

No. 680,922.

Patented Aug. 20, 1901.

H. ILL.
OUTLET BOX.

(Application filed June 11, 1901.)

(No Model.)

2 Sheets—Sheet 1.

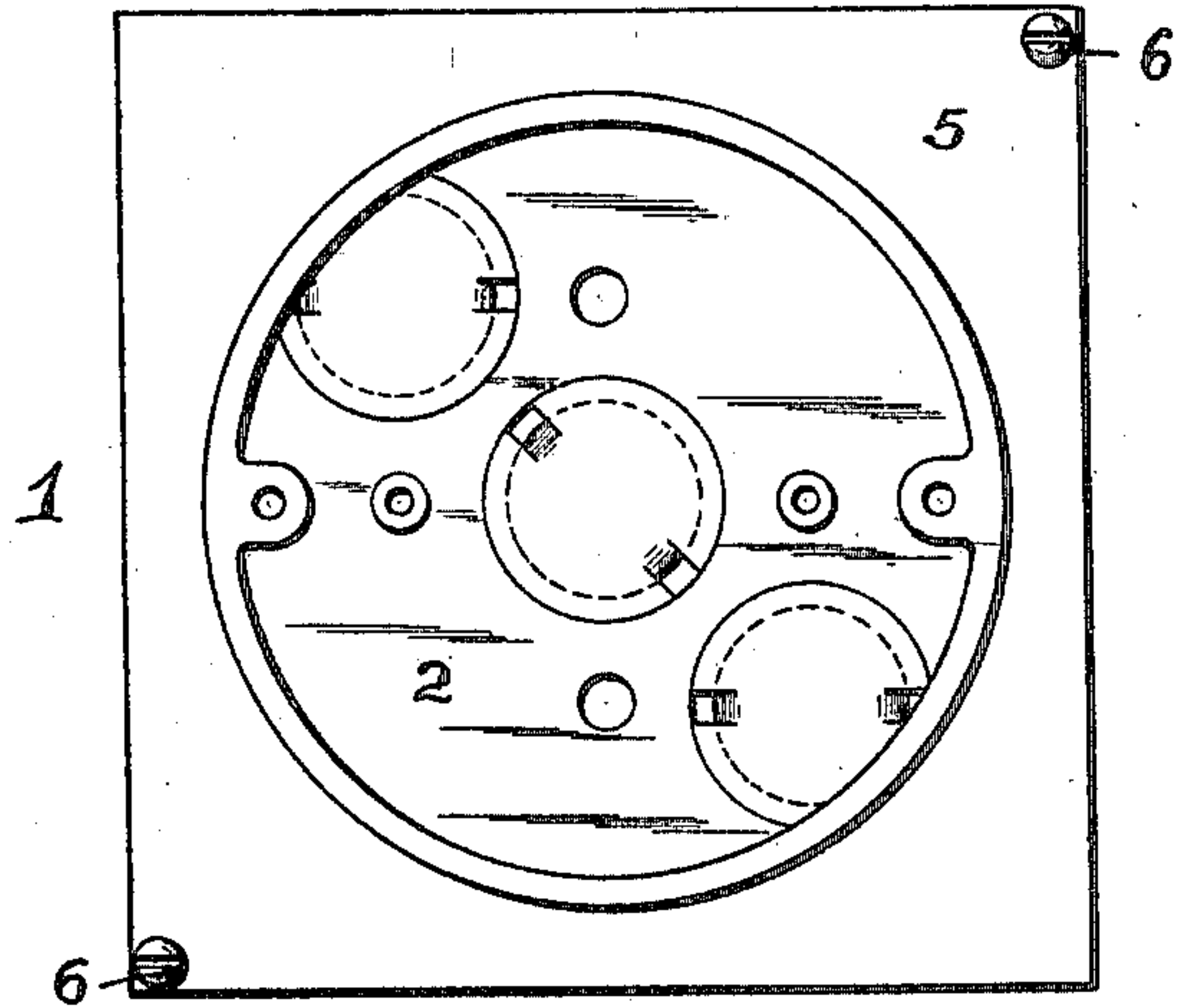


FIG. 1

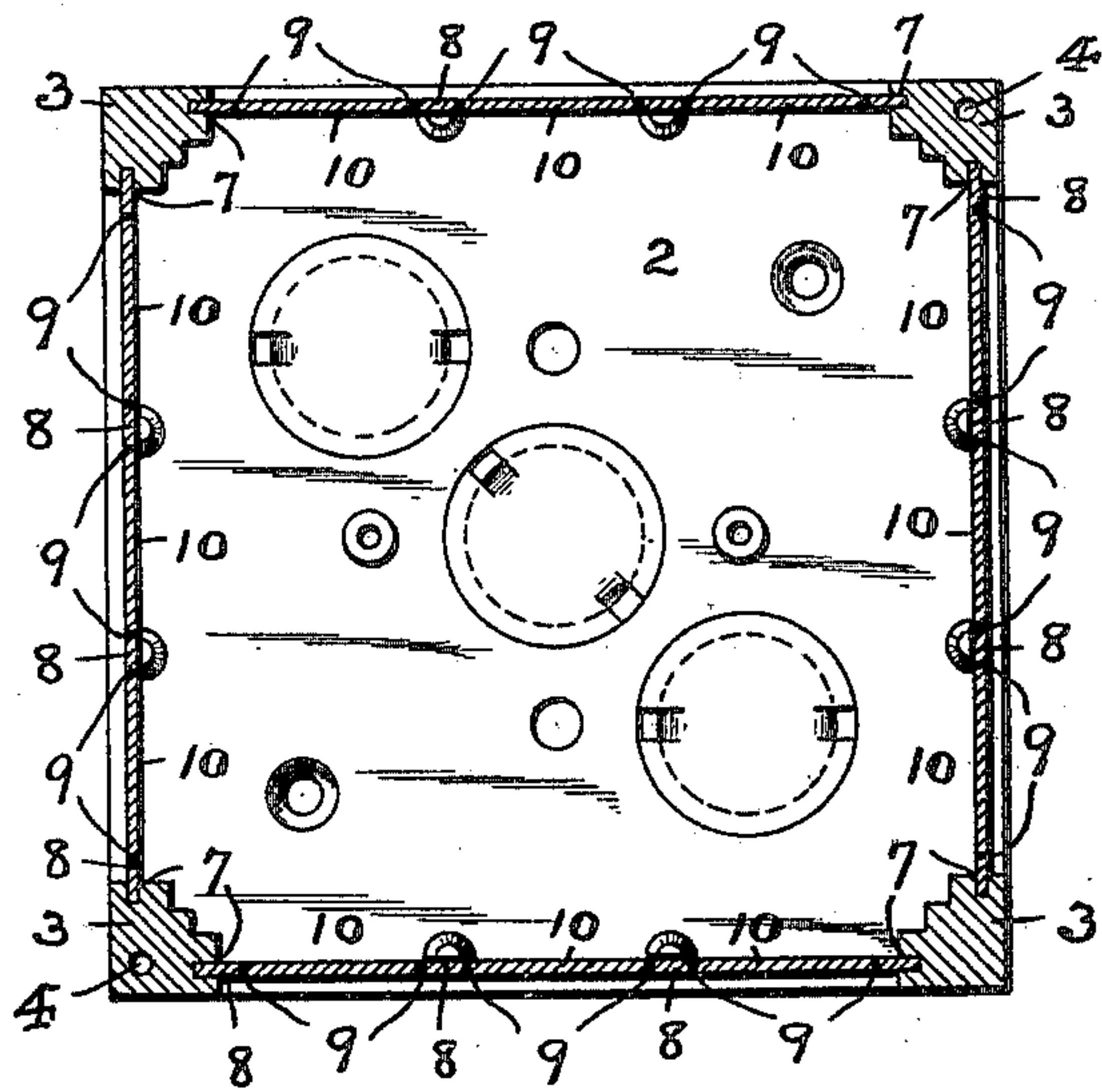


FIG. 2

WITNESSES:

W. B. Fraentzel
Geo. S. Richards

INVENTOR:

