

Sept. 4, 1928.

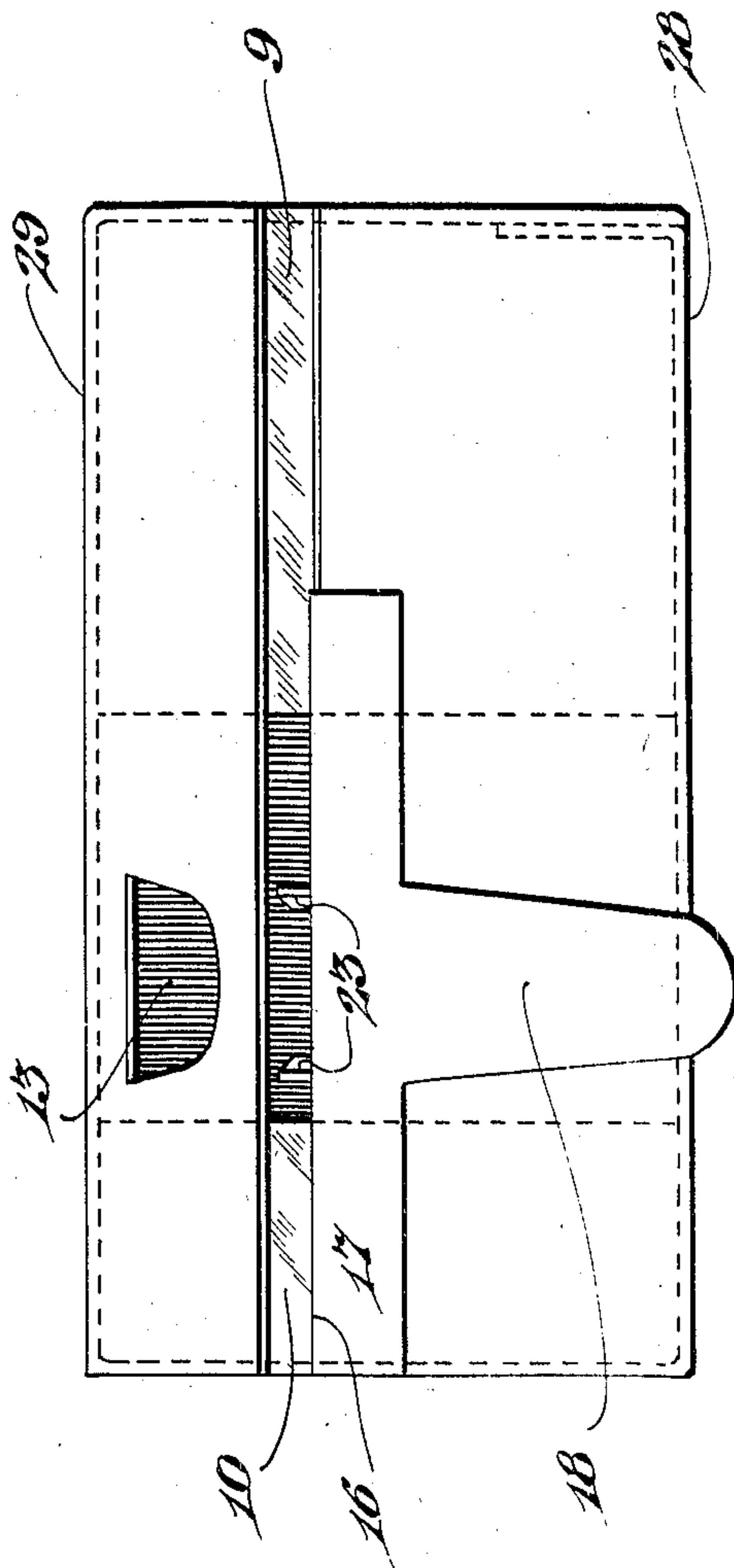
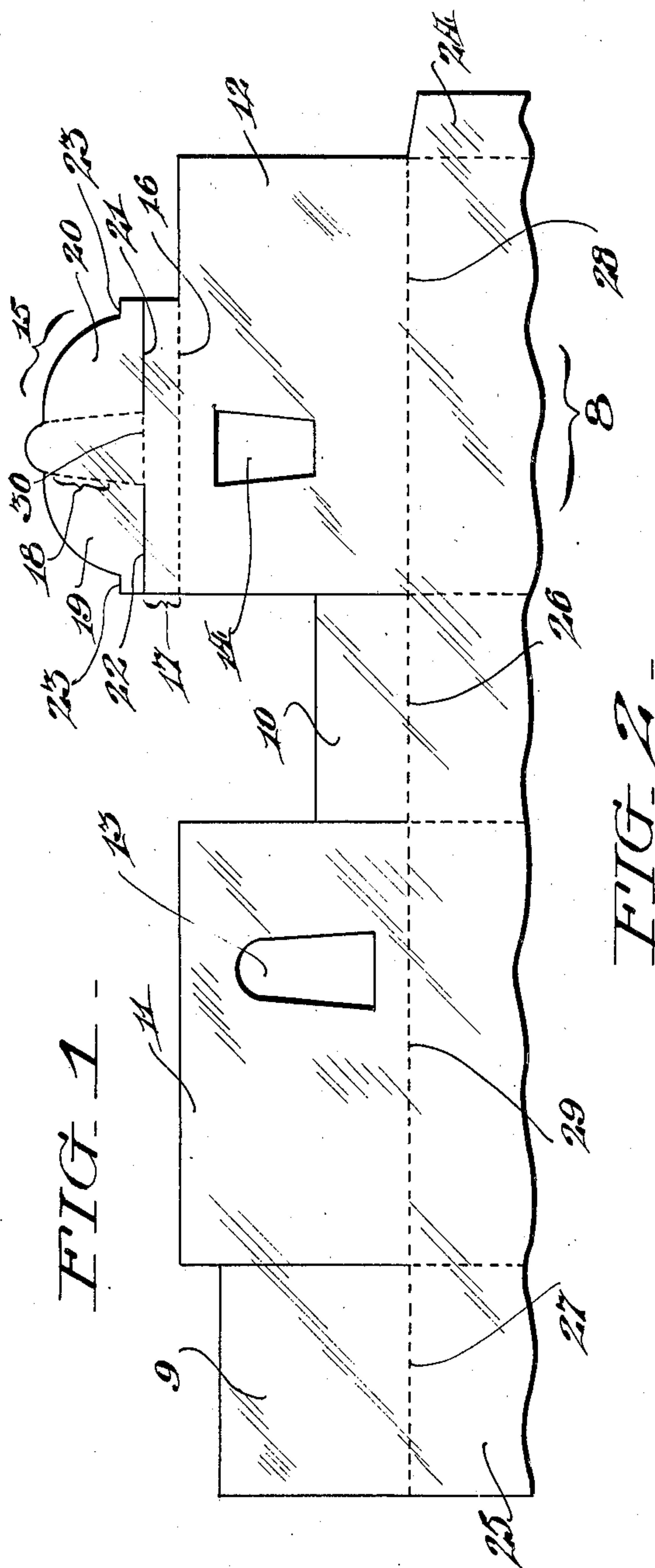
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1,683,116

