

J. F. LAMB.
MOLDER'S FLASK.
APPLICATION FILED DEC. 28, 1908.

914,585.

Patented Mar. 9, 1909.

2 SHEETS—SHEET 1.

FIG. 1.

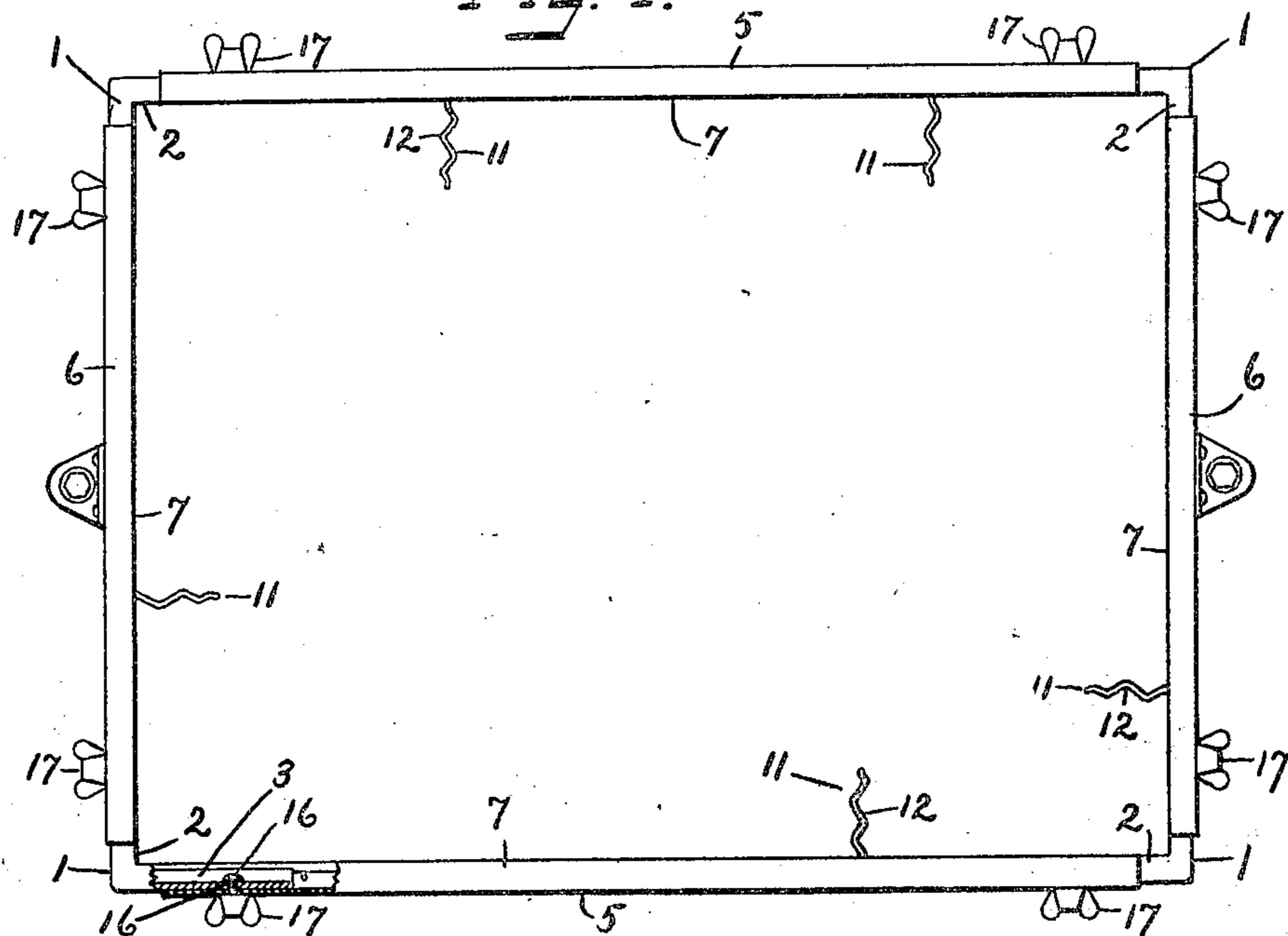


FIG. 2.

