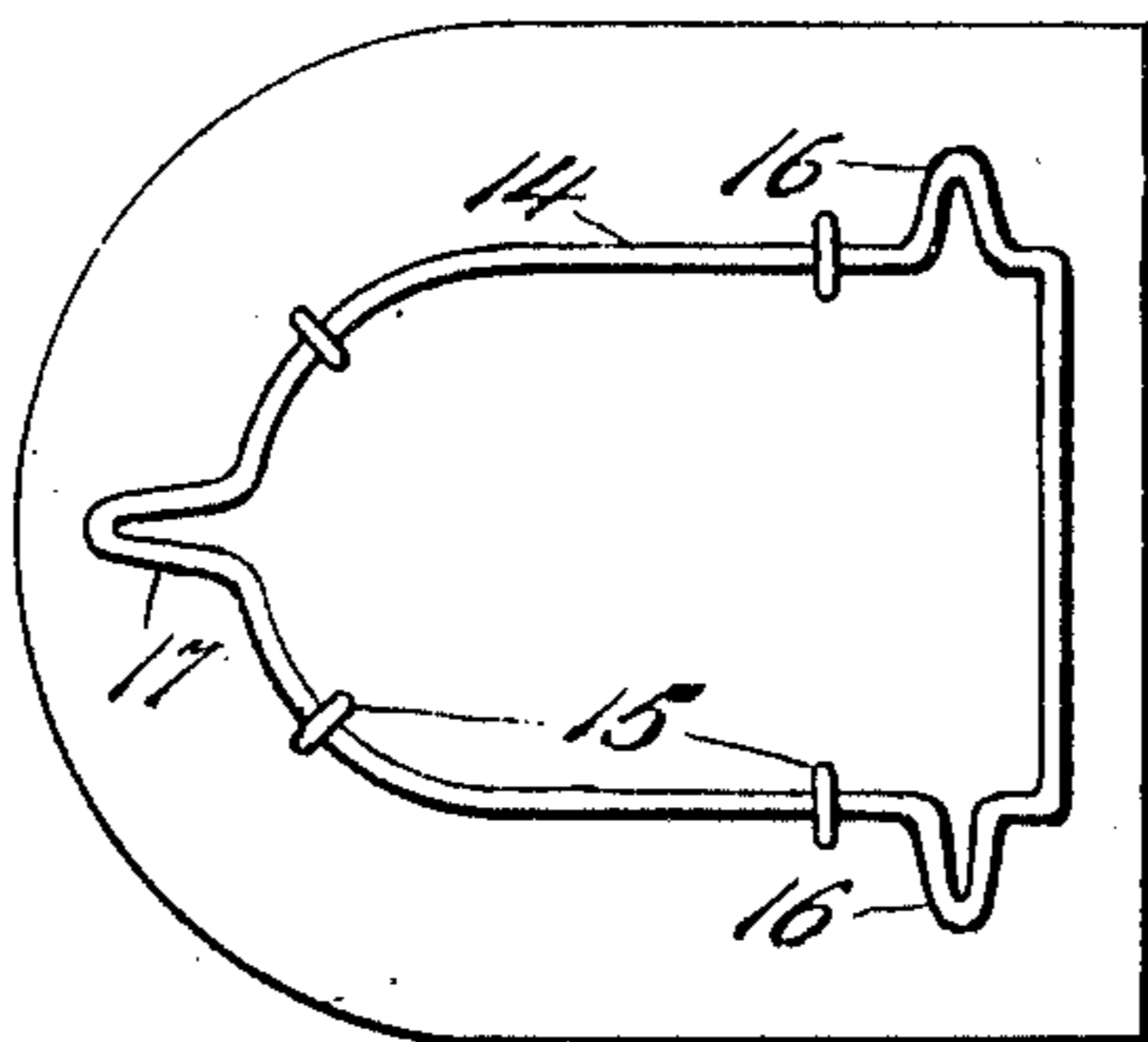
