

(No Model.)

H. G. PAINE.
NUT LOCK.

No. 460,988.

Patented Oct. 13, 1891.

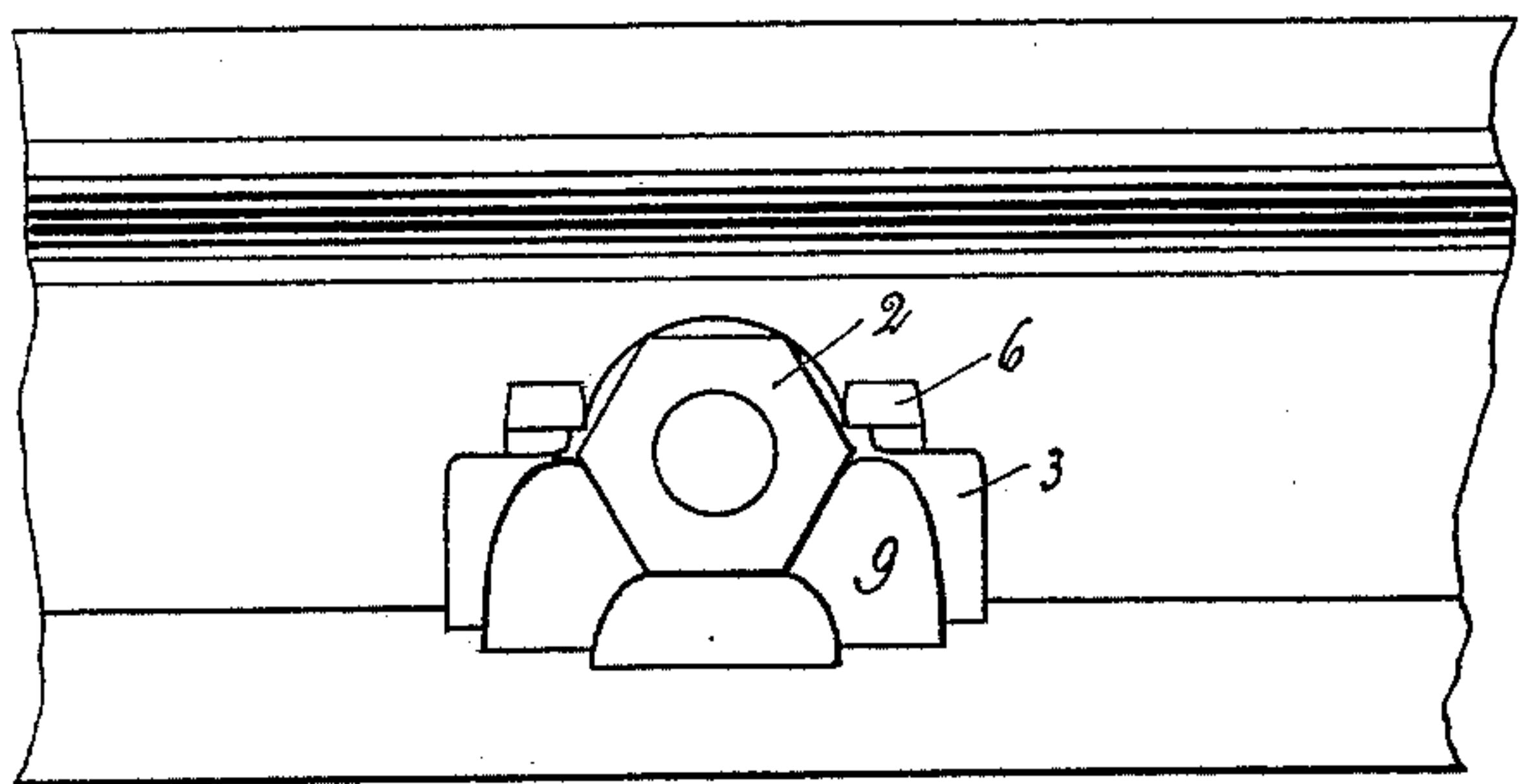


Fig. 1.