CARTON

Filed April 7, 1927

3 Sheets-Sheet 1



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FIG. 3.

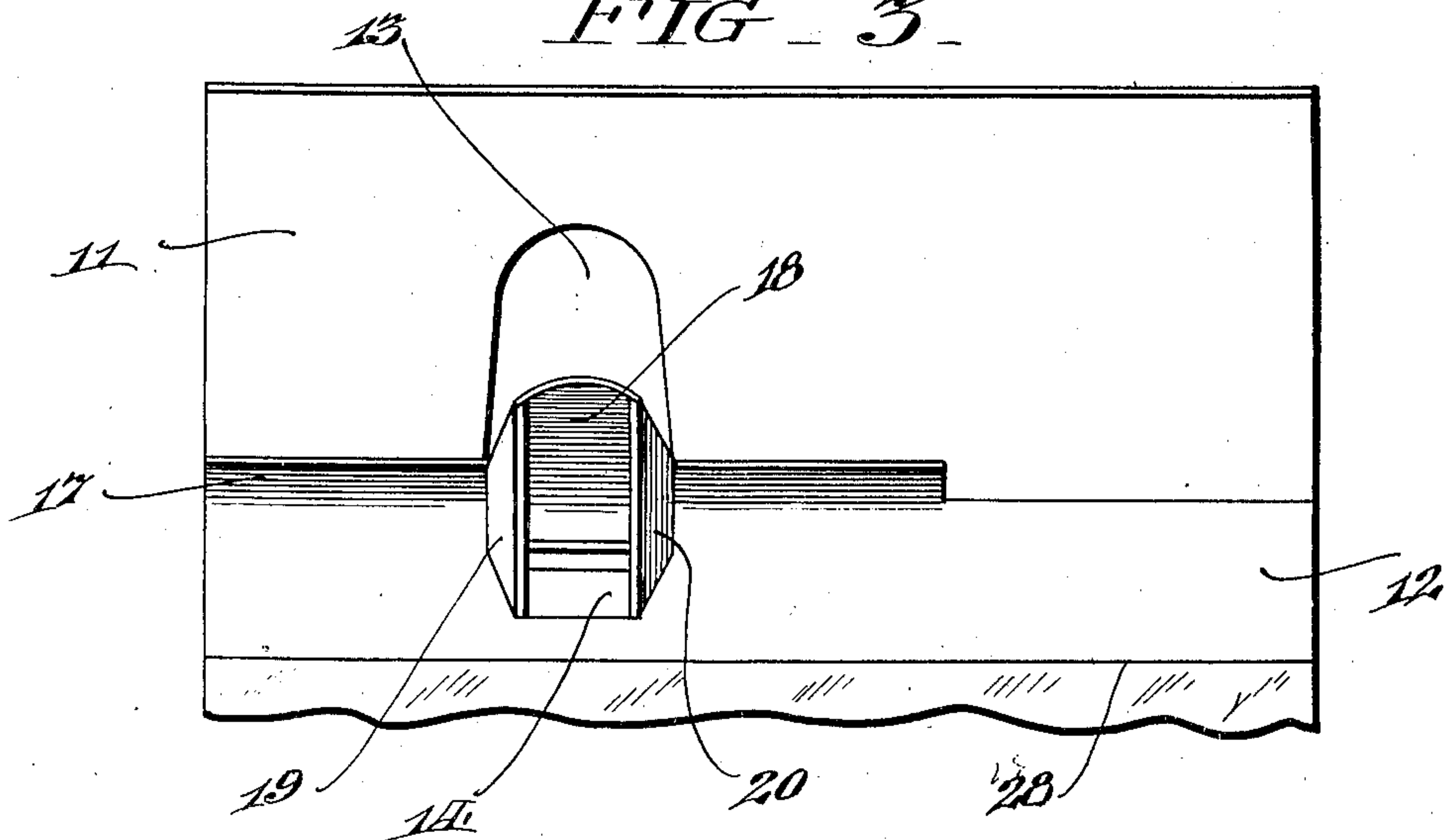


FIG. 4.