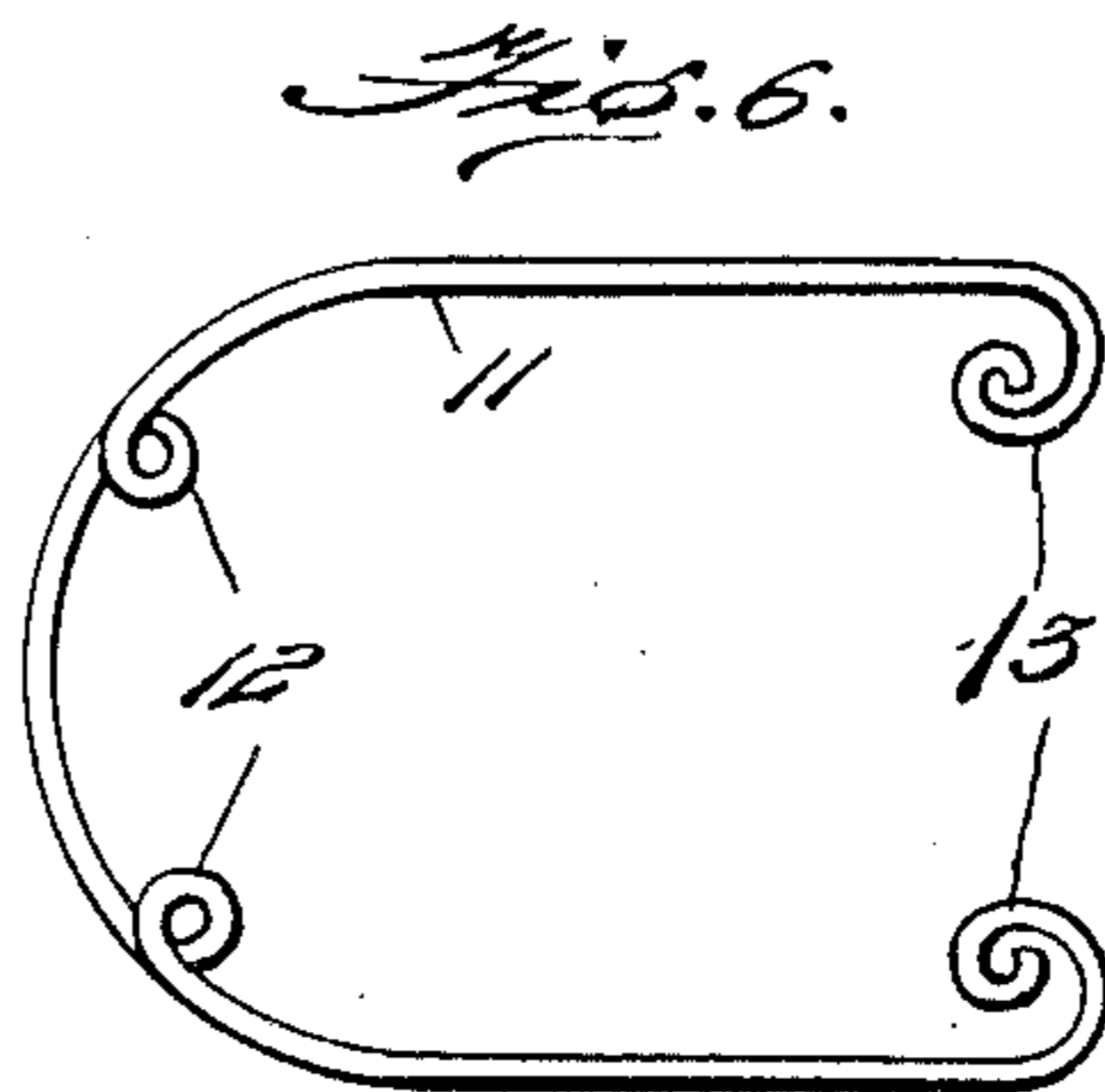