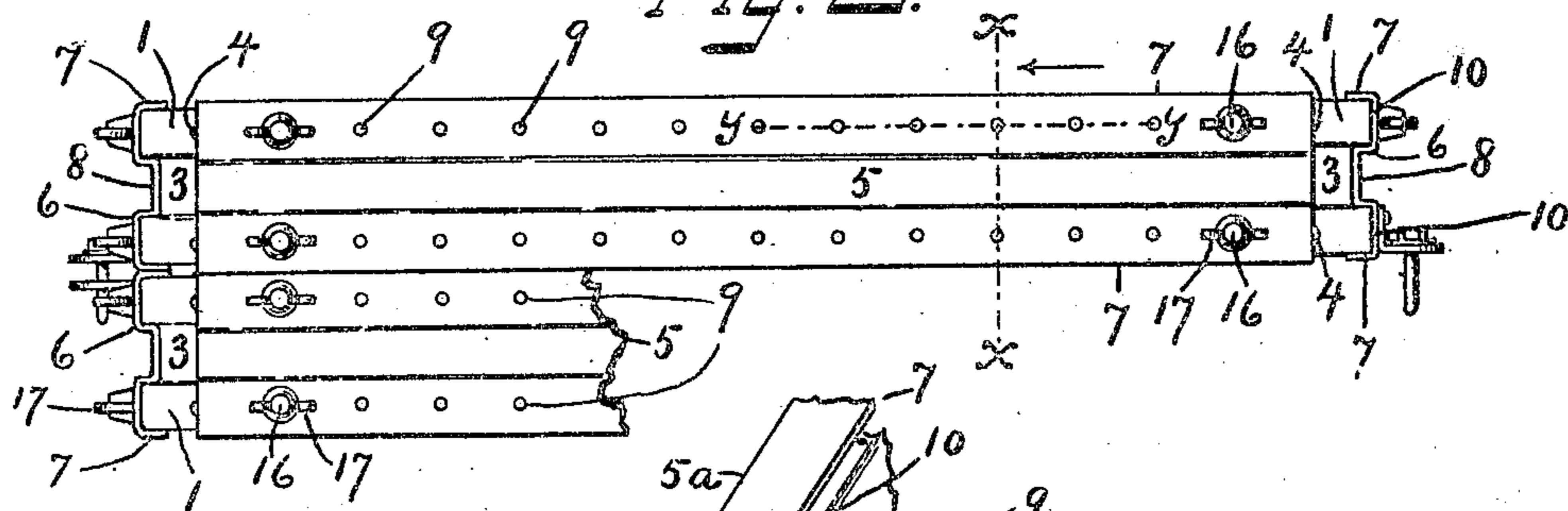
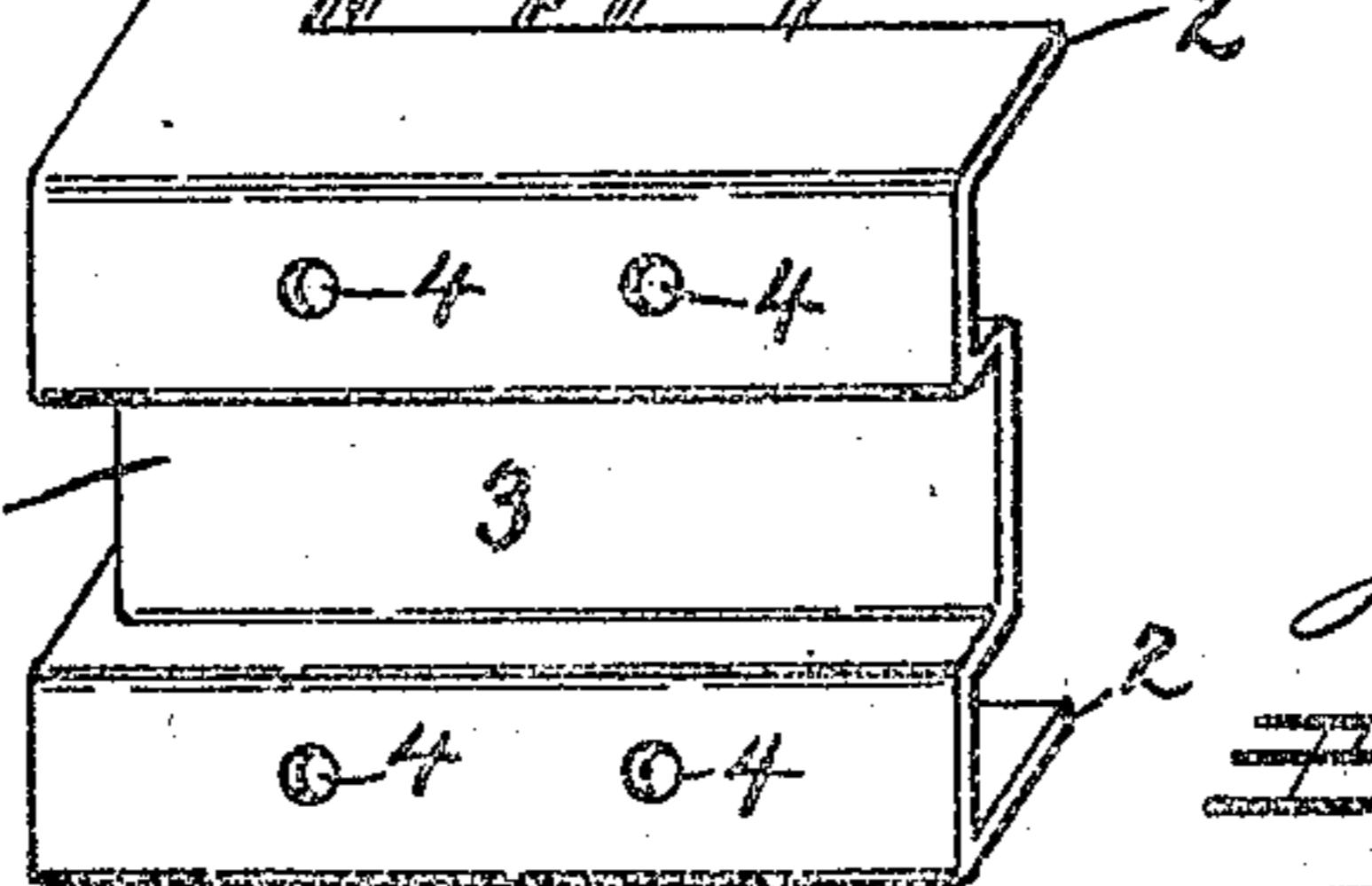


FIG. 3.



WITNESSES.

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2 SHEETS—SHEET 2.

FIG. 4.

