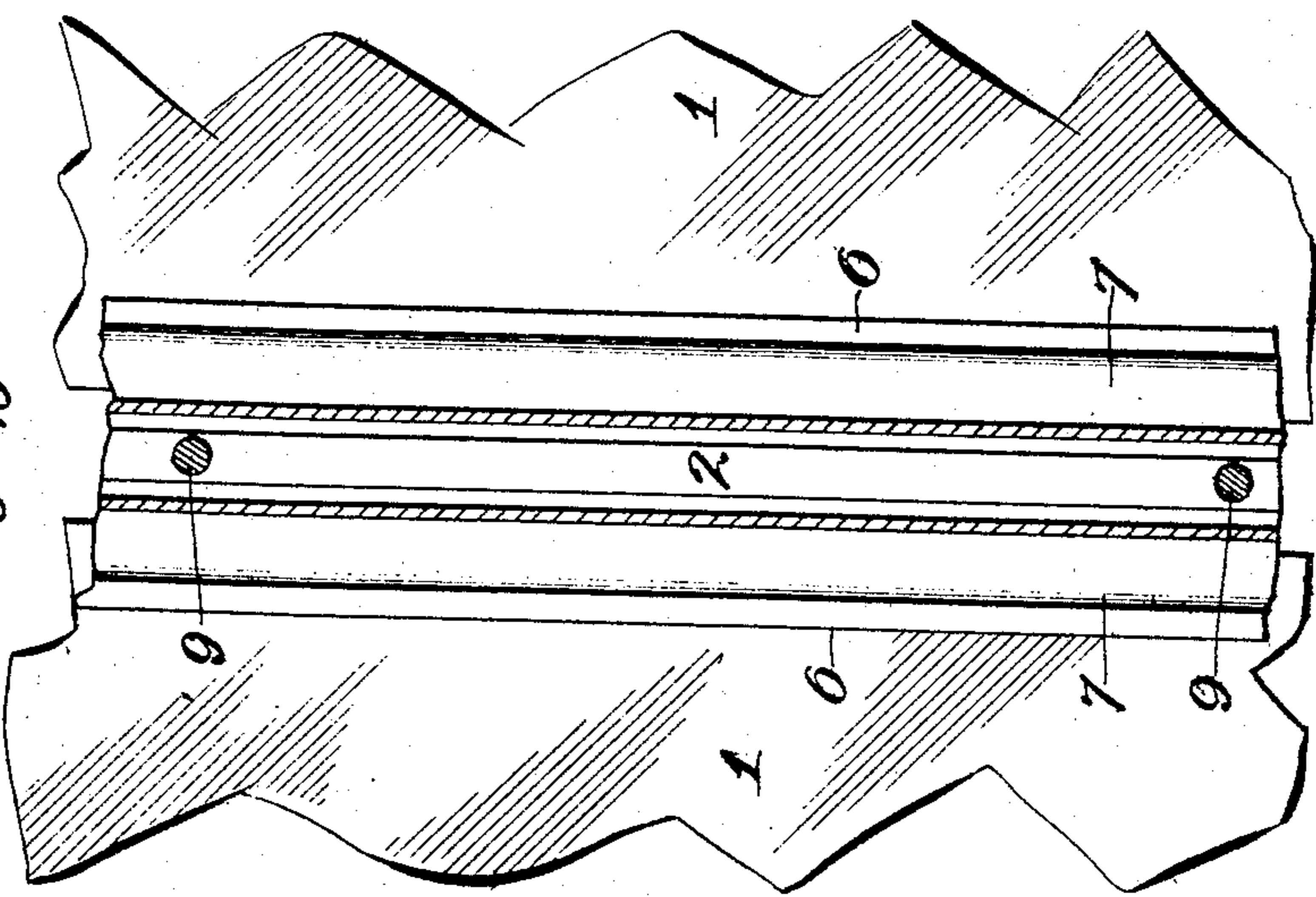