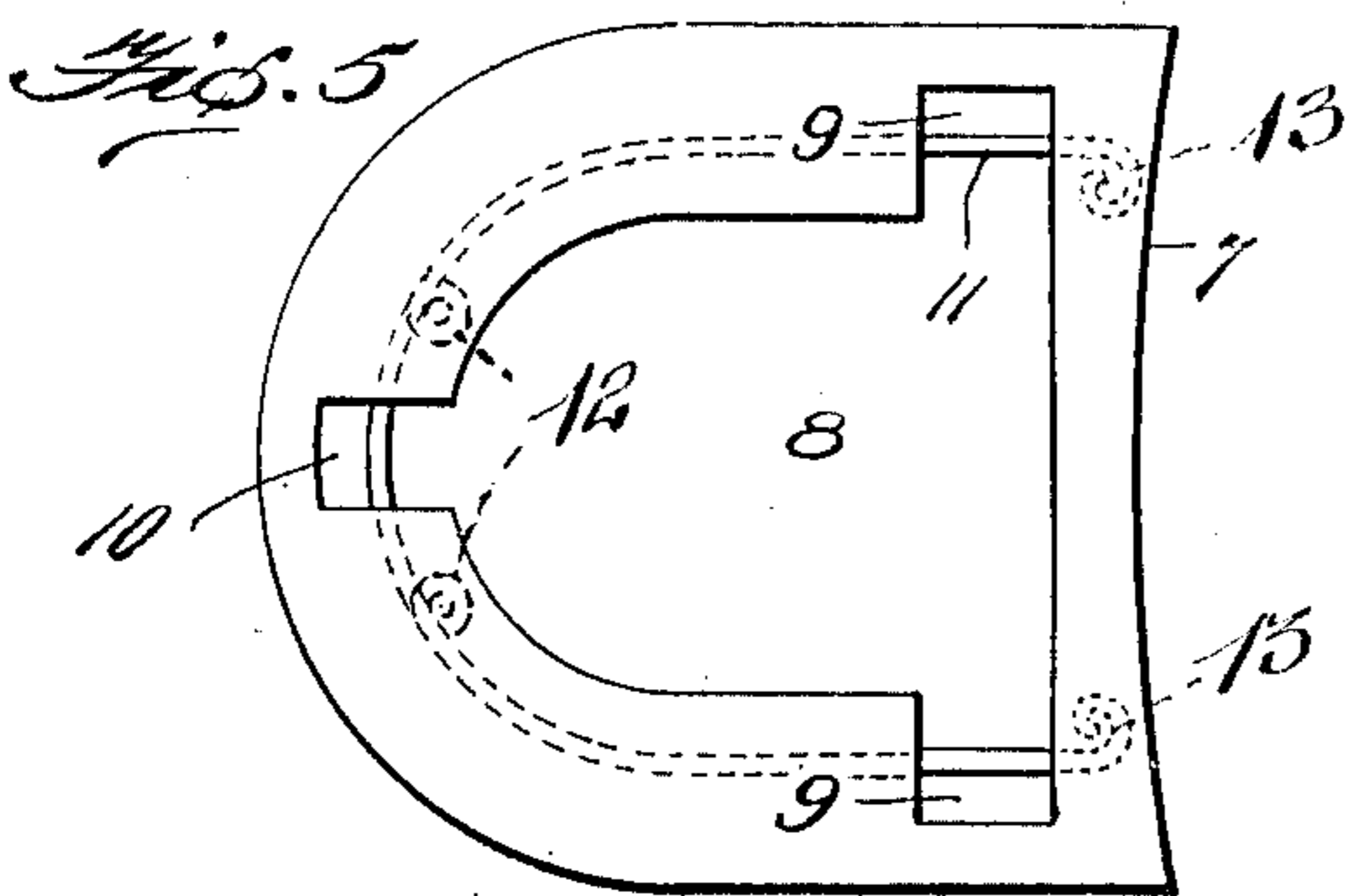
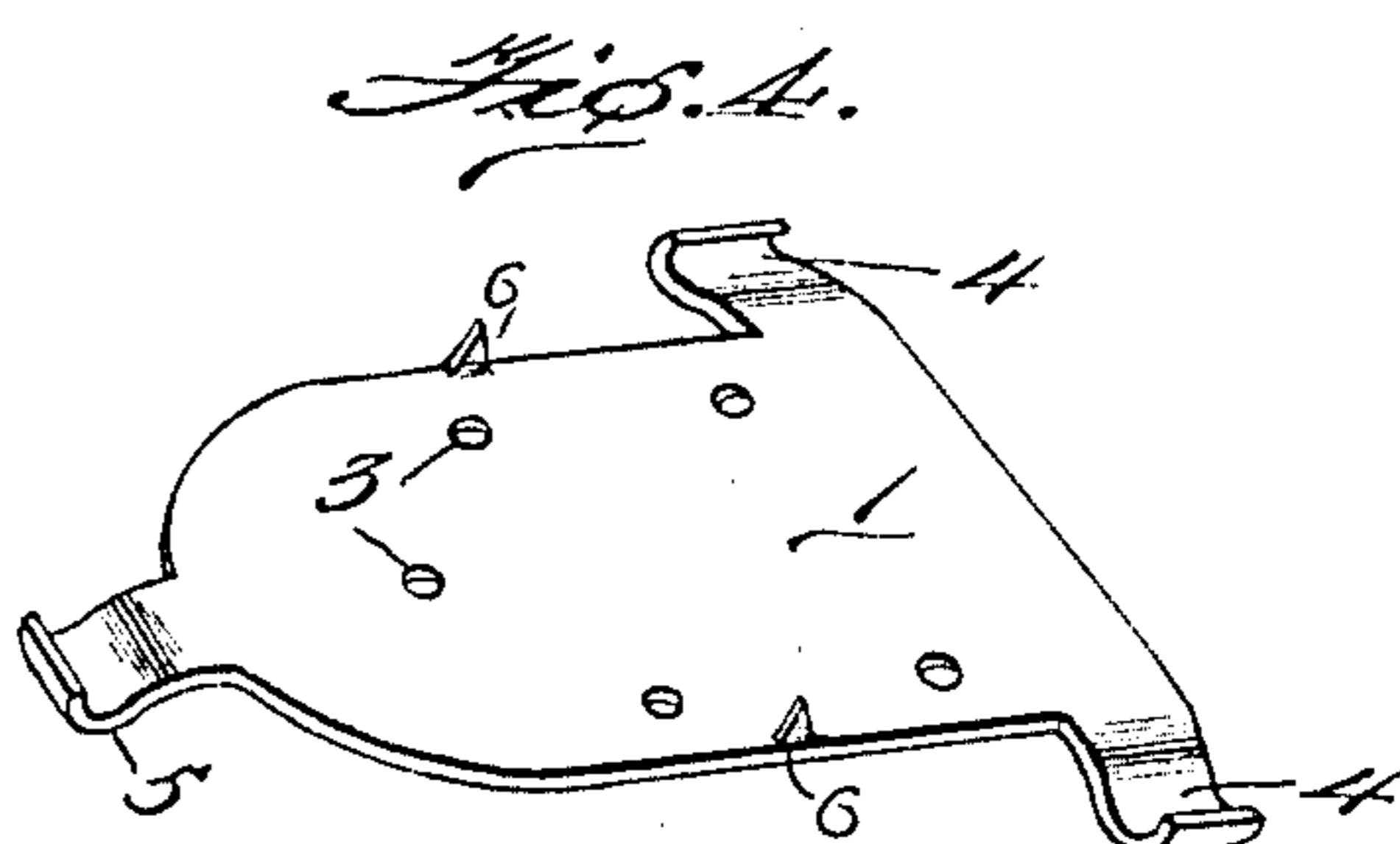