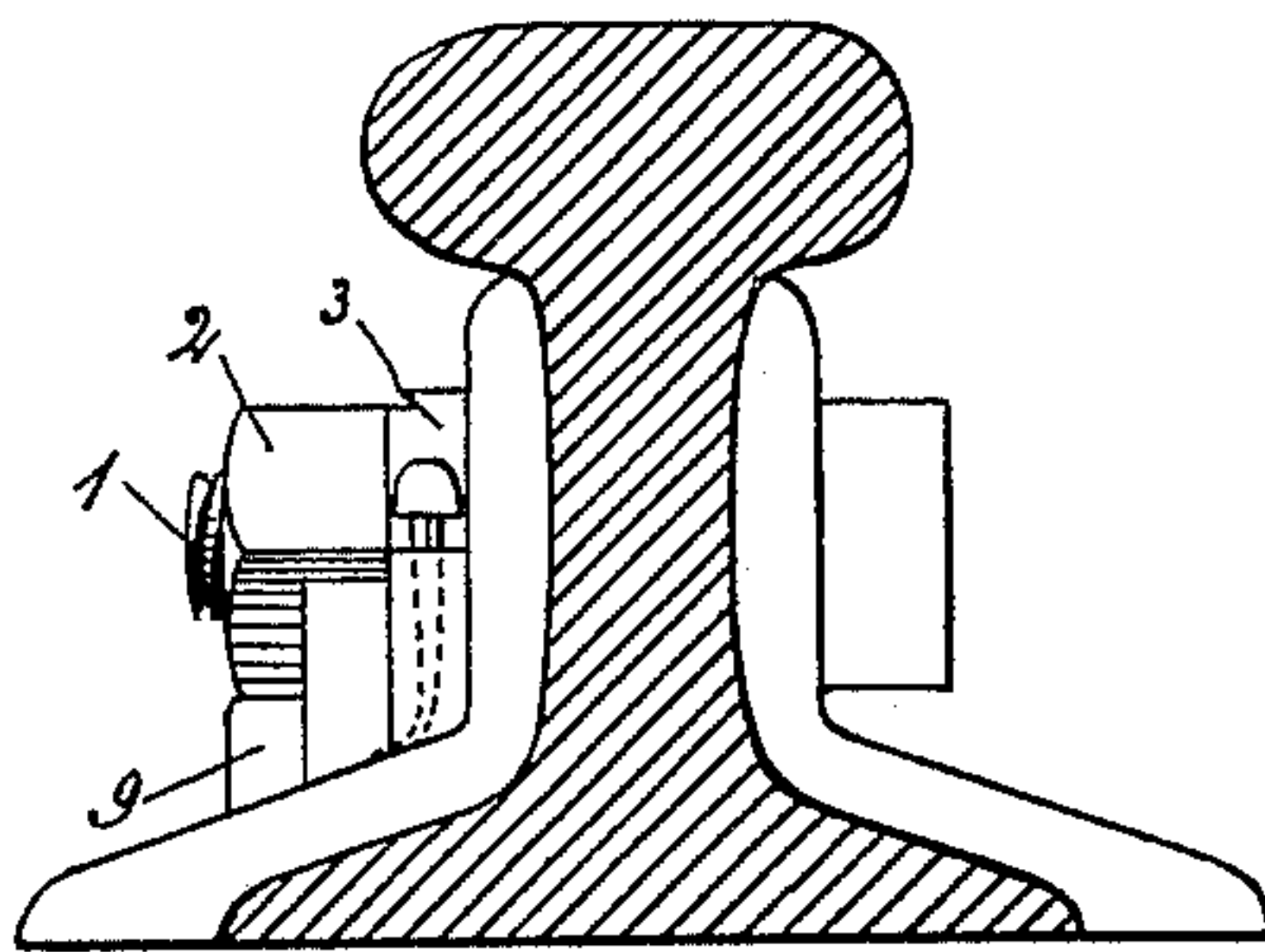


Fig. 2.