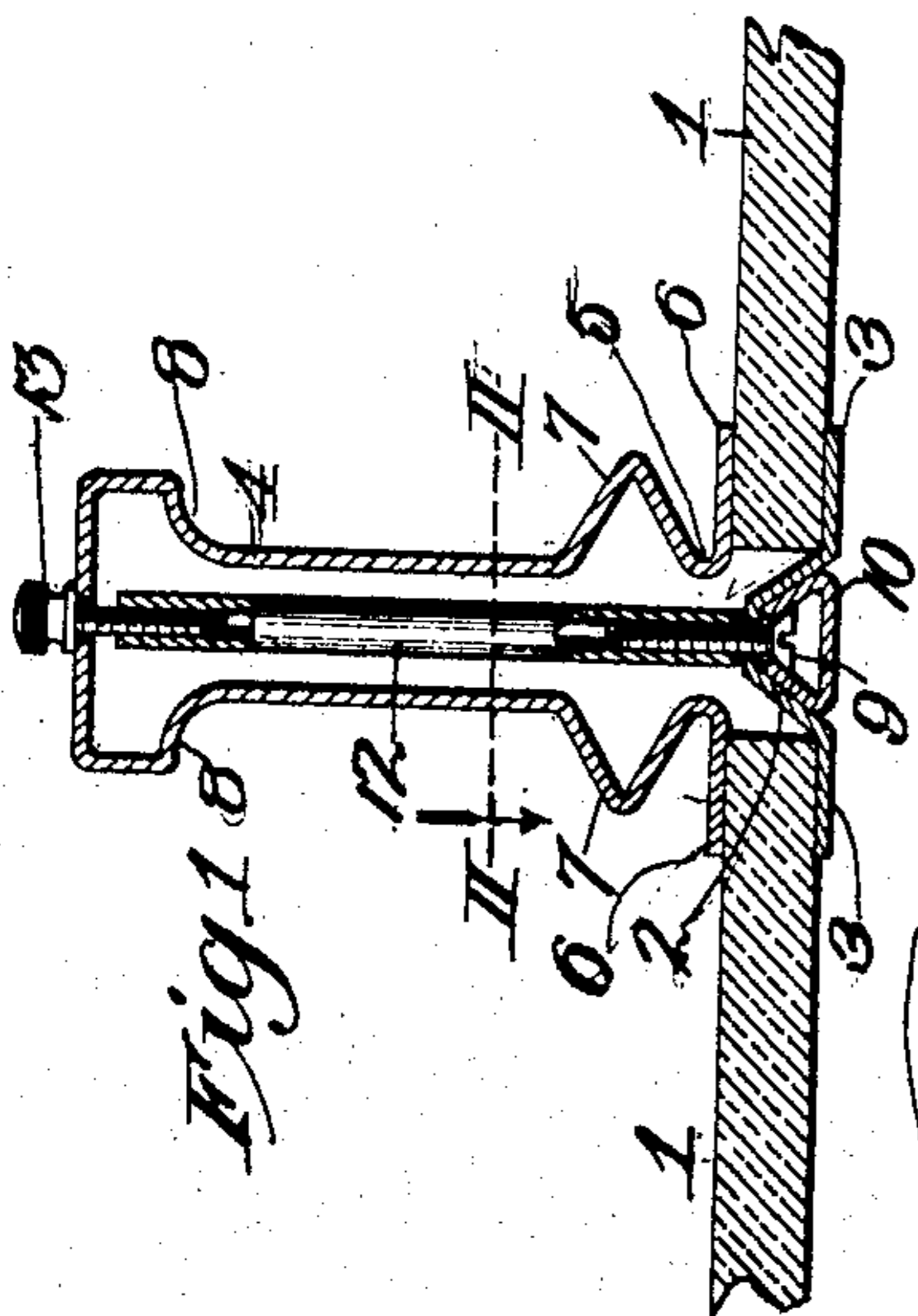
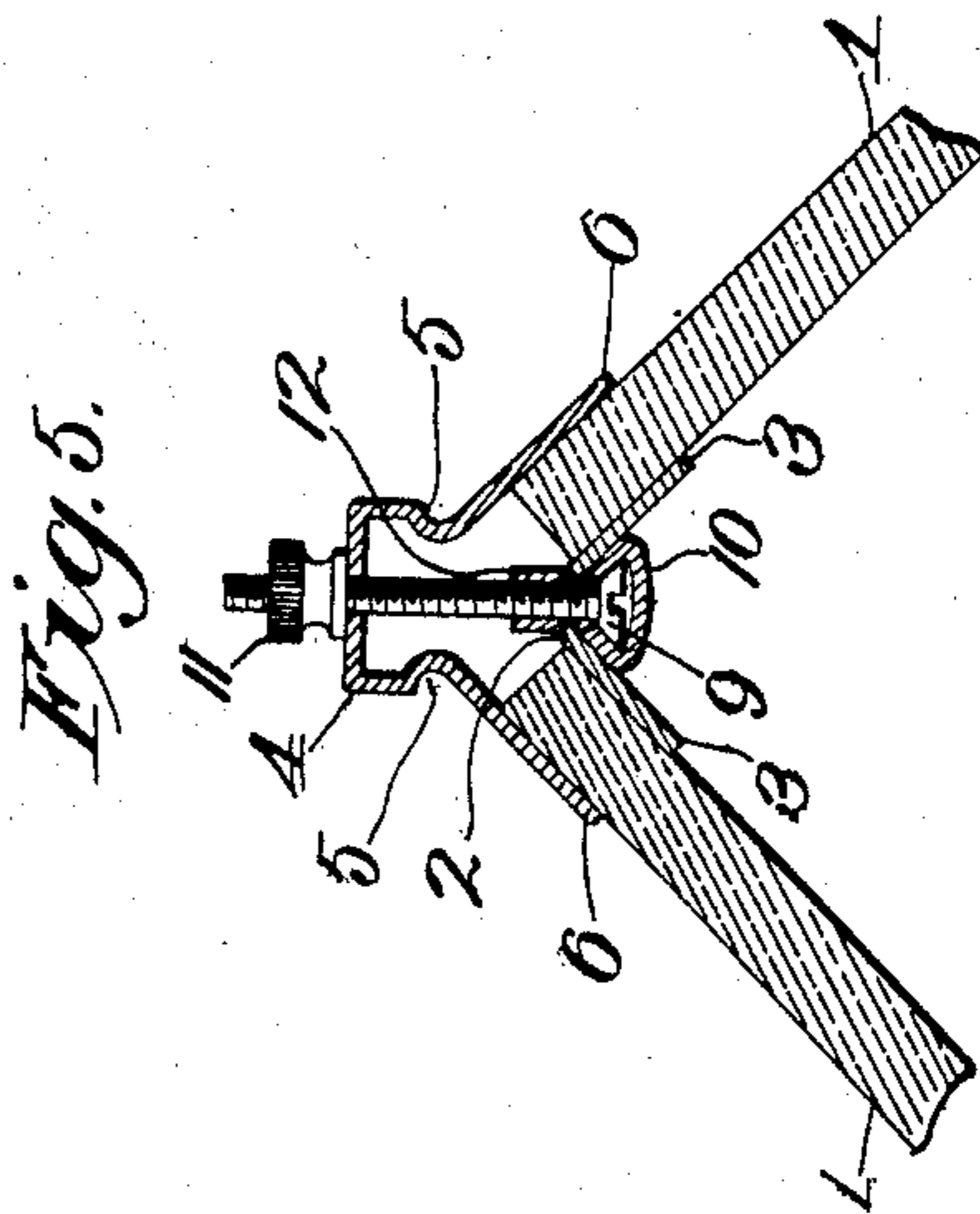