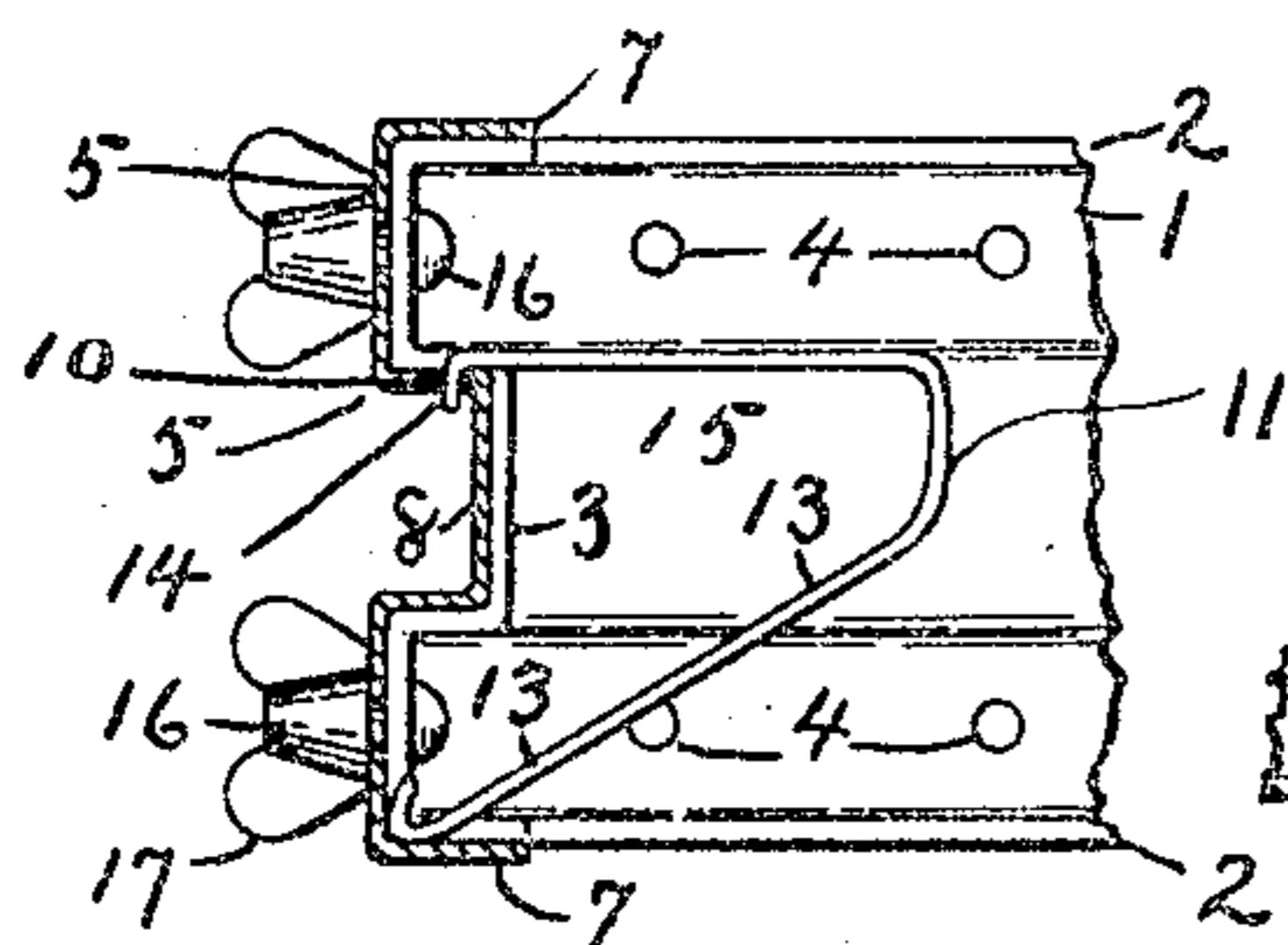


FIG. 5.

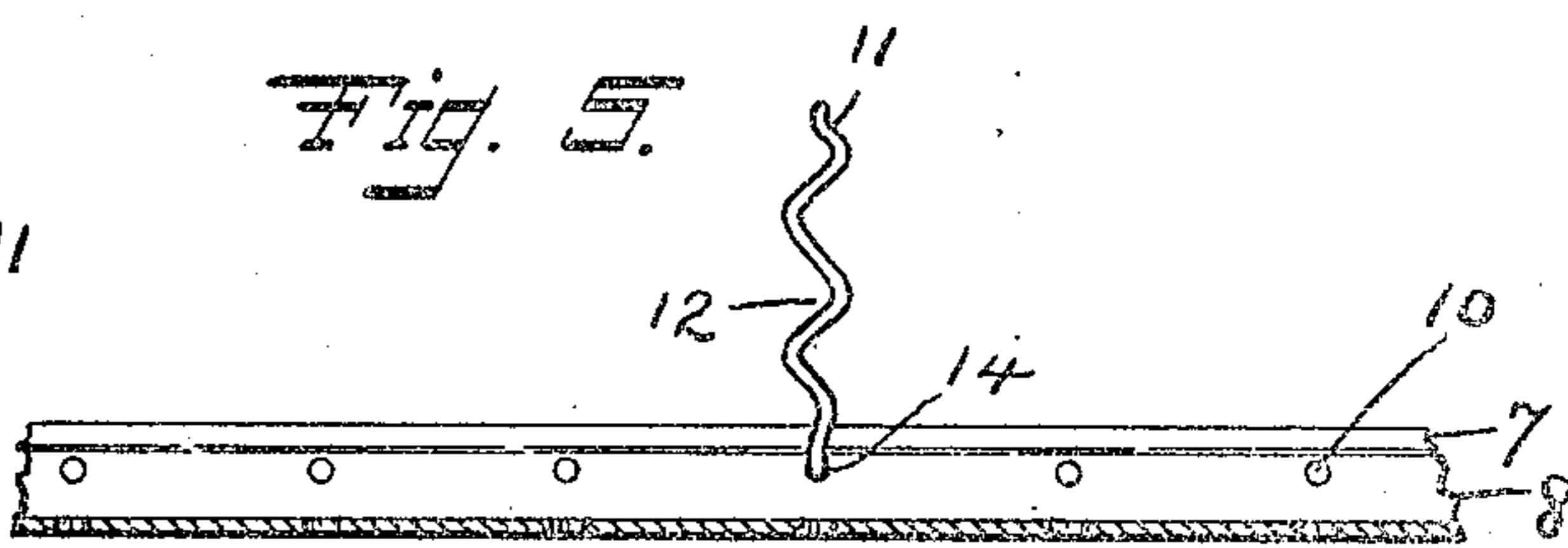


FIG. 6.