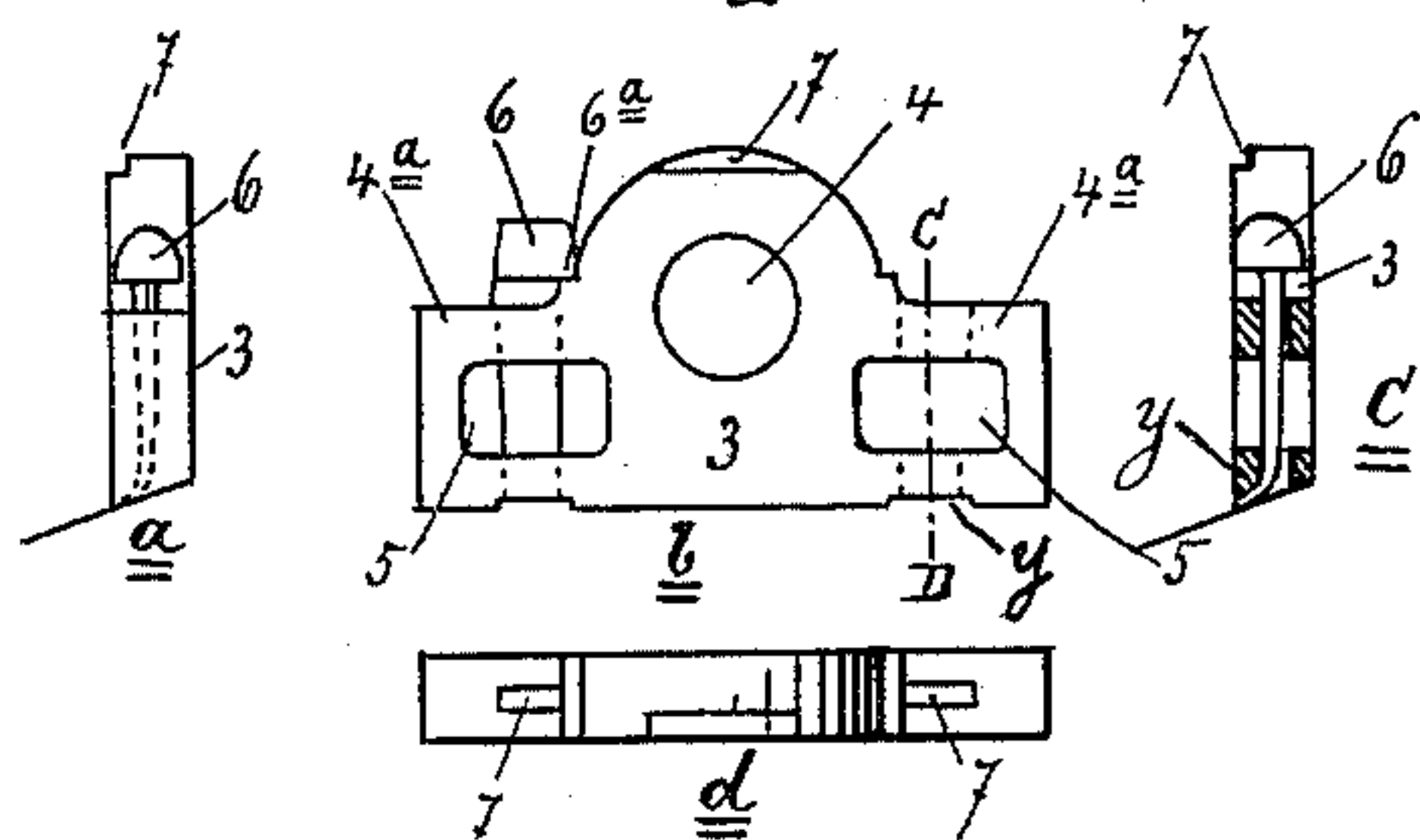


Fig. 3.