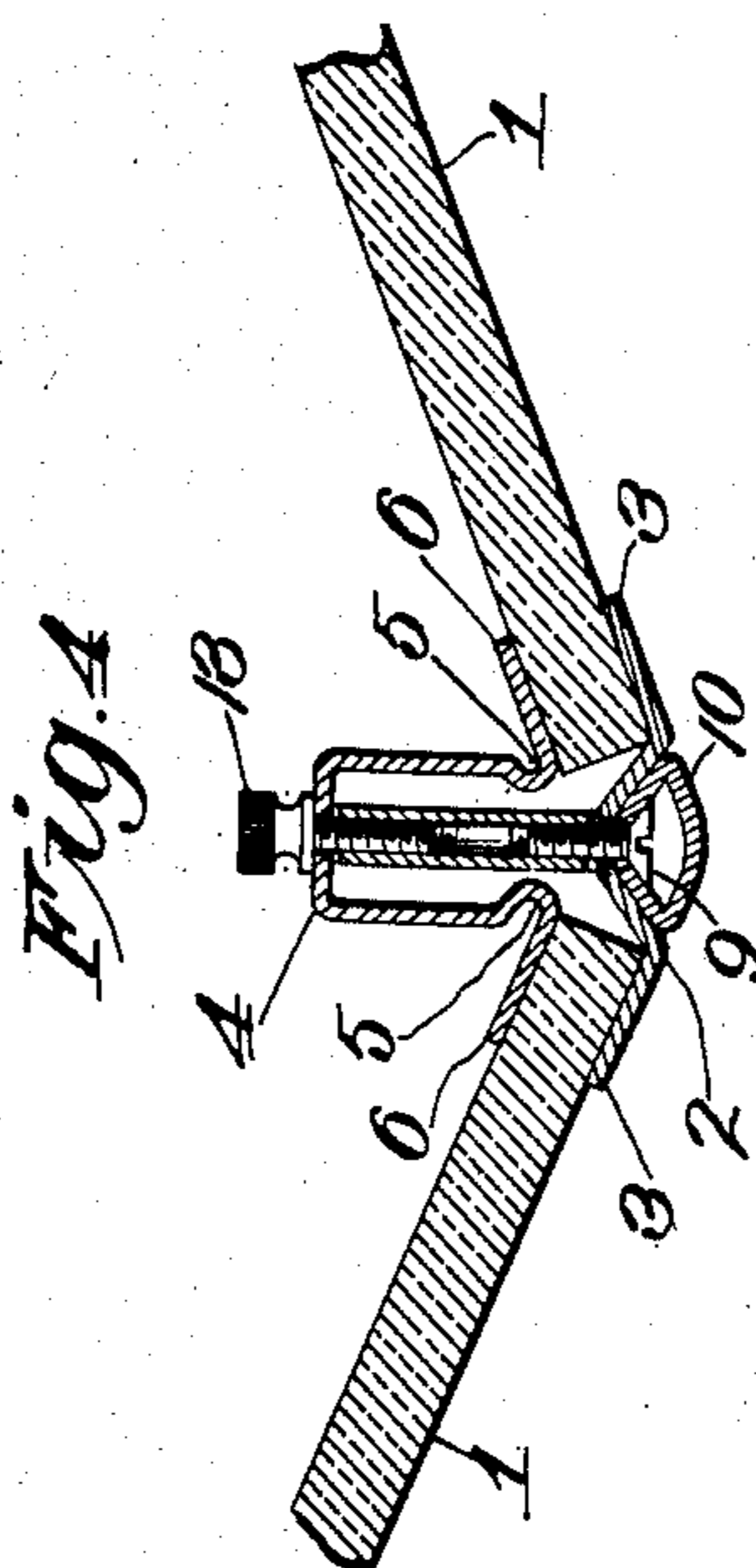