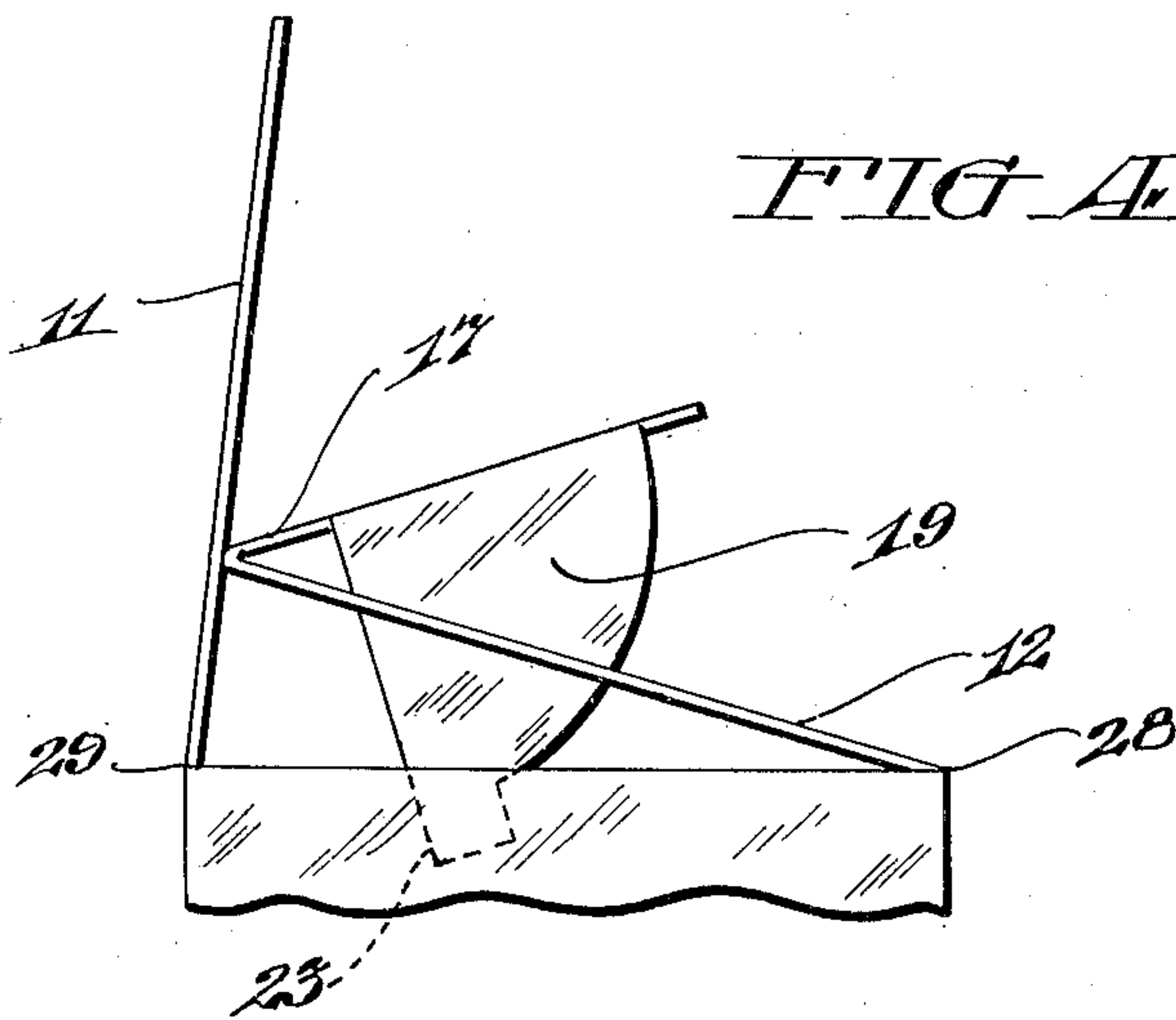