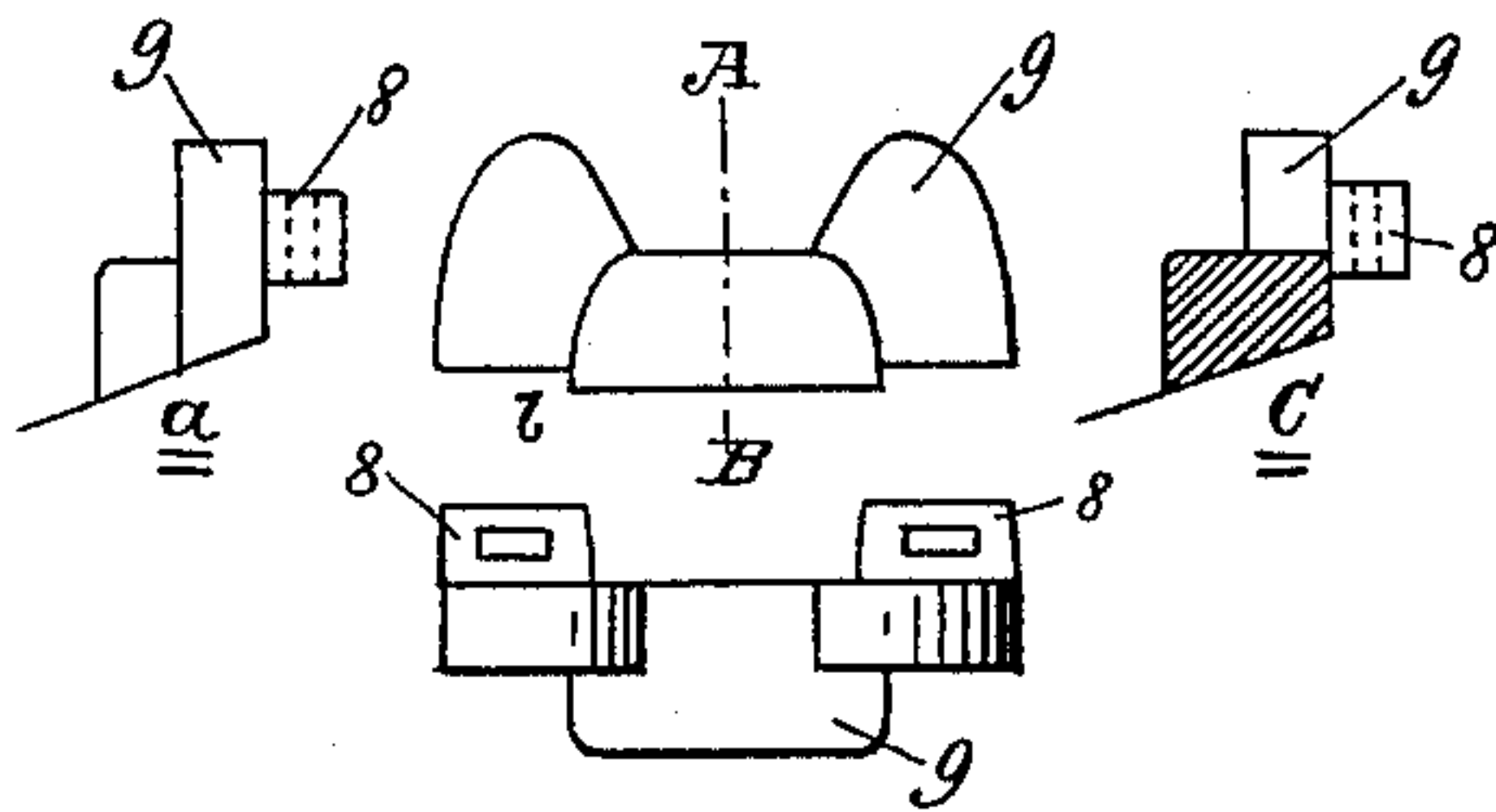


Fig. 4.

