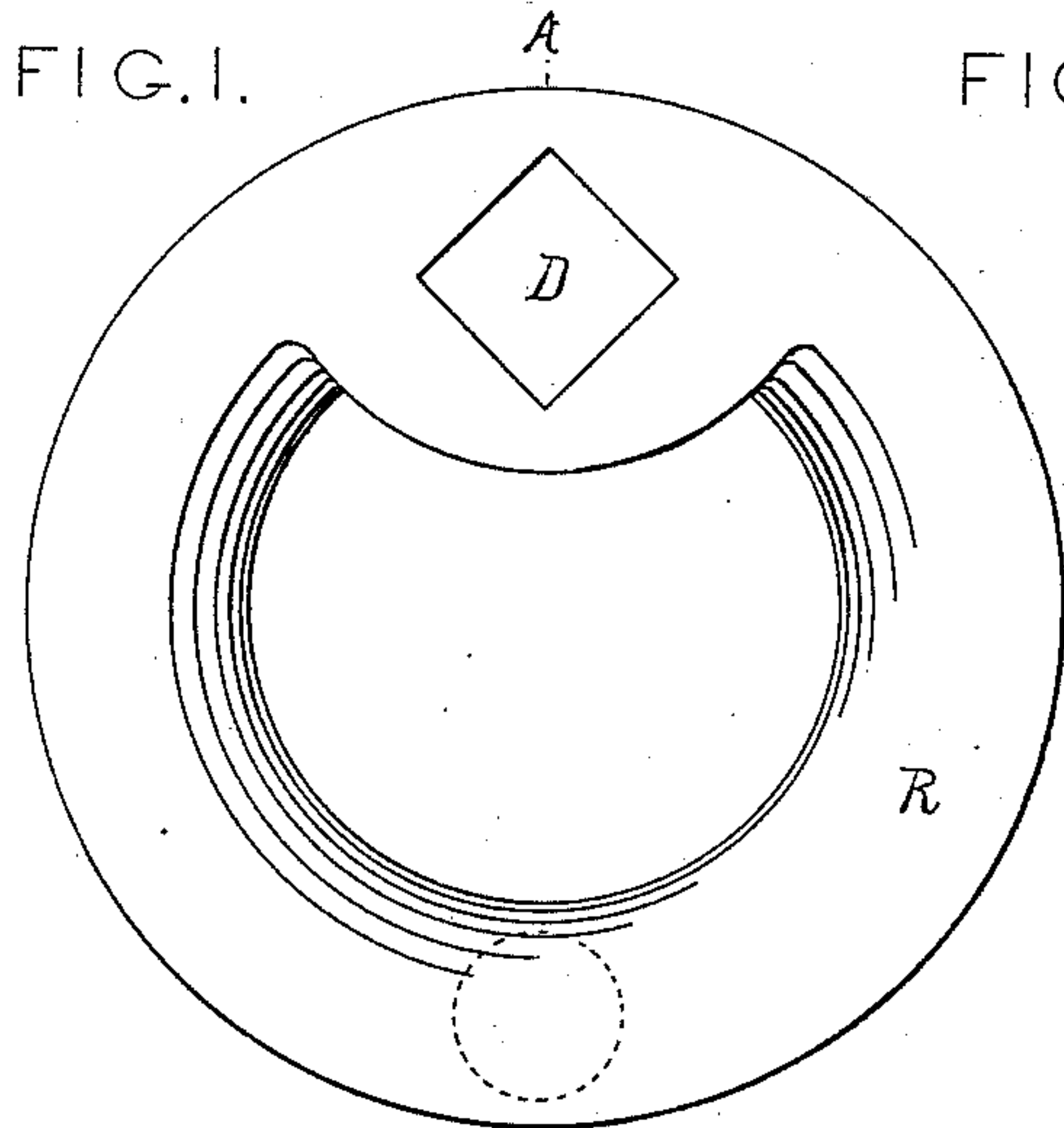


FIG. 5.

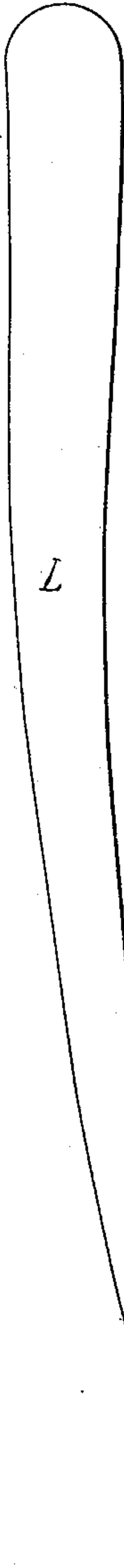


FIG. 6.