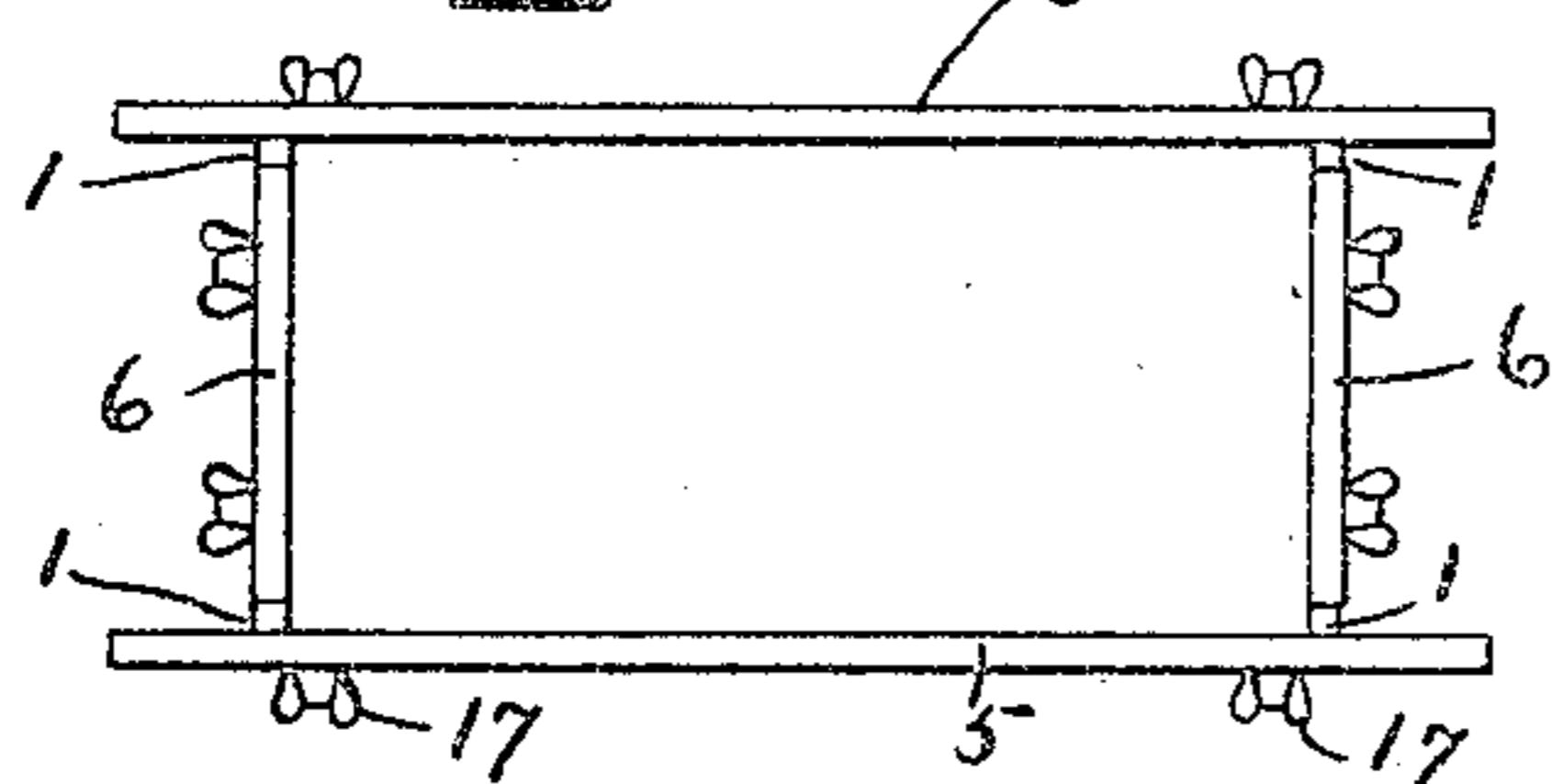


FIG. 7.

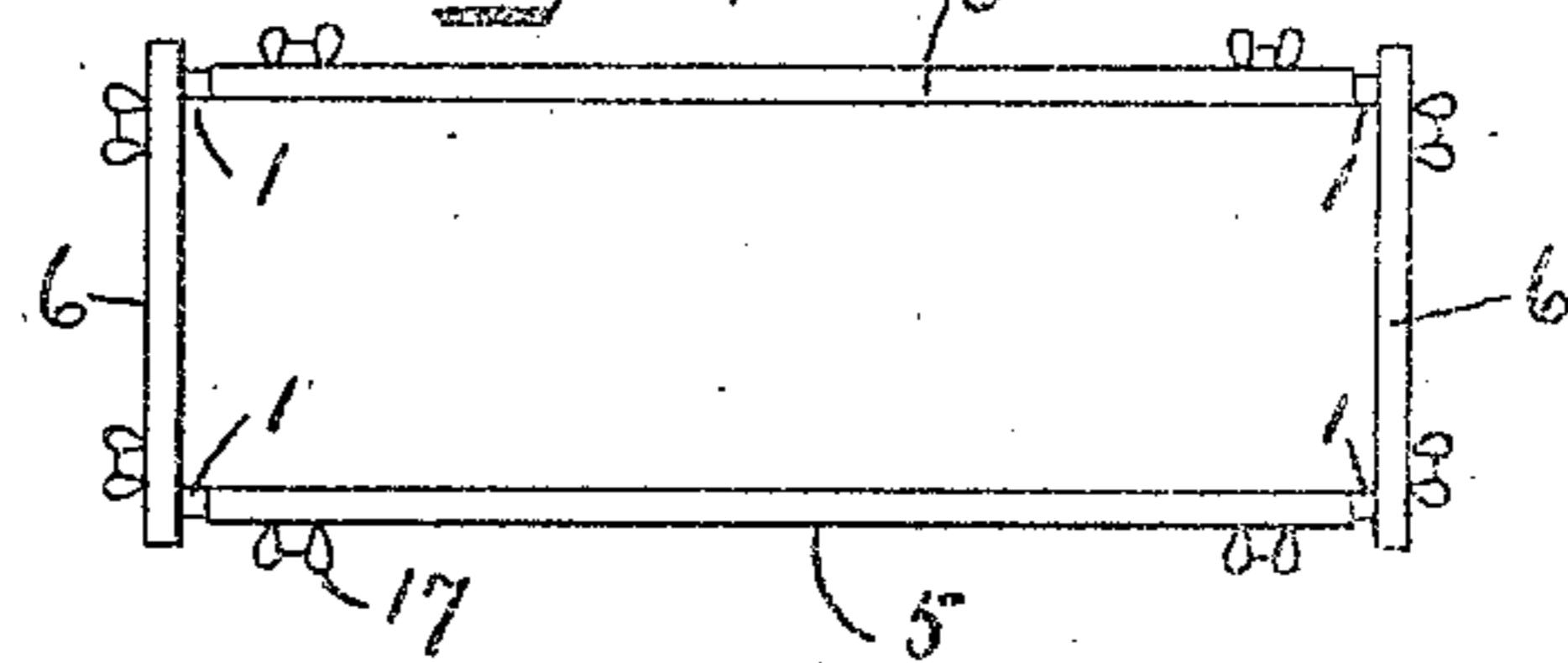


FIG. 8.