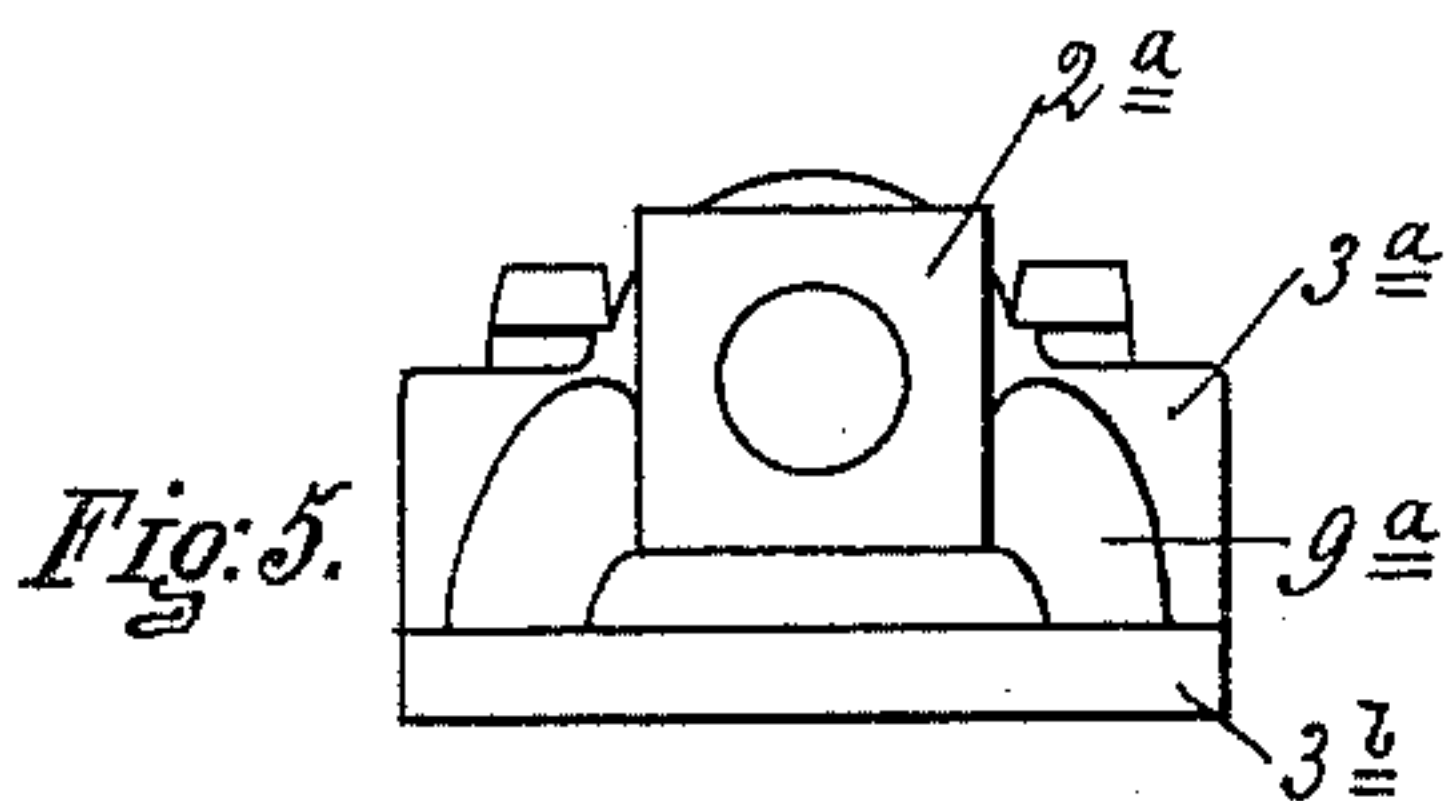


Fig. 5.

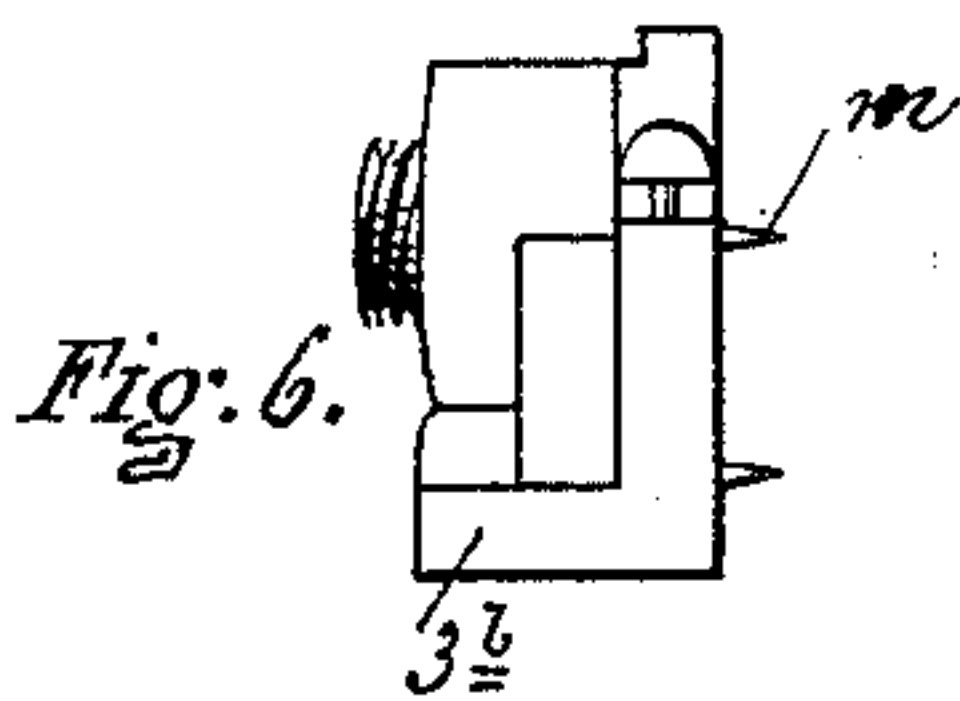


Fig. 6.

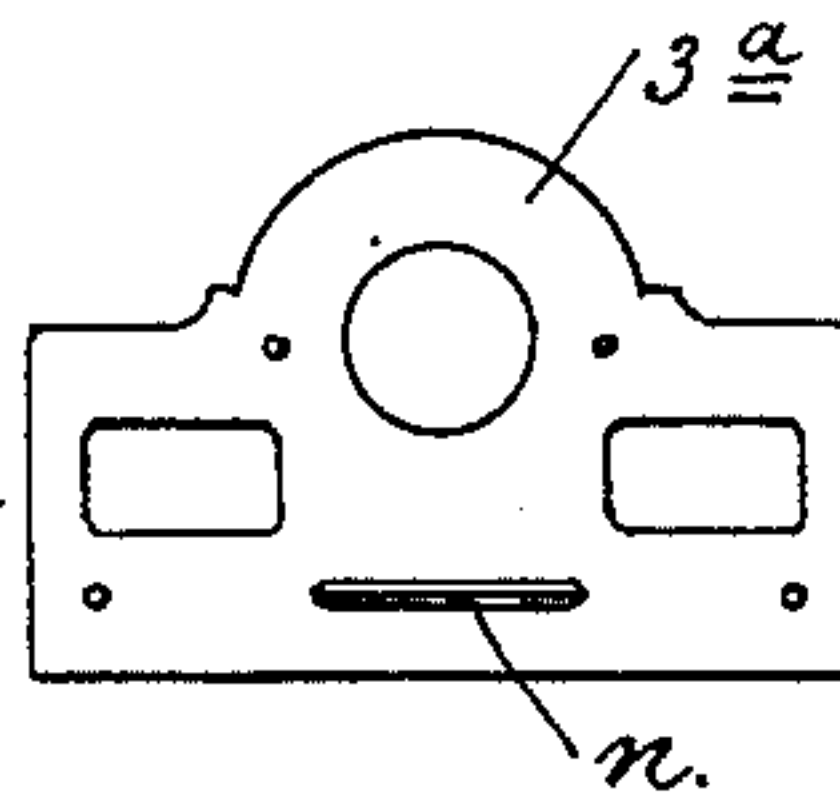


Fig. 7.