HENRY ILL,

BY *Fred C. Fraentzel,*
ATTORNEY

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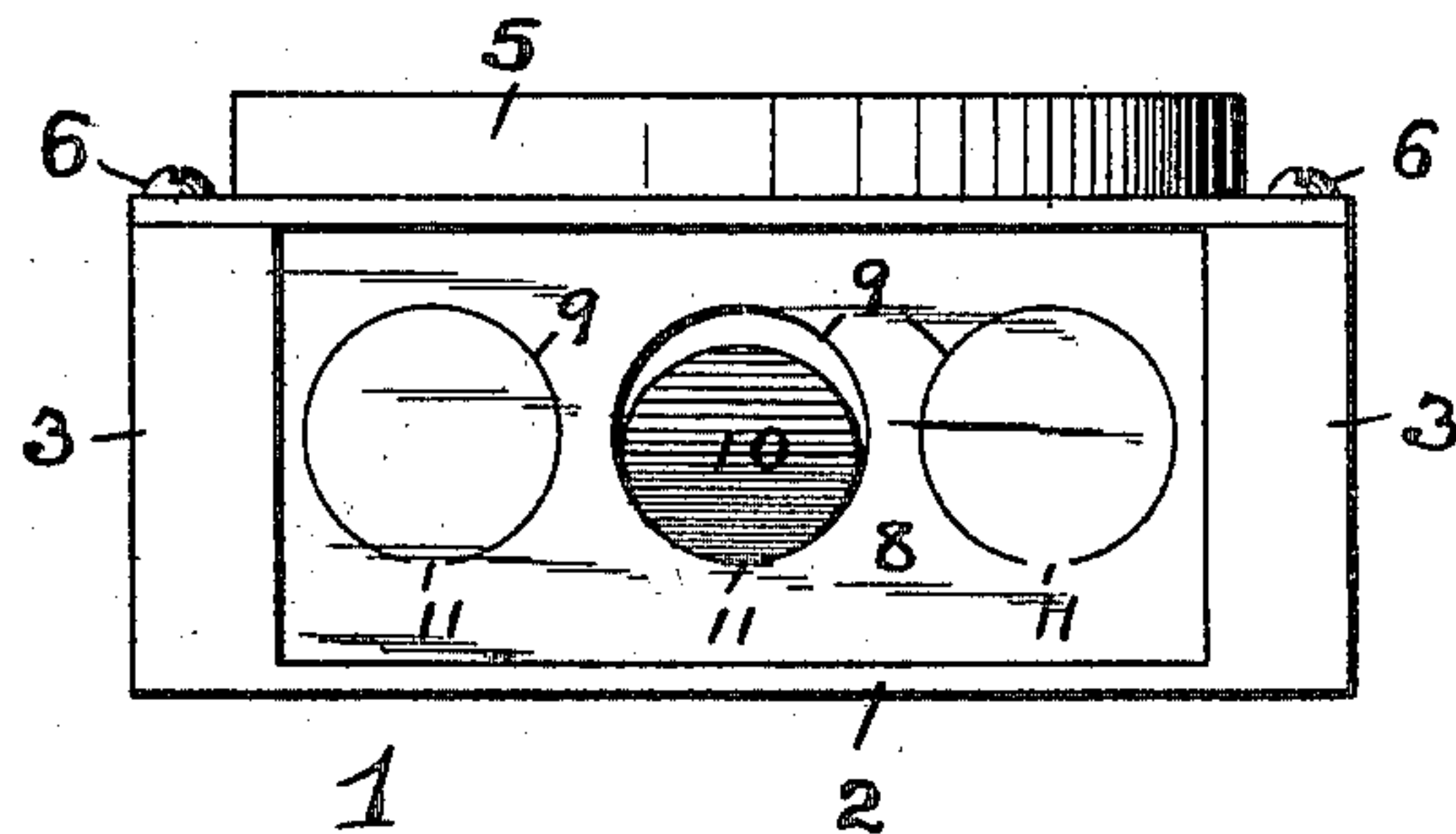