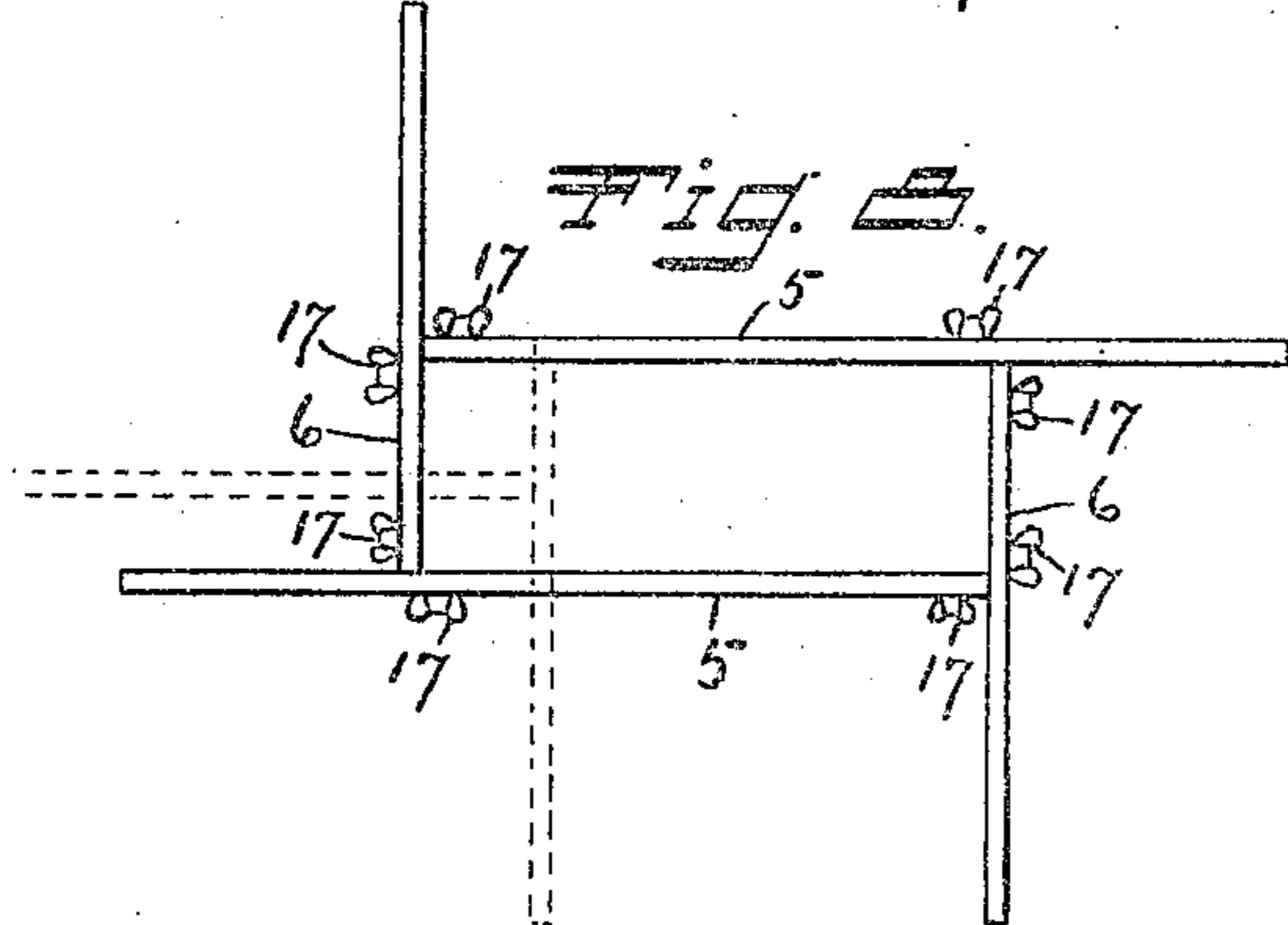


FIG. 9.