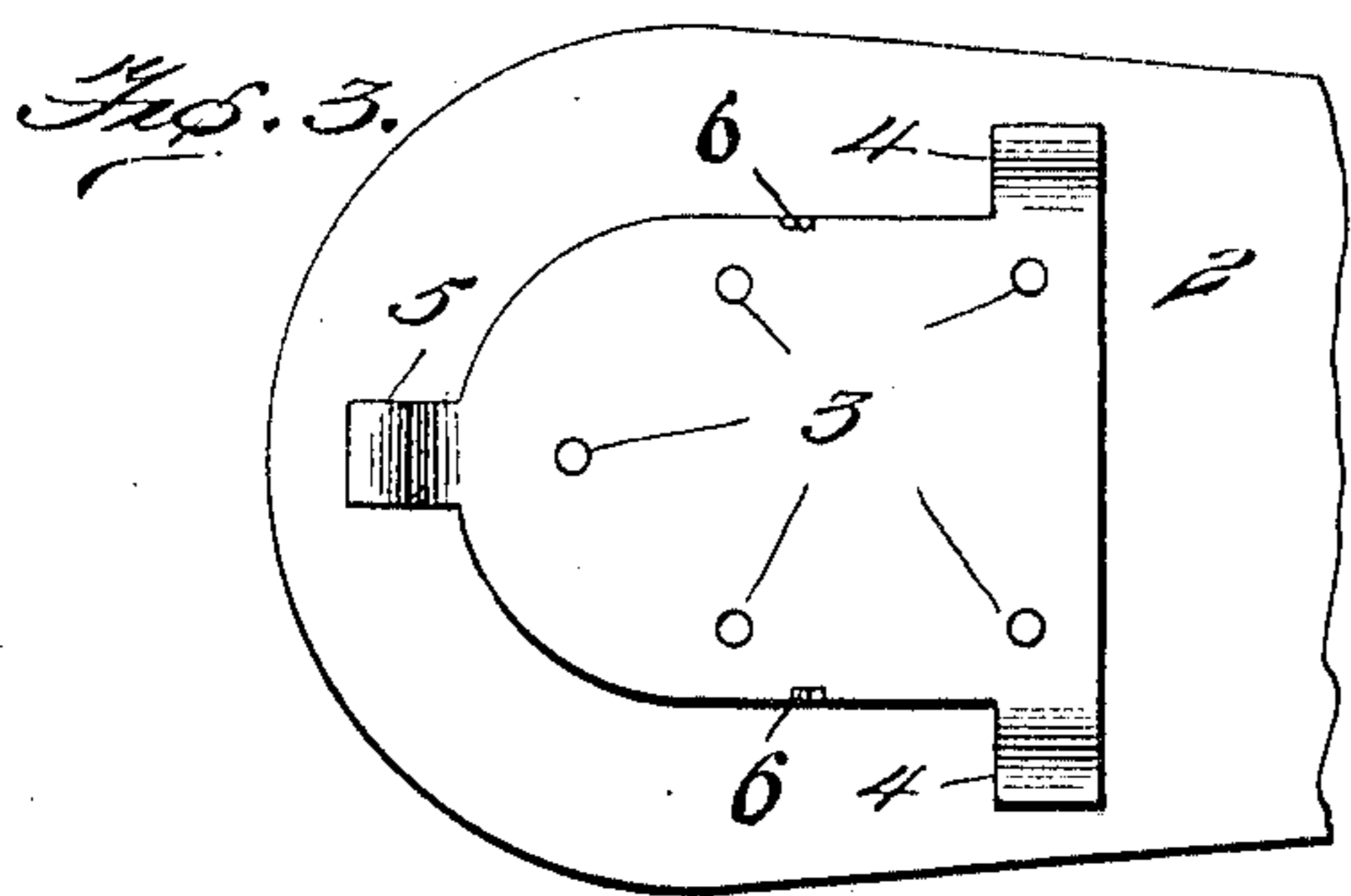