FIG. 3

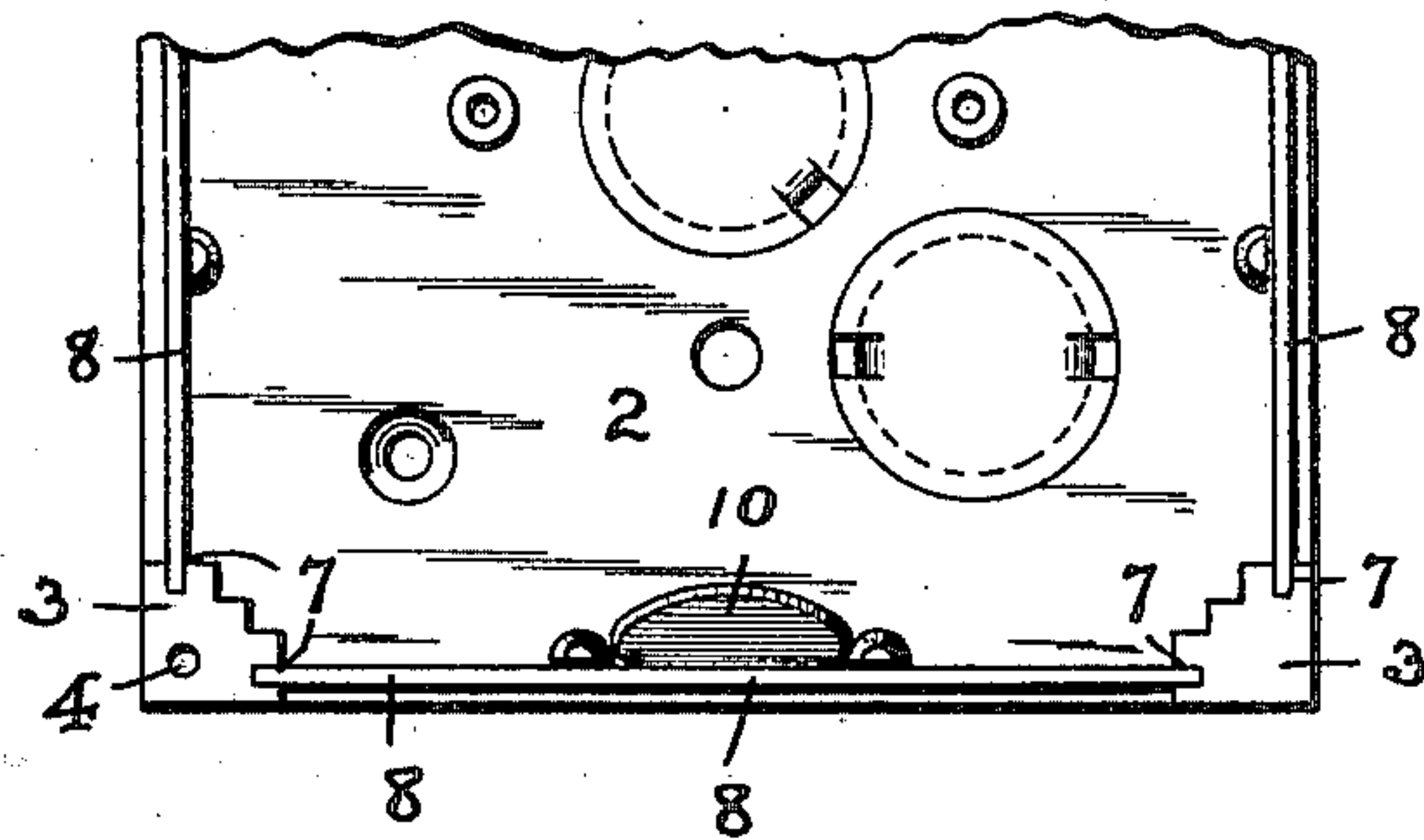


FIG. 4

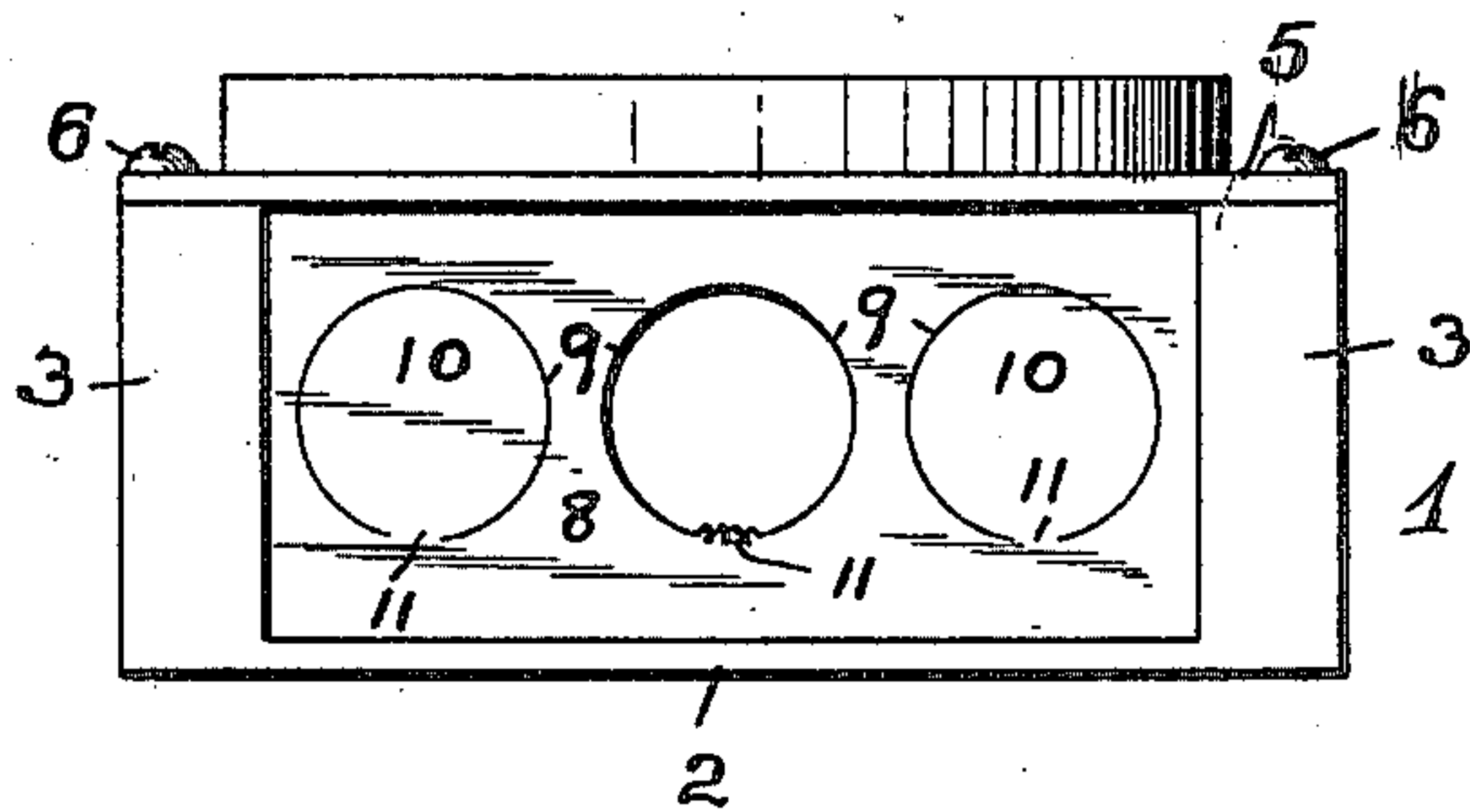
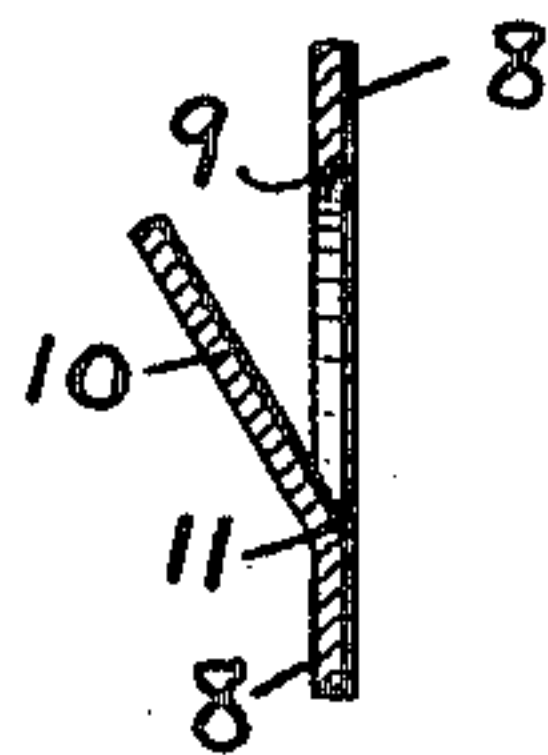


FIG. 5

FIG. 6



WITNESSES:

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UNITED STATES PATENT OFFICE.