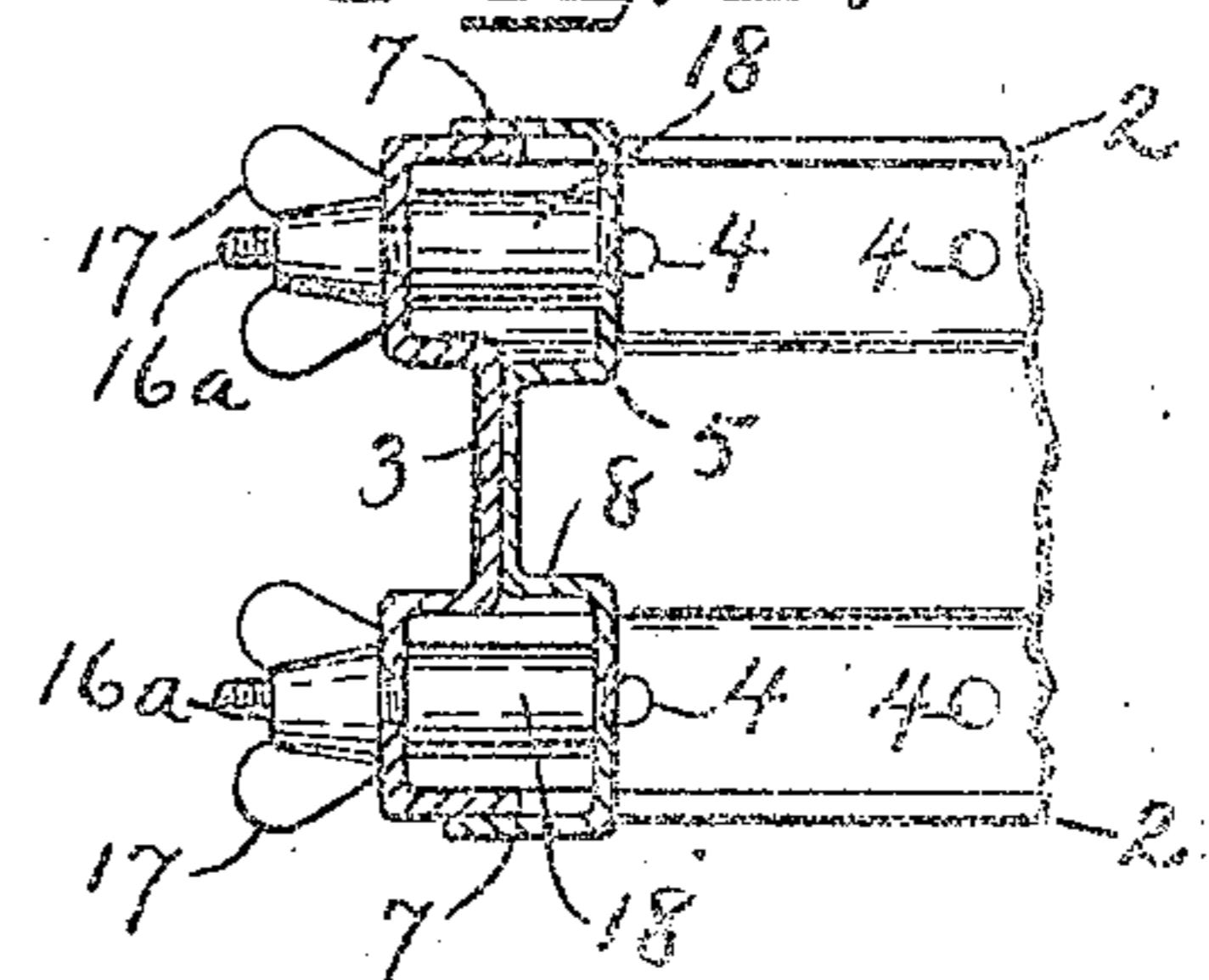


FIG. 10.

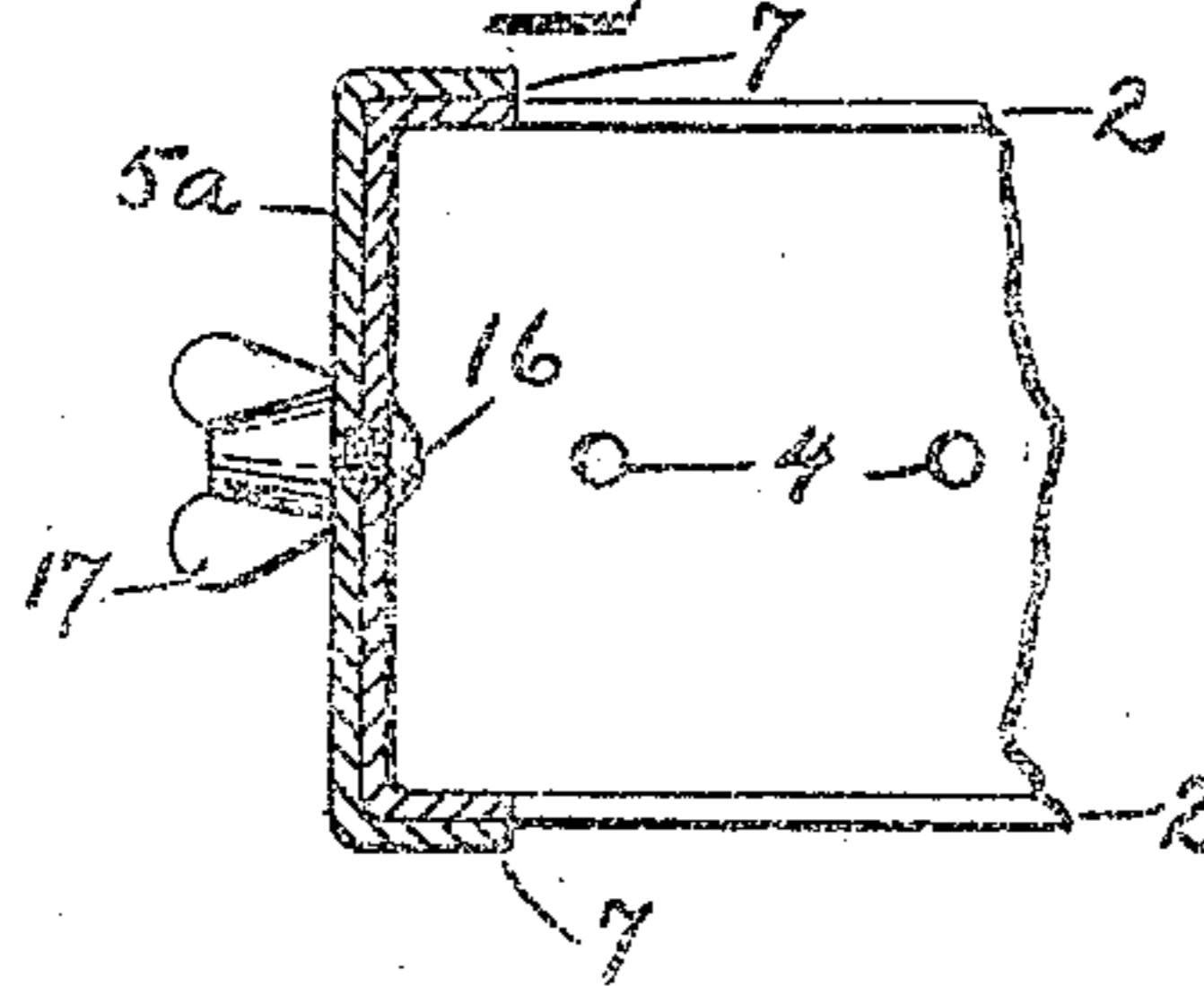
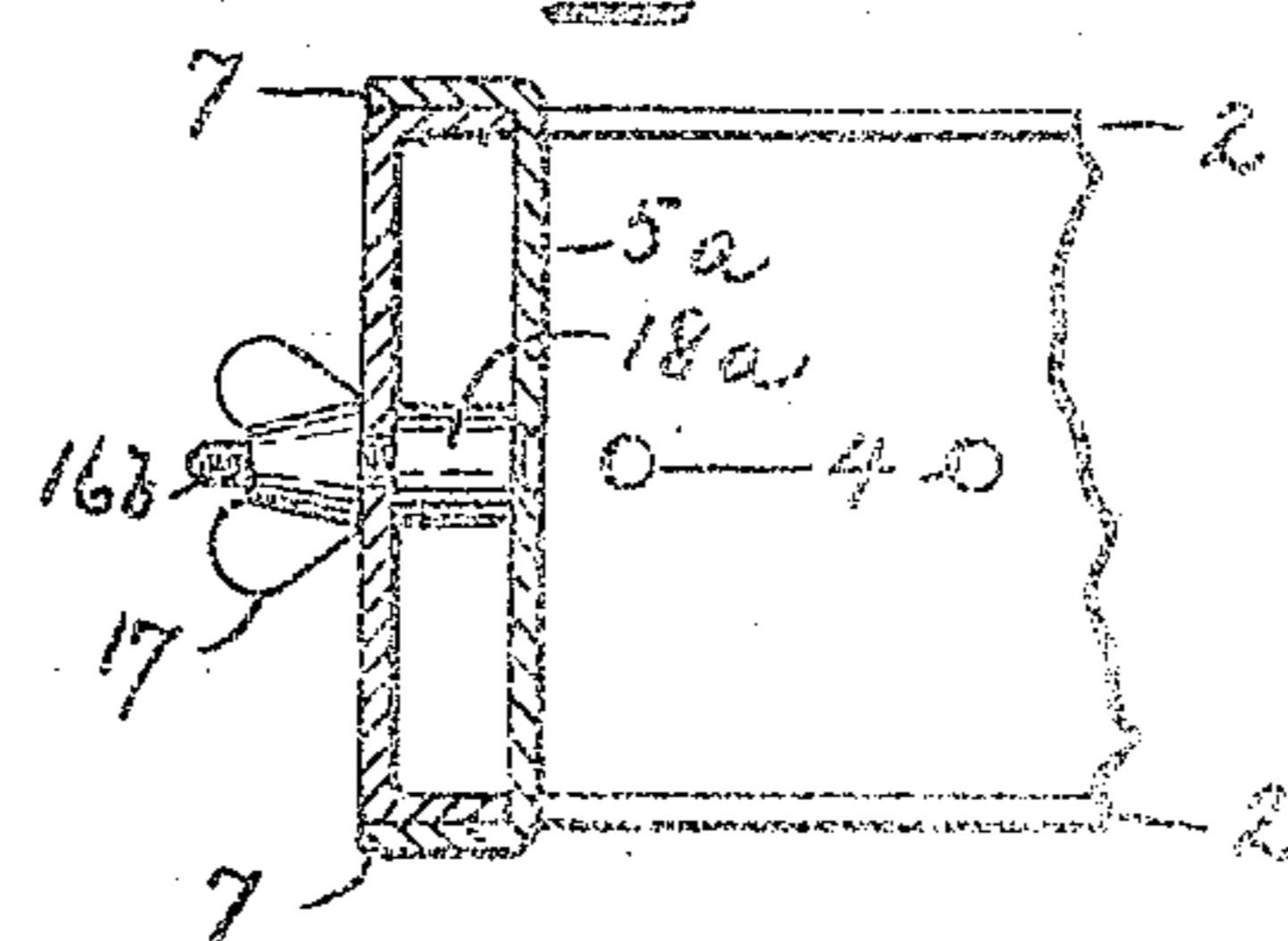