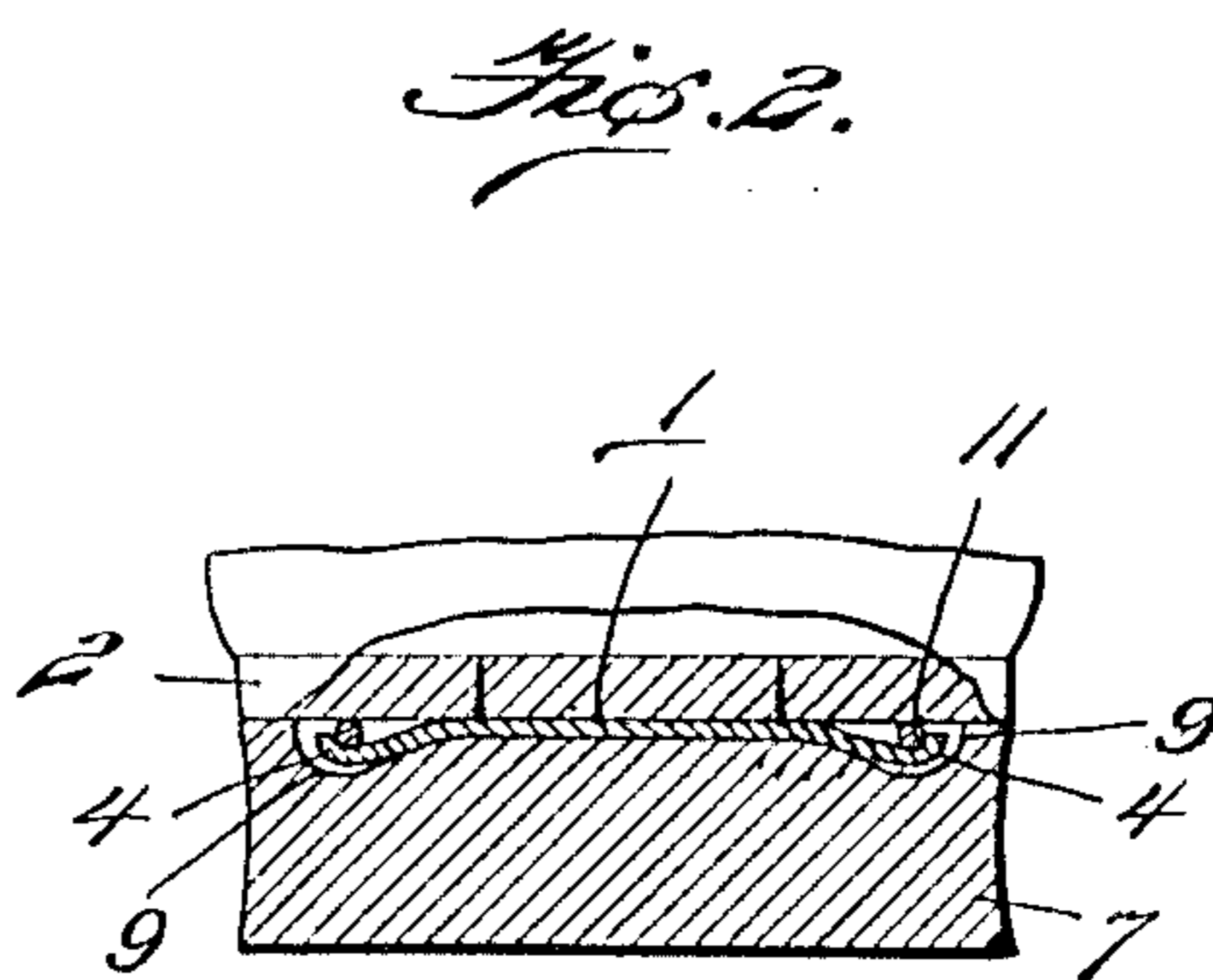