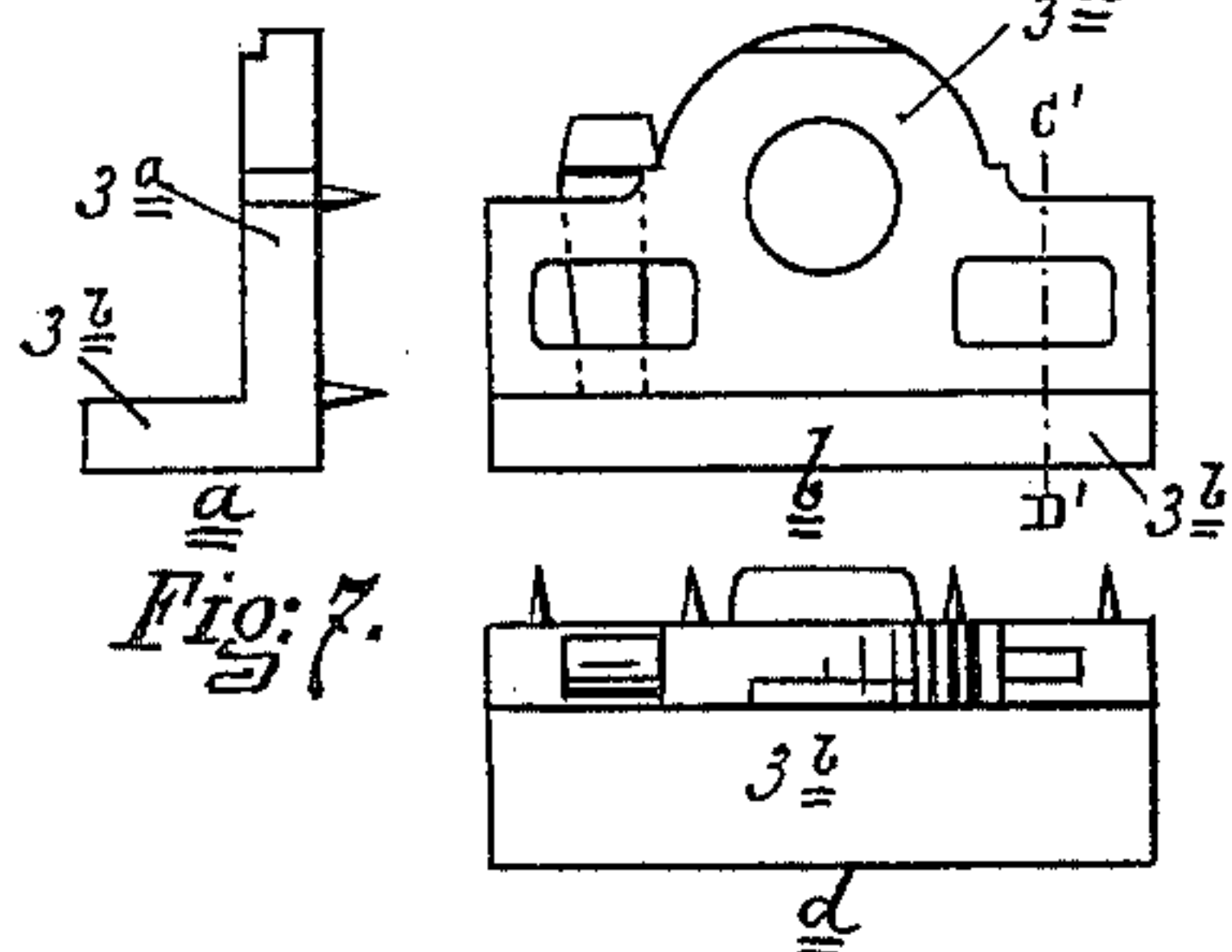


Fig. 8.