FIG. 11.



WITNESSES

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UNITED STATES PATENT OFFICE.

JOSEPH F. LAMB, OF NEW BRITAIN, CONNECTICUT.

MOLDER'S FLASK.

No. 914,585.

Specification of Letters Patent.

Patented March 9, 1909.

Application filed December 28, 1908. Serial No. 469,712.

To all whom it may concern:

Be it known that I, JOSEPH F. LAMB, a citizen of the United States, residing at New Britain, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Molders' Flasks, of which the following is a specification.

My invention relates to improvements in molders' flasks and the objects of my improvements are simplicity and economy in construction with convenience and efficiency in use, and particularly to produce a flask of a simple, convenient and reliable construction, all as hereinafter described.

In the accompanying drawings:—Figure 1 is a plan view of a complete flask, with a part of a side and corner broken out and shown in horizontal section. Fig. 2 is a broken out side elevation of the same. Fig. 3 is an enlarged perspective view of a portion of one side and corner of my flask in modified form. Fig. 4 is a transverse section of a side along the line $\alpha\alpha$ of Fig. 2, together with the main portion of one corner in the distance. Fig. 5 is a horizontal section of a portion of a side piece along the line yy of Fig. 2. Figs. 6, 7 and 8, are plan views of my flask on a reduced scale with the parts variously adjusted. Fig. 9 is a transverse section of one side and corner on the scale used in Fig. 3, with the side applied to the corner in a reversed position from that shown in Fig. 4. Fig. 10 is a transverse section of a side and corner of my flask in modified form. Fig. 11 is a transverse section of the same with the side reversed on the corners.

Similar reference characters refer to similar parts throughout the several views.

My flask is mainly composed of four corners and four sides, or two sides and two ends. The corners 1 are in the form of two wings arranged at right angles to each other and are preferably formed of sheet metal. They are provided with inwardly turned sand supporting flanges 2 at the top and bottom edges and an inwardly formed rib 3 extending longitudinally along the middle thereby forming what may be called a special form of channel iron. The wings of the corners are each provided with a series of holes 4 for clamping screws. The four sides will ordinarily be made in two lengths and in that case may be properly termed sides and ends, the longer pieces 5

constituting the sides and the shorter pieces 6 the ends. These have the same general form in cross section as the wings of the corners. The top and bottom sand supporting flanges 7 are turned inwardly and the ribs 8 likewise, but the depth between the flanges is made a little greater and the ribs a little narrower so that the sides may fit over the wings of the corners and when so placed may slide longitudinally, one upon the other. Along the length of the sides are arranged two series of holes 9, the alignment of the same being such that the holes register with the holes 4 of the corners, said holes being adapted for clamping screws used to clamp the sides to the corners. Along the upper side of the rib 8 of the sides is located a series of holes 10 arranged at any desired distance apart, adapted to receive the hooked end of a sand support 11. The sand supports 11 are formed of wire preferably corrugated along its length, as shown at 12, and bent into the form of a loop, as shown in Fig. 4, said loops being supported at the lower ends by having the end of the lower arm 13 rest against the lower inside corner of the sides or ends, as best shown in Fig. 4, the upper ends being formed with a right angular hook 14 adapted to hook into the holes 10 in the upper side of the ribs 8 so that the upper arm 15 of the sand support will swing substantially horizontally. The adjustability of the sand support described is secured in part by the fact that they are pivoted as described inasmuch as in case such a support happens to obstruct a pattern in a given case, the support may be simply swung on its bearings out of the way. If they cannot be thus turned to one side out of the way of any particular pattern they may be removed from one hole and secured in another. Furthermore, any number of such sand supports may be used as desired by simply providing a corresponding number of holes 10 in the sides and ends and inserting the number of supports desired.