HENRY ILL, OF NEWARK, NEW JERSEY.

OUTLET-BOX.

SPECIFICATION forming part of Letters Patent No. 680,922, dated August 20, 1901.

Application filed June 11, 1901. Serial No. 64,057. (No model.)

To all whom it may concern:

Be it known that I, HENRY ILL, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have
5 invented certain new and useful Improvements in Outlet-Boxes; 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 ap-
10 pertains to make and use the same, reference being had to the accompanying drawings, and to numerals of reference marked thereon, which form a part of this specification.

This invention relates to improvements in
15 outlet or junction boxes such as are used in buildings for making electrical connections in the electrical wiring; and the invention relates more particularly to a novel construction of outlet-box provided in its sides or
20 bottom with one or more normally-closed openings, any one or more of said openings being easily and quickly opened by forcing or breaking out the closing portion of the opening to permit of the proper connection
25 of a conduit pipe or pipes at the desired point or points.

The invention, therefore, has for its primary object the novel construction of outlet-box having one or a series of weakened por-
30 tions, whether in the sides, top, or bottom of the box, said weakened portion or portions each forming a normally-closed opening capable of being forced or broken out to form a complete opening for the reception of the
35 usual conduit-pipe, through which the electric wires are drawn into the box to enable the workman to make the proper electrical connection.

My present invention, therefore, consists
40 in the novel construction of outlet-box provided with a normally-closed opening or openings, the closing portion of each opening being capable of being forced out or broken away to provide an opening having a perfect
45 circumferential edge free from any ragged edges which might abrade or tear the insulation of the wires when the latter are drawn in or out of the said opening thus made.

The invention consists, furthermore, in the
50 various novel arrangements and combina-

tions of the parts, all of which will be hereinafter fully described and then finally embodied in the various clauses of the claim.

In the accompanying drawings, Figure 1 represents a plan or top view of one form of
55 outlet-box; and Fig. 2 is a horizontal section of the same, taken directly through the several normally-closed openings in the sides of the box. Fig. 3 is a side view of the outlet-box with one of the closing devices for nor-
60 mally closing the conduit-opening partly forced from its closing position adapted to be readily broken away by hand; and Fig. 4 is a plan view of a portion of the outlet-box,
65 its cover having been removed, illustrating the partially-removed position of said closing device in the side of the box. Fig. 5 is a side elevation of an outlet-box provided in its
70 sides with a series of normally-closed openings, but showing the one opening entirely free from the closing device. Fig. 6 is a vertical section of a sheet-metal side for an outlet-box, said section being taken through one
75 of the openings and through the partially-removed closing device, which is integrally connected at an arbitrary point in the circumferential edge of the opening with the main
body of the said side plate.

Similar numerals of reference are employed in all of the said above-described views to in-
80 dicate corresponding parts.

In the said drawings, 1 indicates the complete outlet-box, which consists, essentially, of a skeleton frame comprising the base or back 2 and the posts 3 at the corners thereof.
85 These posts 3, as will be seen from an inspection of Fig. 2, are provided with the usual screw-holes 4 for securing upon the said posts by means of the screws 6 the usual form of
90 top cover 5. Each post 3 is provided with recesses or grooves 7, in which are arranged the ends of certain side plates 8, substantially as illustrated in Figs. 2 and 4. These plates
8 are usually made of sheet metal; but they may be cast or may be made of any suitable
95 material. It will also be understood that the said side plates may be otherwise arranged and held or secured in their respective positions between the posts of the said skeleton
frame to form the sides of the box, as will be 100

clearly evident. The side plates, which in the present case are made from sheet metal, have a portion or portions stamped out by means of a suitable stamping-out die to be employed, said portions being of a circular outline or configuration, as shown in Figs. 3 and 5, the parts cut in such manner almost forming a complete circle 9, as shown. In this manner each side plate 8 can be formed with one or more openings of a circular marginal configuration, each opening being normally closed by the stamped part, which forms a closing-disk 10 and which is integrally connected by means of the remaining and uncut portion 11 with the main body of the plate 8, as clearly illustrated.