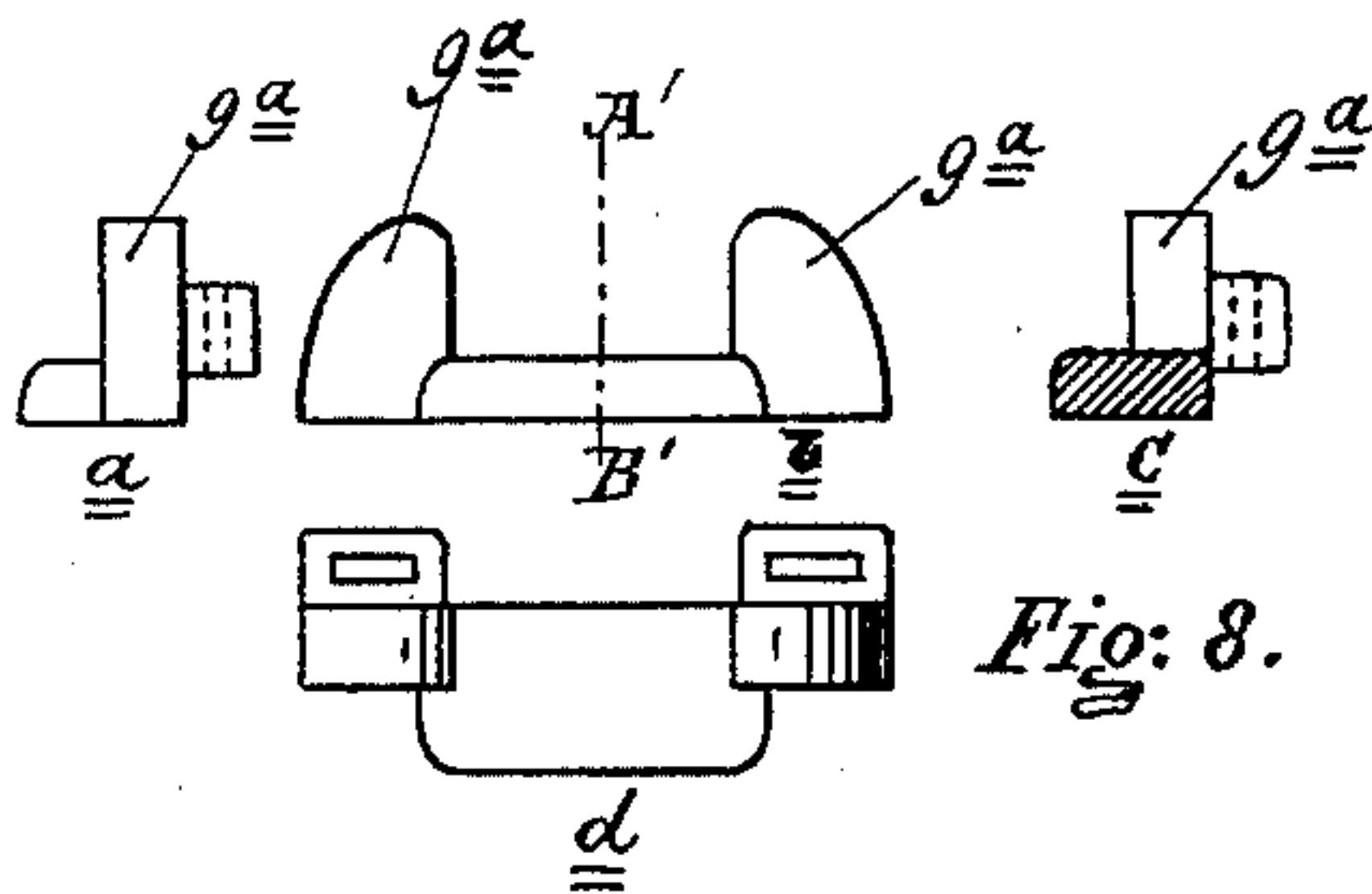
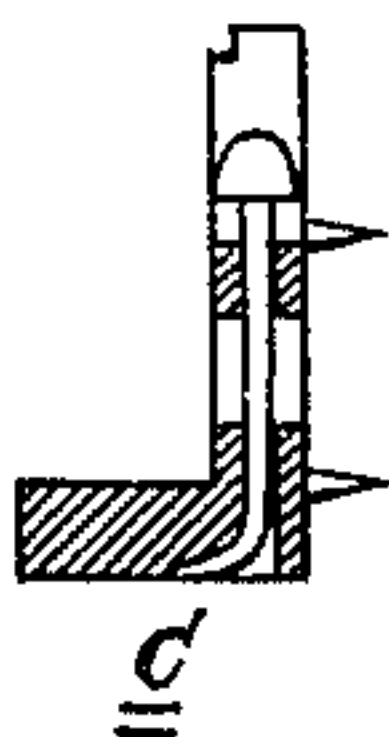


Fig. 10.

WITNESSES.
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UNITED STATES PATENT OFFICE.