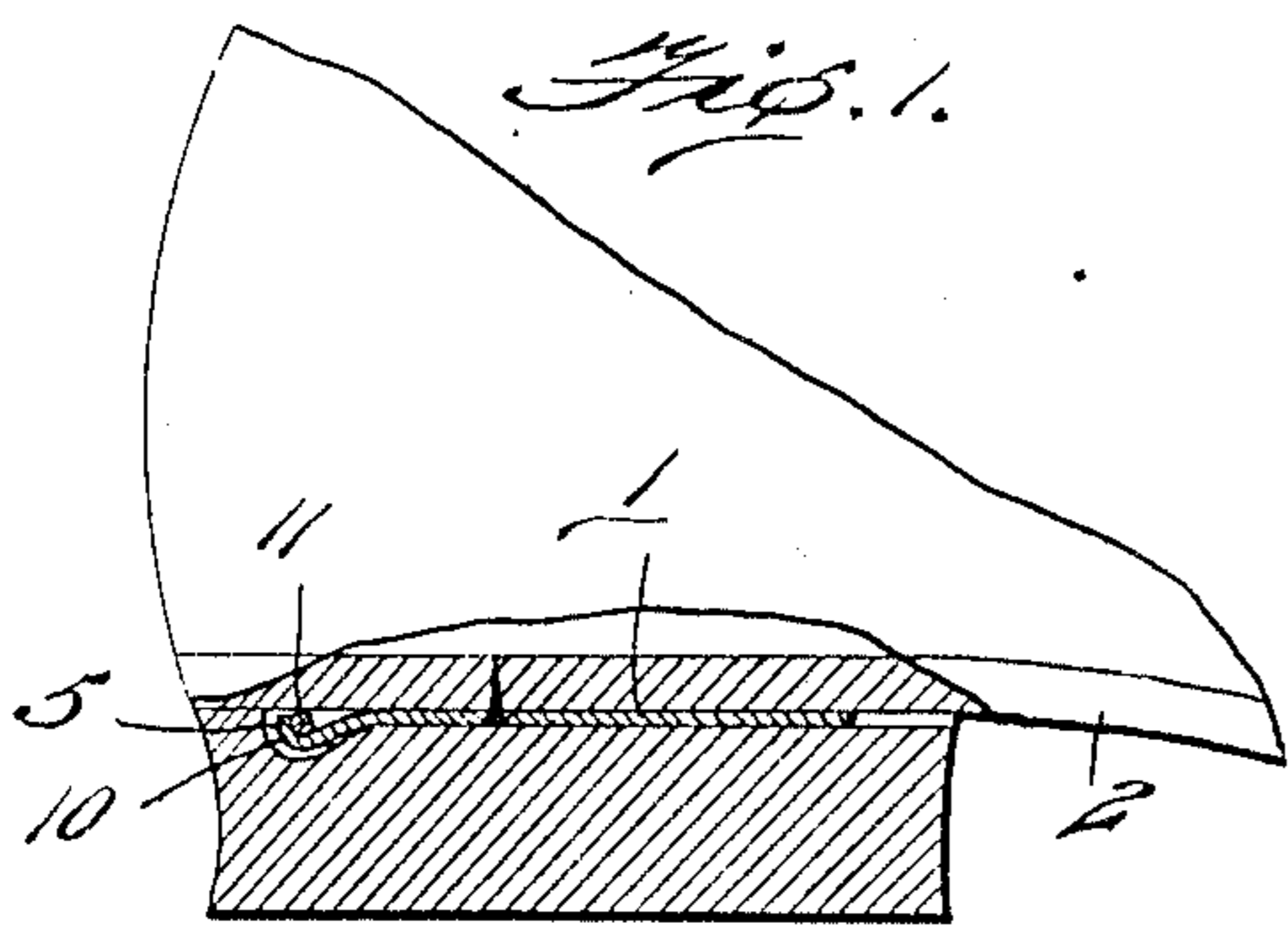