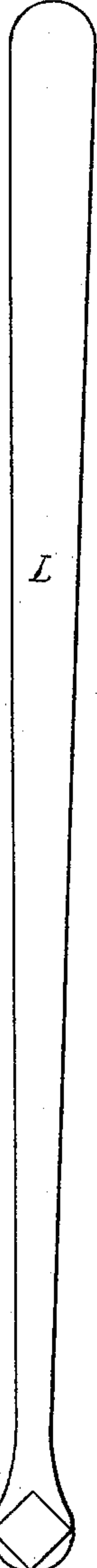
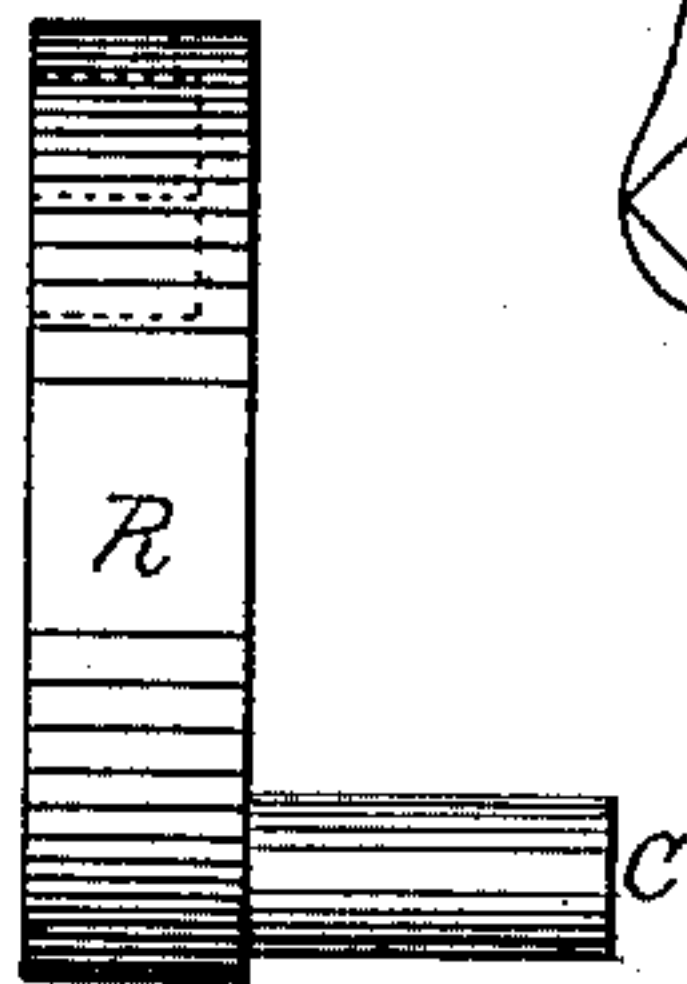


FIG. 4.



WITNESSES.

J. W. Guppie
S. L. Moody.

INVENTOR

James P. Hill.
Per Joseph B. Moody.
his attorney.

UNITED STATES PATENT OFFICE.

JAMES P. HILL, OF SACO, MAINE.

FLOOR-CLAMP.

SPECIFICATION forming part of Letters Patent No. 354,418, dated December 14, 1886.

Application filed July 21, 1886. Serial No. 203,683. (No model.)

To all whom it may concern:

Be it known that I, JAMES P. HILL, a citizen of the United States, residing at Saco, in the county of York and State of Maine, have
5 invented a new and useful Improvement in Floor-Clamps for the Use of Builders; and I do hereby declare the following to be a full, clear, and exact description of my invention, reference being had to the drawings accompanying and forming a part of this specification,
10 in which—

Figure 1 is a top view of ring R, of which Fig. 2 is a reversed view. Fig. 3 is a sectional view of same on line A A. Fig. 4 is a side
15 view of same. C is a stud. D is a socket. Figs. 5 and 6 are views of a lever, L.

The object of my invention is to provide an effective tool for clamping and securing the boards of a floor preparatory to their being
20 permanently secured by nailing or other known means, this end to be attained in a simple, economical, and efficient manner.

The ordinary method of clamping or setting floor-boards preparatory to their being
25 permanently secured is by the use of wooden wedges or braces. This method is tedious and wasteful both of time and material. Machines called "clamping-machines" have been invented for this purpose, all of which
30 are more or less expensive, complicated, and difficult of operation.

My improved floor-clamp consists of a metallic ring or disk, R, having at or near its edge a stud, C, and at or near the opposite
35 edge a socket, D, as and for the purposes hereinafter set forth.

The manner of using my improved clamp is as follows: If a single floor is to be laid, holes are bored in the beams. If a double
40 floor is to be laid, these holes are bored in the lower floor, these holes to be of a diameter to receive readily the stud C. These holes are bored at any convenient distance relative to the length of the board to be clamped, at a
45 distance from the edge of the board about equal to the diameter of the ring, these distances depending on the judgment of the workman. The studs of the clamping-rings are inserted in these holes, and between the
50 rings and the edge of the board scantlings are placed to protect the edge of the board and distribute the pressure of the clamp. The

lever L is then placed in the socket D and force applied in direction to cause an eccentric movement of the ring around its center
55 at C, which movement causes the edge of the ring to be forced against the board or scantling, thus securing the full, ready, and certain action of the eccentric clamp. When the board is secured in place by nailing or other-
60 wise, a reversed movement of the lever relieves the pressure, and the operation is repeated *ad infinitum*.

It will be noticed that the eccentric motion of the ring is a horizontal motion on a plane
65 with the floor-board. By the use of two or more of these rings at distances required a single workman can accomplish a greater amount of work at less expenditure of time and strength than by any method known to
70 your petitioner.

My improved floor-clamp possesses advantages over the ordinary method, as well as over any floor-clamping machines now in use, in that it is more cheaply constructed than
75 any other mechanism for the purpose, its cost being less than the cost of the wooden wedges. It is a model of simplicity as well as of efficiency, the measure of its power being determined by the diameter of the ring and length
80 of lever. For ordinary use a ring of three or four inches diameter with a lever eighteen to twenty-four inches in length is ample.

What I claim as my invention, and desire
85 to secure by Letters Patent, is—

1. The circular ring R, having the stud C on one side and the socket D on the opposite side, they being on or near opposite edges of said ring, as herein shown and described, in combination with the lever L, formed to fit
90 said socket, to operate as and for the purpose specified.

2. As an improved article of manufacture, the herein-described floor-clamp, consisting of a circular metallic ring having at or near
95 one edge a stud and at or near the opposite edge a socket, in combination with a lever formed to fit in said socket, as shown, and for the purpose specified.

JAMES P. HILL.

Witnesses:

F. W. GUPTILL,
FRANK W. NUTTER.