HARRY G. PAINE, OF UTICA, NEW YORK, ASSIGNOR OF ONE-HALF TO JOHN WELCH, OF SAME PLACE.

NUT-LOCK.

SPECIFICATION forming part of Letters Patent No. 460,988, dated October 13, 1891.

Application filed December 11, 1890. Serial No. 374,326. (No model.)

To all whom it may concern:

Be it known that I, HARRY G. PAINE, of Utica, in the county of Oneida and State of New York, have invented certain new and
5 useful Improvements in Nut-Locks; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form part of this specification.

My invention relates to an improvement in
15 nut-locks.

In the drawings which accompany and form part of this specification, and in which similar letters and figures of reference refer to corresponding parts in the several views,
20 Figure 1 shows my nut-lock as applied to a railway-rail. Fig. 2 shows the same on the cross-section of the rail. Figs. 3 and 4 show parts in detail. Fig. 5 shows a front elevation of the lock adapted to be applied to a
25 wood surface. Fig. 6 shows the same at right angles from the position shown in Fig. 5. Figs. 7, 8, and 9 show details of construction relating to the construction shown in Fig. 5.

Referring more specifically to the reference
30 letters and numerals marked on the drawings, 1 indicates the screw-threaded bolt to which the nut-lock is applied. 2 is the nut, screw-threaded to work on the screw-threads of the bolt. 3 indicates the retaining-piece, having
35 an opening 4, adapted to receive the bolt and provided with projecting ears 4^a 4^a, having openings 5 5, which openings 5 are spanned by securing-pin 6, which passes through openings 7 7 in the vertical line of the nut-lock.
40 The openings 5 5 are adapted to receive perforated projecting ears 8 of the locking-piece 9, which locking-piece 9 is of such shape on its upper side as to engage or conform to the shape of the nut that it is designed to lock,
45 and at its lower side it is preferably of form to coincide with the surface on which it is adapted to rest. The securing-pin 6 is preferably provided with a shoulder-head, as shown at 6^a, which shoulder is adapted to engage on a shoulder *x* of the nut-lock, so that
50 the pin cannot be driven entirely down, and

having it so that a claw-bar can be readily inserted under the head to withdraw the pin. The lower portion of the opening in the piece 3, through which the pin 6 passes, is rounded
55 outward, as will be seen at *y*, so that when the pin 6 is driven home the lower end of the pin, which is preferably thin and malleable, will be turned or clinched upward around the part *y* to secure the pin in position, so
60 that it will not jar out and cannot be removed without a tool for the purpose. On the upper edge of the piece 3 I provide a line or ledge, as shown at *f*, so that when the nut is applied
65 to the bolt and one side is made to conform to the line or ledge *f* it may be known that in this position the nut will permit the locking-piece 9 to be applied.

In the form of construction shown at Fig. 5 and succeeding figures the foundation or
70 body-piece of the retaining-piece 3^a is provided with suitable projecting points, as *m*, and lip, as *n*, adapted to be forced into a wood surface and prevent the rotation of the part 3^a. The part 3^a is also preferably provided
75 with a ledge or shoulder, as 3^b, adapted to facilitate the placing of the retainer-piece 9^a into position when it is desired to secure the nut. The locking-piece 9^a, it will be observed, is constructed to receive a square nut, as 2^a,
80 instead of hexagonal, as shown in the previous figures. In other particulars the construction shown in Fig. 5 and succeeding figures is the same as that of the previous figures, the lower face of the part 9 being square
85 to conform to the offset or ledge 3^b.

The mode of using this nut-lock will be readily understood without special description.

It is evident that other alterations or modifications in and from the construction described may be made without departing from
90 the spirit of my invention.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with a bolt and nut, of
95 a retaining-piece having shoulders adapted to engage the surface on which the piece rests and prevent rotation thereof, and recesses or openings for receiving the projecting lugs of the locking-piece, and perforations transverse thereto for receiving the pins, and shoulders adapted to engage the shoulder of the
100

pins, a locking-piece having projecting perforated lugs, and pins for securing the locking-piece to the retaining-piece and having shouldered head, substantially as set forth.

- 5 2. The combination, with a bolt and nut, of a retaining-piece having projections adapted to engage the surface on which it rests and the projecting ledge, a locking-piece adapted to rest on the ledge and having shoulders
10 adapted to engage the nut, and perforated projecting lugs adapted to enter suitable re-

cesses or openings in the retaining-piece, and transverse perforations to the openings for the reception of the lugs diverging at the lower end from a straight line, substantially as set forth.

In witness whereof I have affixed my signature in presence of two witnesses.

HARRY G. PAINE.

Witnesses:

LOUISE S. CLARKE,
M. E. ROBINSON.