F. L. ROUSE.
HEEL ATTACHING MEANS FOR SHOES.
APPLICATION FILED MAR. 25, 1909.

947,353.

Patented Jan. 25, 1910.



Witnesses
B. M. Offutt,
C. H. Griesbauer.

Inventor
Frank L. Rouse
by *A. B. Wilson & Co.*
Attorneys

UNITED STATES PATENT OFFICE.

FRANK L. ROUSE, OF SOMERVILLE, MASSACHUSETTS, ASSIGNOR TO LIGHTENING
DETACHABLE RUBBER HEEL CO., OF BOSTON, MASSACHUSETTS, A CORPORATION
OF MAINE.

HEEL-ATTACHING MEANS FOR SHOES.

947,353.

Specification of Letters Patent.

Patented Jan. 25, 1910.

Application filed March 25, 1909. Serial No. 485,732.

To all whom it may concern:

Be it known that I, FRANK L. ROUSE, a
citizen of the United States, residing at
Somerville, in the county of Middlesex and
5 State of Massachusetts, have invented certain
new and useful Improvements in Heel-At-
taching Means for Shoes; and I do declare
the following to be a full, clear, and exact
description of the invention, such as will
10 enable others skilled in the art to which it
appertains to make and use the same.

This invention relates to improvements in
shoe heels and means for securing the same
to a shoe.

15 The object of the invention is to provide
an improved construction of heel and means
whereby the same may be readily attached
to and removed from a shoe.

With the foregoing and other objects in
20 view, the invention consists of certain novel
features of construction, combination and
arrangement of parts, as will be more fully
described and particularly pointed out in
the appended claims.

25 In the accompanying drawings, Figure 1
is a central longitudinal sectional view of a
shoe heel, showing the same secured to the
shoe sole; Fig. 2 is a vertical cross sectional
view of the same taken through the lateral
30 heel engaging devices of the holding mem-
ber; Fig. 3 is a bottom plan view of a por-
tion of a shoe showing the heel holding mem-
ber secured thereto; Fig. 4 is a perspective
view of a holding member removed from
35 the shoe sole; Fig. 5 is a plan view of the
heel, showing the attaching member carried
thereby; Fig. 6 is a plan view of the attach-
ing member removed from the heel; Fig. 7
is a plan view of a portion of a shoe sole,
40 showing a modified form of the holding
member.