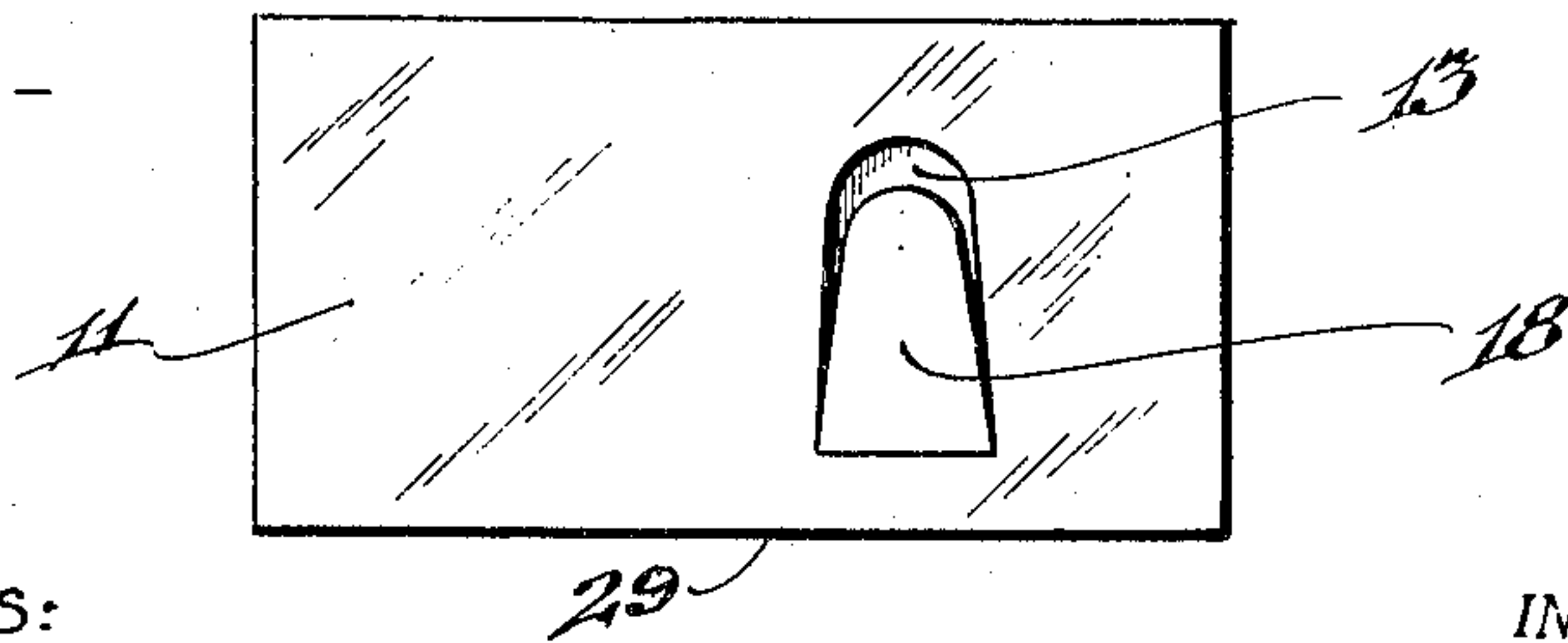