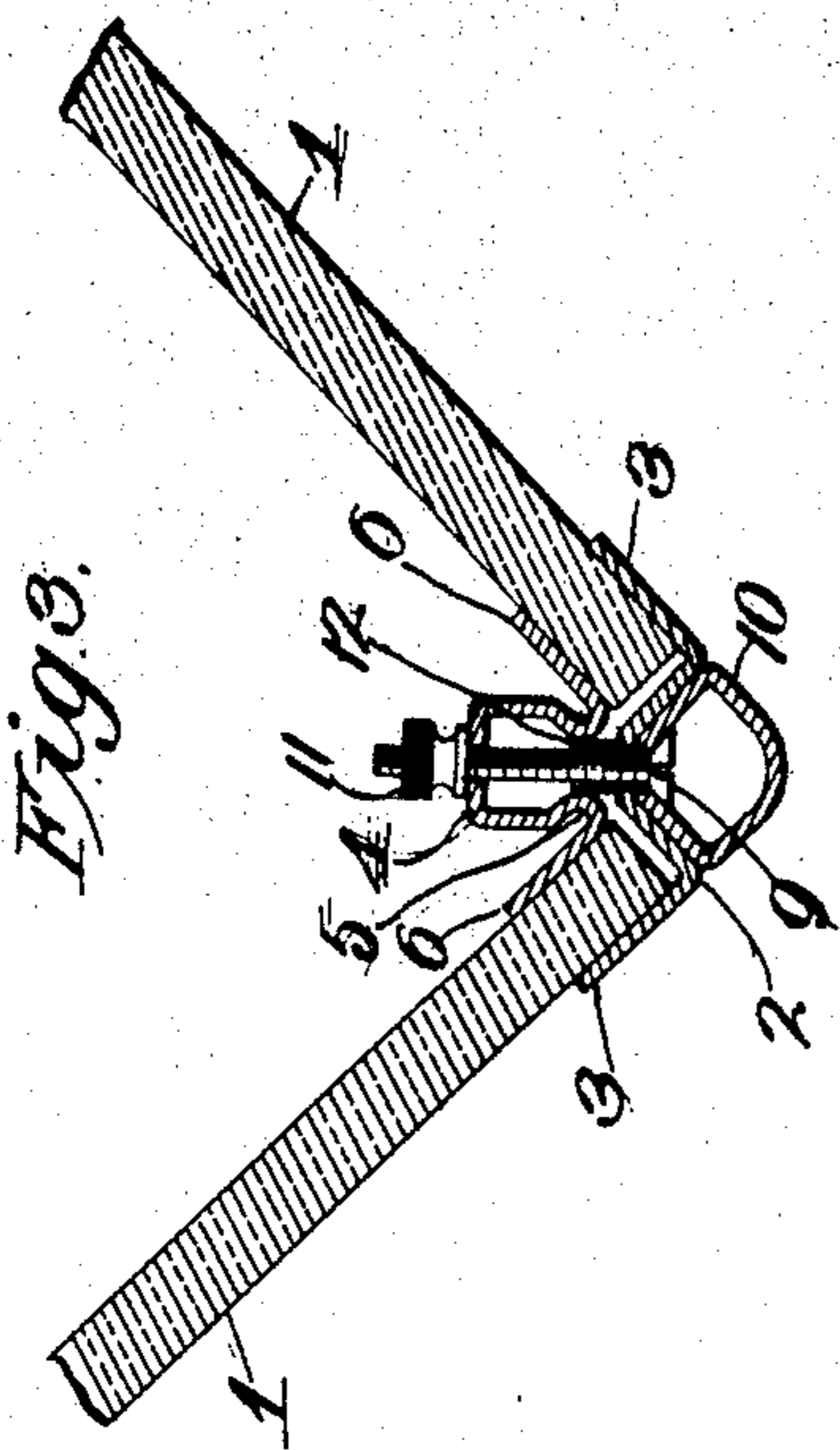