When the plates 8 are arranged in the sides of the skeleton frame, each disk 10 closes its opening, whereby the sides of the box are rendered imperforate. Should it be desired to provide an opening in the box into and through which electric wires are to be drawn, all that is necessary is to strike the closing-disk 10 a blow by means of a hammer or other tool, whereby the disk 10 will be forced from its normal closing relation with its opening inclining at an angle, as indicated in Figs. 3, 4, and 6. The disk 10 can then be readily removed by bending it back once or twice by hand, causing it to break at the weakened portion or connection 11. A complete and clearly-defined circular opening is thus produced, except, perhaps, for a very slight rough surface at the point where the disk 10 has been broken from its integral holding connection 11 with the main body of the side plate 8. This is no serious objection, since this roughened surface in the present drawing in Fig. 5 is greatly exaggerated, and in practice the roughness, if any, is hardly perceptible. A complete opening is thus provided through which the insulated wires can be drawn without any danger of abrasion to the insulation. Of course it will be clearly understood that the said plates 8 and the disks 10 and the weakened portions 11 may be formed of cast metal; but for cheapness of construction sheet metal is preferred.

It will be clearly understood that my invention may be employed with any usual form of outlet-box and the base may, if desired, be provided with one or more openings, which are normally closed by means of disks 10, connected with the main body portion of said base by weakened portions or connections 11.

Having thus described my invention, what I claim is—

1. An outlet-box for electric wires or other fixtures, said box being provided with one or more normally-closed openings, each opening having a closing device, integrally connected with the main body of the box by means of a weakened portion, whereby said closing device can be bent at an angle to provide a partial opening, and can be finally broken away at said weakened portion to form a

complete opening, substantially as and for the purposes set forth.

2. An outlet-box for electric wires or other fixtures, said box being provided with a side having cut portion 9, and a closing-disk in the opening formed by said cut portion, said disk being integrally connected by means of a weakened portion 11 with the main body portion of the side, the said weakened portion 11 being adapted to be bent, whereby said closing-disk can be arranged at an angle to form a partial opening, and said weakened portion being capable of being broken away to form a complete opening, substantially as and for the purposes set forth.

3. An outlet-box for electric wires or other fixtures, consisting, essentially, of a base and posts, sheet-metal sides arranged between said posts and forming with the base the body of said box, one or more of said sides being provided with one or more normally-closed openings, and each opening having a closing device connected with the main body of the side by means of a weakened portion, the said weakened portion being adapted to be bent, whereby said closing device can be arranged at an angle to form a partial opening, and said weakened portion being capable of being broken away, substantially as and for the purposes set forth.

4. An outlet-box for electric wires or other fixtures, consisting, essentially, of a base and posts, sheet-metal sides arranged between said posts and forming with the base the body of said box, one or more of said sides being provided with one or more normally-closed openings, and each opening having a closing device integrally connected with the main body of the side by means of a weakened portion, whereby the closing device can be bent at an angle, and can be finally broken away at said weakened portion to form a complete opening, substantially as and for the purposes set forth.

5. An outlet-box for electric wires or other fixtures, consisting, essentially, of a base and posts, sheet-metal sides arranged between said posts and forming with the base the body of said box, each side having a series of cut portions 9, and a closing-disk in the opening formed by each cut portion, each disk being integrally connected by means of a weakened portion 11 with the main body portion of the side, the said weakened portion 11 being adapted to be bent, whereby said closing-disk can be arranged at an angle to form a partial opening, and said weakened portion being capable of being broken away to form a complete opening, substantially as and for the purposes set forth.

In testimony that I claim the invention set forth above I have hereunto set my hand this 7th day of June, 1901.

HENRY ILL.

Witnesses:

FREDK. C. FRAENTZEL,
GEO. D. RICHARDS.