FIG. 5.



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FIG. 6

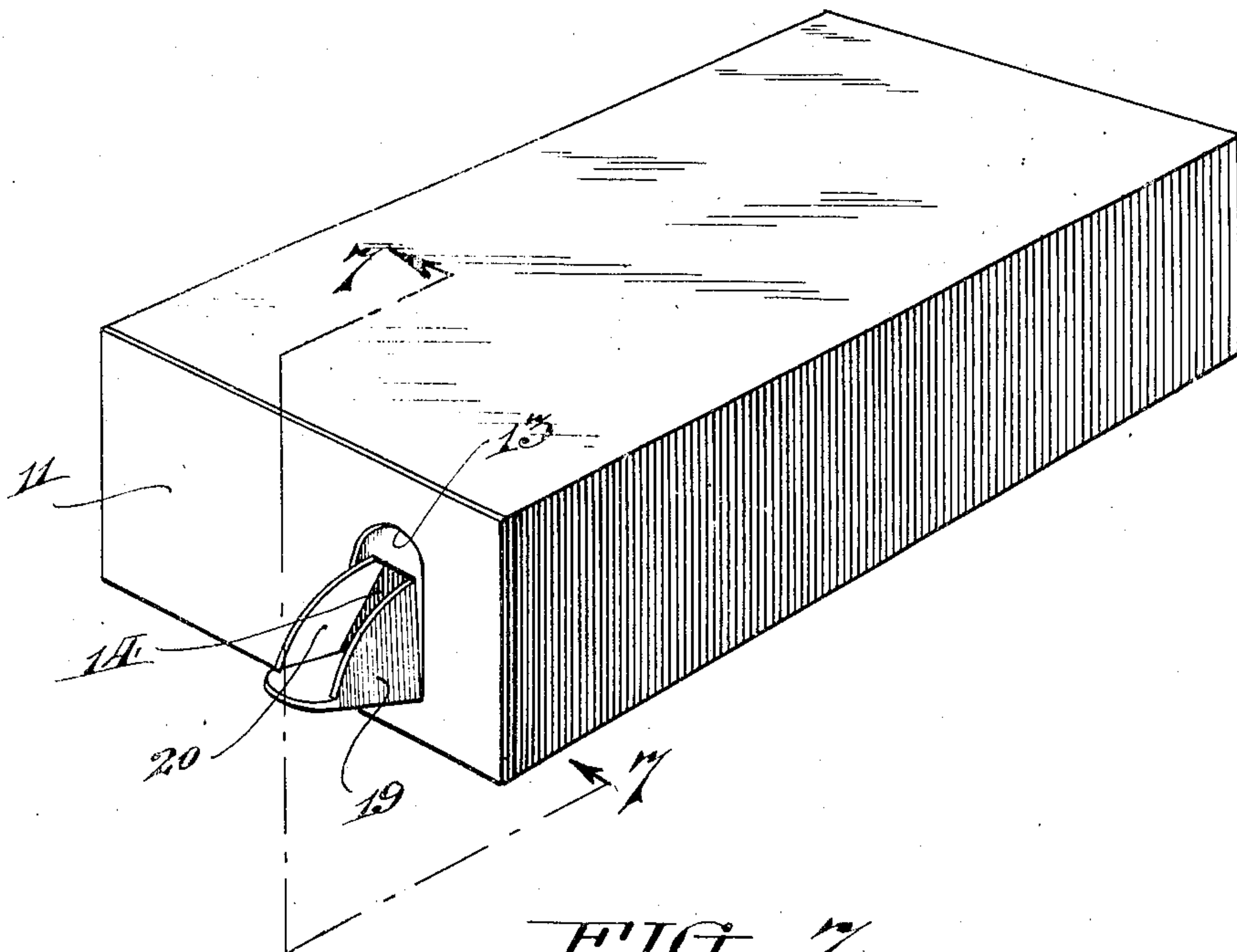
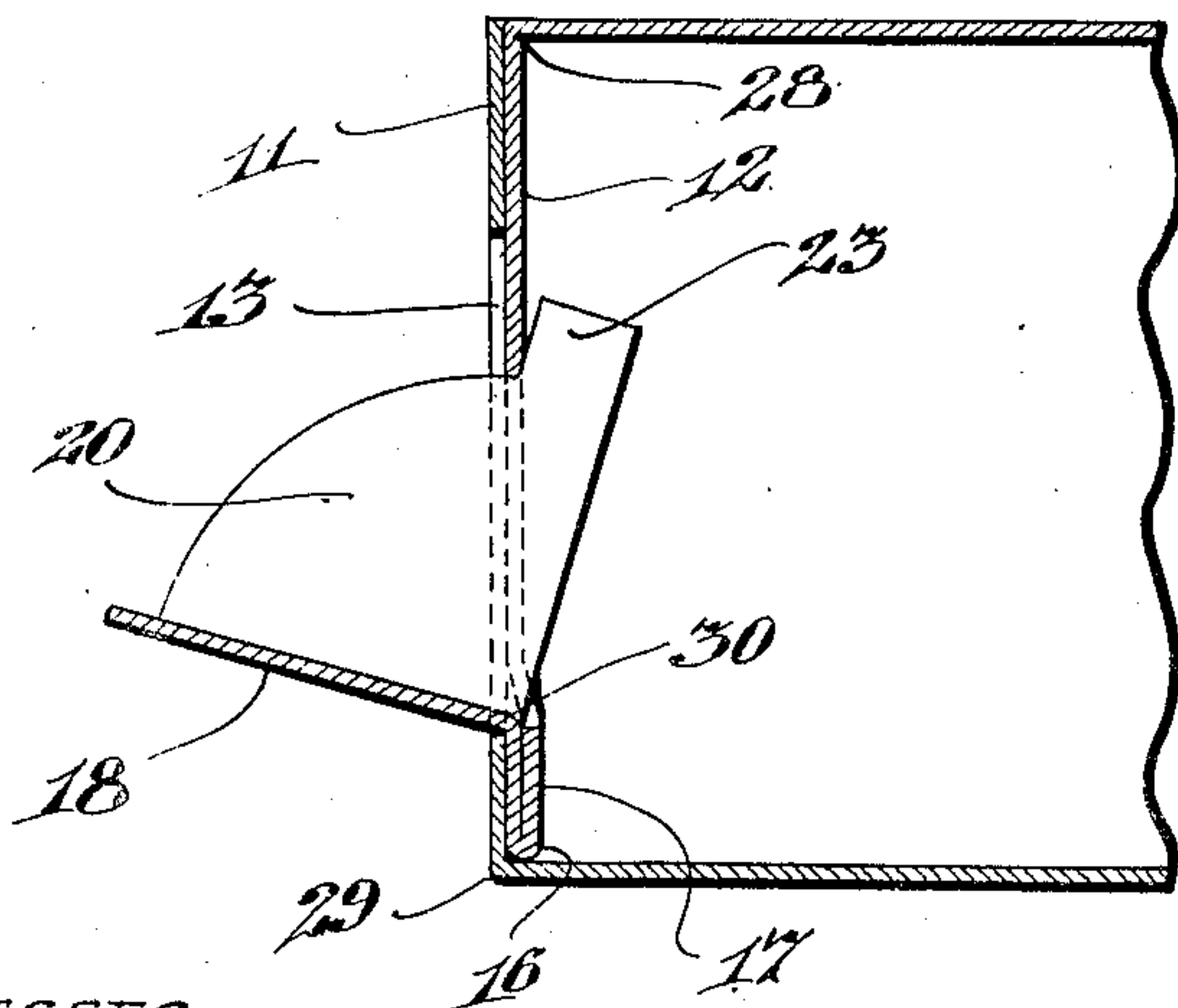