F. J. PLYM.
STORE FRONT CONSTRUCTION.
APPLICATION FILED JULY 12, 1907.

955,103.

Patented Apr. 12, 1910.



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UNITED STATES PATENT OFFICE.

FRANCIS J. PLYM, OF NILES, MICHIGAN.

STORE-FRONT CONSTRUCTION.

955,103.

Specification of Letters Patent.

Patented Apr. 12, 1910.

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To all whom it may concern:

Be it known that I, FRANCIS J. PLYM, citizen of the United States, residing at Niles, in the county of Berrien and State of Michigan, have invented certain new and useful Improvements in Store-Front Construction, of which the following is a specification.

This invention relates to store front constructions of that type in which the adjacent edges of panes of glass are yieldingly clamped between a face-plate and a back-plate or stiffener, and my object is to produce an efficient and reliable construction of this character by which the glass panes can be secured in or removed from operative position easily and expeditiously and which is of simple, strong, durable and inexpensive construction.

To this end the invention consists in certain novel and peculiar features of construction and combinations of parts as hereinafter described and claimed; and in order that it may be fully understood reference is to be had to the accompanying drawing, in which:—

Figure 1, is a horizontal section of a store front construction embodying my invention. Fig. 2, is a vertical section on the line II—II of Fig. 1. Figs. 3, 4 and 5, are horizontal sections of constructions which differ slightly from the construction shown by Fig. 1 and each other.

In the said drawing 1—1 indicates a pair of panes of glass arranged in line with each other as shown in Fig. 1 or at different angles to each other as shown by Figs. 3 to 5 inclusive.

2 indicates a channel face-plate between the adjacent edges of the glass panes and provided at its side margins with flanges 3.

4 is a substantially U-shaped back-plate or stiffener, the same being disposed back of and parallel to the face-plate and having its arms projecting toward the face-plate and longitudinally crimped or bent as at 5 the portions forward of such crimps or bends forming laterally projecting spring-wings disposed rearward of and substantially parallel to the flanges 3.

In Figs. 1 and 2, which show a back-plate or stiffener of greater depth than those shown in the remaining figures, the said back-plate or stiffener is corrugated parallel to wings 6 at 7, to increase the strength and resiliency of the arms, this resiliency being

further increased by the bends 8 in or near the rear ends of said arms.