The clamping screws 16 are ordinary screws adapted to be used with a nut, preferably a winged nut 17, the screws being inserted from the inside through the corners and sides. Changes in dimensions are obtained by inserting the screws in different holes. In the adjustment shown in Fig. 1 the corners extend beyond the ends of the sides, making a flask of substantially rec-

tangular shape of a length somewhat greater than the sides and wider than the length of the ends. In the adjustment shown in Fig. 6 the sides and corners are arranged with the length of the flask made shorter than the length of the sides 5. These overhanging ends may serve conveniently as handles for carrying the flask. Other arrangements of the said parts are shown in Figs. 7 and 8. In Fig. 7 the ends 6 are shown overhanging the sides 5, resulting in a flask relatively long as compared with the width. In Fig. 8 one end of each end piece 6 abuts against a side 5 while in turn each end of each side abuts against an end 6, the corners being covered by the said sides and ends so as not to show in plan view. In this arrangement there is a projecting side or end at each corner of the flask. This arrangement permits of an extended range of adjustment, being particularly adapted to make a flask of small dimensions, even with sides and ends of considerable length. In Fig. 8 the dimensions of flask shown are less than the dimensions of the sides and ends. The dotted lines indicate the same parts adjusted to make a smaller flask and indicate the range of adjustment whereby four sides in two different lengths and four corners of a given length may be adjusted to vary a rectangular flask from side to side in either direction from the smallest dimensions shown by broken lines in Fig. 8 to either of the adjustments shown in Figs. 1, 6 and 7. In all of these adjustments, when separate corner pieces are employed, each of the four sides is fitted to and rests upon two wings of the four corners, and each wing has its inwardly projecting flanges fitted inside of the flanges of the several sides. Disregarding the length of the sides and ends and considering them simply as four sides and the corners as four corners, whether they are separate or integral with the said sides, the arrangement is such that each one of the four sides is fitted to nest over and rest upon an outer face of one of the said corners, and they can be adjusted thereon to project one end of each of the said four sides beyond an outer face of an adjacent side and vary the distance between any two parallel sides of the flask by varying the projection of the ends of the other two sides.

In Fig. 8 is shown a style of unit adapted to be united in accordance with the plan shown in Fig. 8, being composed essentially of a corner 1^a united to end 5^a as one piece, so that by the use of this piece the results illustrated in Fig. 8 may be attained by the use of four pieces instead of eight. In this construction a swell or offset 20 is made at the junction of the corner 1^a and side 5^a so as to enlarge the said side into the proper dimensions to make it fit over the corners,

and inasmuch as one side and corner are made integral four of the clamping screws may be omitted.

In Fig. 9 a corner and side 5 are shown with the side 5 located on the inner side of the corner 1, the same being adapted for use as a band. In this case the flanges 2 of the corner 1 enter within the flanges 7 of the side until the rib 3 of the corner abuts the rib 8 of the end or side. In order to obviate crushing the sides and corner in tightening the clamping nut 17 a bushing 18 of a length to correspond to the separation of the side and corner is placed upon the body of the clamping screw.

In Fig. 10 is shown a modified form of side 5^a and corner 1^a with the middle rib omitted and with only one row of holes for clamping screws, the other features being the same as has been described.

In Fig. 11 the corner and side shown in Fig. 10 are shown arranged with the side 5^a located on the inner side of the corner 1^a, the same being adapted for use as a band. In this case the flanges 2 of the corner enter within the flanges 7 of the side until the ends abut against the wall of the side, leaving the side and corner separated along the line of the clamping screw 16^a.

The clamping screw 16^a in Fig. 9 and 16^b in Fig. 11 differ from the clamping screw 16 by being longer and by being provided with a counter sunk head so as to leave the band with a smooth inner surface.

I claim as my invention:

1. An extensible flask, comprising four corners, four sides and clamping screws, the said corners each comprising two right angular wings, each of the said four sides being fitted to nest over and rest upon two wings of the said four corners, whereby the several ends of the four sides may project beyond any desired wing of the said corners, to vary the dimensions of the flask from side to side in two different directions.

2. An extensible flask, comprising corners, sides, and clamping screws for adjustably clamping the parts together, the sides provided each with an inwardly projecting longitudinal rib along the middle, and provided with a series of holes in the upper wall of said rib adapted to receive and hold inwardly projecting sand supports.

3. An extensible flask, comprising corners, sides, and clamping screws, said corners and sides being all provided with inwardly turned flanges, and the sides provided with an inwardly projecting longitudinal rib along the middle having a series of holes in the upper wall of said rib adapted to receive sand supports.

4. In an extensible flask, a sand support in the form of a loop with its upper member provided with means for pivotally attaching the said loop to the inner walls of the flask,

5. In an extensible flask, a sand support formed of a wire bent in the form of a loop, the upper arm having a hook for engaging holes provided therefor in the sides 5 of the flask, the lower arm of said loop being adapted to bear against the inner wall of the flask.

6. An extensible flask, comprising separate corners and sides, all having inwardly turned sand retaining flanges along the edges, the sides lapping over and fitted upon the outer faces of the corners, and clamping screws and nuts passing through holes in the corners and corresponding holes in the 15 sides, for extensibly securing the parts in place with the flanges on the inner surface of the flask.

7. An extensible flask, comprising four corners, four sides and clamping screws; the said corners each comprising two right angular wings each wing and each of the said four sides having inwardly projecting and longitudinally extended flanges at their upper and lower edges, each wing of the

said four corners having its inwardly projecting flanges fitted inside of the flanges of the several sides. 25

8. In an extensible flask, an attachable sand support formed of wire in the shape of a loop and provided with means for pivotally securing the said support to the inner wall of a flask. 30

9. An extensible flask, comprising four corners, four sides and clamping screws, for adjustably securing the parts together, each 35 of the said four sides being fitted to nest over and rest upon an outer face of one of the said corners and arranged for being adjusted thereon with one end of each of the said four sides projecting beyond an outer 40 face of an adjacent side, whereby the distance between any two parallel sides of the flask may be varied by varying the projection of the ends of the other two sides.

JOSEPH F. LAMB.

Witnesses:

SHEFFIELD H. CLARKE,
JAMES SHEPARD.