Referring more particularly to the draw-
ings, 1 denotes a holding member which is
permanently secured to the underside of the
45 shoe sole 2 at the rear or heel end of the
same, as shown. The member 1 is prefer-
ably in the form of a flat metal plate having
formed therein a series of screw holes 3 to
receive fastening screws whereby the same
50 is attached to the sole of the shoe. The plate
1 corresponds somewhat in shape to the
shape of the heel and is provided at its for-
ward end and on each edge with laterally
projecting lugs 4 which are preferably in

the form of downwardly projecting hooks. 55
The plate or member 1 is also provided at
its rear end with a rearwardly projecting
hook-shaped lug 5. In the opposite side
edges of the member 1 are formed marking
and temporary attaching points 6 which are 60
preferably cut from the metal forming the
plate and are bent upwardly in position to
engage the sole when the holding member,
which has been previously engaged with
the heel, is applied to the sole, thus 65
marking the exact position for securing
the holding plate to the sole. The holding
member, when thus applied to the sole, may
be pressed into engagement therewith with
sufficient force to cause the points 6 to secure 70
the holding plate to the sole, after the heel
has been disengaged so that the holding
member may be permanently fastened by
the fastening screws without further fitting
or measuring and when permanently fas- 75
tened, after thus being temporarily secured,
will be in exact position to receive and retain
the heel in its proper place on the sole.

The heel 7 is formed in its upper or inner
side with a recess 8 corresponding in shape 80
to the holding member 1 and in said heel
is also formed laterally extending recesses
9 and a central rearwardly extending recess
10, said recesses 9 and 10 communicating
with the main recess 8. Arranged in the 85
heel is an attaching member 11 which is
preferably in the form of a wire rod bent
into proper shape to cross the recesses 9
and 10 and thereby form locking bars which
are engaged with the hook-shaped lugs 4 and 90
5 on the holding member 1. The attaching
device 11 is preferably bent to form rear
coils 12 which engage the heel at opposite
sides of the rear recess 10. The attaching
member 11 also has its ends bent in the form 5
of coils 13 which engage the heel adjacent
to each of the recesses 9. The coils 12 and
13 are provided to form a firmer bearing for
the attaching member 11 in the heel. When
the heel is formed of rubber or plastic com- 100
position, the attaching member is preferably
molded therein, in position to provide the
locking bars for receiving the lugs 4 and 5
of the holding member, as hereinbefore de-
scribed. When the heel is engaged with the 105
shoe sole, the holding member 1 will enter
the recess 8, while the lugs 4 and 5 enter
the recesses 9 and 10 and are engaged with

the locking bars of the attaching member which cross the slots thereby securely holding the heel in place on the shoe sole.

In Fig. 7 of the drawings is shown a modified form of holding member, said member being here shown in the form of a wire rod 14, which is substantially in the shape of the heel. The rod 14 is secured to the underside of the sole by means of staples or other suitable fastening devices 15 and said rod is bent on its opposite sides adjacent to its forward end to form laterally projecting lugs 16 adapted to be engaged with the locking bars in the recesses 9 of the heel. The rod 14 is also bent at its rear end to form a rearwardly projecting lug 17 which is adapted to be engaged with the locking members in the recesses 10 of the heel, thereby securely fastening the heel onto the shoe. By means of a holding and attaching mechanism constructed as herein shown and described, a heel may be quickly and easily engaged with or removed from the shoe sole without the use of nails or similar fastening devices which interfere with the cushioning qualities of the heel, when formed of rubber. By thus detachably securing the heels to the shoe, the former, when worn or run off on one side, may be reversed or applied to the opposite shoe, thus causing the heels to wear down evenly.

From the foregoing description, taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advan-

tages of the invention, as defined in the appended claims.

Having thus described my invention, what I claim is:

1. In a shoe, a holding member permanently secured thereto, said member comprising a metal plate having radially projecting hook-shaped lugs and marking points formed thereon to mark and temporarily attach the plate to the shoe sole, a heel having a central recess and a series of radial recesses communicating with said central recess, an attaching member comprising a rod bent into substantially the shape of said main recess and having formed therein coils, said attaching rod being arranged in the heel to span the radial recesses therein and thereby form locking bars to receive the hooked lugs on said holding member.

2. In a shoe, a holding member permanently secured thereto and comprising radially projecting hook shaped portions, a heel having a central recess and a series of radial recesses communicating with said central recess, an attaching member comprising a rod bent substantially the shape of the main recess and being arranged in the heel to span the radial recesses therein, and thereby form locking bars to receive the hook shaped portions on said holding member.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

FRANK L. ROUSE.

Witnesses:

EVERETT H. HADLEY,
U. G. WILSON.