To connect the face-plate and the back-plate or stiffener together for the purpose of causing their flanges and wings to clamp the glass plates yieldingly between them, I provide a connection extending through the face-plate and the back-plate or stiffener between the glass panes and the arms of said back-plate or stiffener. In Figs. 3 and 5 the connection comprises a screw-bolt 9 having its head at the front side of the face-plate and covered by a channel strip 10, this cover strip having its arms fitting against the sides of and therefore reinforcing and strengthening the face-plate, and also serving to prevent unauthorized persons from having access to or tampering with the screw-bolts. It furthermore provides an ornamental filling for the hollow side of the channeled face-plate. The rear ends of screw-bolts 9—it being understood that there will be plurality of the connections disposed at suitable distances apart—are engaged by nuts 11 bearing against the rear side of the back-plate or stiffener, and capable of adjustment upon the screw-bolts for varying the clamping pressure of the plates on the panes of glass, it being also noticed in Figs. 3 and 5 that short sleeves 12 are screwed upon bolts 9 in order to hold the screws in the face-plate and hold the cover plate against the latter when nuts 11 are not engaging the bolts and the rear sides of the back-plate or stiffener, these sleeves forming in effect an adjustable shoulder or enlargement for screw-bolts 9.

In Figs. 1 and 4 the connection between the face-plate and back-plate or stiffener comprises three parts namely, screw-bolt 9 extending through the face-plate, a sleeve 12 screwed upon said screw-bolt but of greater length and projecting rearward beyond the same, the front end of said sleeve constituting an adjustable shoulder having the same function as in Figs. 3 and 5, and a second screw-bolt 13 to take the place of nut 11, and extending forward through the bridge-portion of the back-plate and into the rear end of said sleeve. By the proper manipulation of bolt 13 the pressure of the flanges and wings on the glass panes can be intensified or relaxed.

From the above description and the drawing it will be seen that I have produced a store front construction applicable in the

different forms of its face-plate and back-plate or stiffener to glass panes arranged at different angles, and it is to be understood that I reserve the right to make such changes
5 in the form, proportion, detail construction and arrangement of the parts as properly fall within the spirit and scope of the appended claims.

Having thus described an invention what
10 I claim as new and desire to secure by Letters Patent, is:—

1. A store front construction, comprising a pair of glass panes having adjacent parallel edges, a channel face-plate arranged between said edges of the panes with its hollow side outward and provided at the outer or free margins of its arms with laterally projecting flanges fitting flatly against the outer faces of such panes, a substantially U-shaped back plate or stiffener paralleling the face-plate, with its arms projecting toward the latter and terminating in laterally projecting spring-wings engaging the inner faces of the panes, and a connection between
20 the face-plate and back-plate to draw them toward each other; said connection embodying a head at the outer side and an adjustable shoulder engaging the inner side of the channel face-plate; and a channel-strip fitting in the channel or hollow side of the
30 face-plate and having its arms interposed between the head of the connection and the face-plate.

2. A store front construction, comprising
35 a channel face-plate provided with laterally projecting flanges, a substantially U-shaped back-plate or stiffener paralleling the face-plate, with its arms projecting toward the latter and terminating in laterally projecting
40 spring-wings substantially parallel to

and back of the flanges of the face-plate, a pair of glass panes having their adjacent edges at opposite sides of the channel portion of the face-plate and between the said flanges and wings, and a connection between
45 the face-plate and the back-plate or stiffener, comprising a screw-bolt extending rearwardly through the face-plate, a screw-bolt extending forwardly through the back-plate or stiffener and a sleeve screwed on said
50 screw-bolt between the face-plate and the back-plate or stiffener.

3. A store front construction, comprising a channel face-plate having laterally projecting flanges, a substantially U-shaped
55 back-plate or stiffener paralleling the face-plate and having its arms projecting toward the latter and terminating in spring-wings substantially parallel to and rearward of the said flanges, and formed with corruga-
60 tions juxtaposed to said spring-wings and with curved portions near their opposite or rear end parallel to said corrugations, a pair of panes of glass fitting between said flanges and spring-wings and disposed at opposite
65 sides of the channel portion of the face-plate, a connection between the face-plate and back-plate or stiffener, provided with a head at the front side of the former and a channel-strip fitting in the channel or hollow side of the face-plate and having its
70 arms interposed between the head of the connection and the face-plate.

In testimony whereof I affix my signature, in the presence of two witnesses.

FRANCIS J. PLYM.

Witnesses:

NELLIE M. BADGER,
MINA ROTHENBURGER.