FIG. 7



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CARTON.

Application filed April 7, 1927. Serial No. 181,634.

This invention relates to cartons or containers, and more particularly to containers stamped or formed from a single sheet of material.

5 The object of the invention is to provide a means and method of constructing a container from a piece of pliable material or material adapted to be folded, whose design contemplates the formation of a spout when the container is assembled.

10 A feature of the invention resides in the provision of an extension to a portion of material adapted to serve as a cover for a container, said extension being patterned to hinge on the cover portion, a portion of the extension forming a material chute adapted to register with a corresponding opening in the cover portion.

15 A further feature is the provision of a second cover portion having an opening adapted to fit over said chute formed integral with the first cover portion. The chute, when in open position, is then adapted to hinge at a second point and project through the second cover. If desired, but one hinging point may be provided.

20 Another feature provides means for forming the spout to project a desired distance beyond the covers of the container, so that for various purposes containers of a certain size may be provided with spouts having different rates of flow, depending upon the extent that the chute or spout is allowed to project outwardly. The spout, which may be considered part of the cover when not in use, is thus prevented from being displaced. This also makes for more accurate and easy filling of smaller receptacles, especially those with narrow necks or small openings.

25 Other features and objects will be apparent from the following description, read in conjunction with the accompanying drawings in which:—

30 Figure 1 is a fragmentary plan view of an embodiment of my invention on a sheet of cardboard adapted to form a carton. Only the top portion of the carton pattern is illustrated.

35 Figure 2 is a plan view of the carton pattern of Figure 1 in assembled form, prior to folding of the cover portions.

40 Figure 3 shows the manner of folding the covers, and is a front view of the illustration of Figure 4.

45 Figure 4 is a side elevation, showing the

arrangement of the covers and the position of the chute of Figure 3.

Figure 5 is a plan view, showing the covers in closed position.

Figure 6 is a perspective view of a carton incorporating the invention, showing the chute or spout in open position.

Figure 7 is a cross section taken on line 7—7 of Figure 6 and illustrates the means for preventing displacement of the spout, and for limiting its outward movement.

Considering all the drawings simultaneously, similar designations referring to similar parts, numeral 8 is a sheet of cardboard, the scored lines thereon indicating points whereat the sheet is adapted to be folded to form a container. The solid lines indicate where the sheet is cut to form the necessary flaps and cover portions of required size.

Flaps 9 and 10 and cover portions 11 and 12 are produced in one operation by any well known cutting and stamping means. Extension 15 is formed integral with cover portion 12. The same operation cuts openings 13 and 14 in cover portions 11 and 12 and scores the material indicated to enable forming the carton and material chute. As is evident, the formation comprises a single sheet of material.

Considering extension 15, scored line 16 forms a hinge for portion 17 having tongue 18. Tongue 18 serves as the bottom of the spout or chute. Portions 19 and 20 are the sides of the chute, lines 21 and 22 indicating the points where the sides are cut from portion 17, to enable them to be bent along the scored lines of tongue 18 to form a chute with tongue 18. The outer edges of sides 19 and 20 are curved and designed to form projections 23 which act as stops and limit the outward swing of the spout.

The assembly of the container is effected as follows: The material is folded along the scored lines and portion 24 attached in any suitable manner to side 25, thus forming the four sides of the container. Flap 10 is folded along line 26 and flap 9 along line 27, as is usual. The length of flaps 9 and 10 is such that they do not extend beyond openings 13 and 14. Consequently, there is no interference with the passage of material through openings 13 and 14, while practically the same reinforcement is obtained. Cover portion 12 is then folded along scored line 28 and the spout formed from

extension 15 before portion 11 is folded along line 29 to act as a top cover.

The spout is formed by folding the extension along scored line 16 toward the outer side of the cover portion 12, sides 19 and 20 being folded along their scored lines also outwardly. Sides 19 and 20 are then inserted within opening 14, the tongue 18 fitting without the opening. Top cover 11 is then folded on top of cover 12. Since opening 13 is larger than tongue 18 as is shown in Figure 5, the spout may be projected outwardly on the line 30, forming the intermediate connection of cut lines 21 and 22 of Figure 1. This acts as a hinge for the tongue.

Figure 7 best shows the relative position of the parts. Cover 12 is innermost. Portion 17 is hinged on line 16. Sides 19 and 20 fit within opening 14, parts 23 acting as stops to limit the outward movement of the chute or spout. Tongue 18 is larger than opening 14 and hence cannot fall or be displaced within the carton. Hole 13 in outer cover 11 is larger than the tongue and allows the tongue to swing outwardly therethrough.

It is evident that projections 23 may be made of any size, merely by adjusting the cutting die for the outer edges of extension 15, without disturbing the rest of the carton forming apparatus. This is very advantageous, since popular sized cartons may thus be adapted to be used for various purposes. The spout can therefore be made to project slightly if a large extension is provided, as would be desirable in a container for spices, where small quantities are discharged at a time. A larger opening, as the one illustrated, is desirable for other products as coarse salt, ground coffee, etc. The projections are therefore made very small.

If desired, a paster or label may be placed over opening 13 on the outer cover to prevent accidental opening of the spout. The friction of the sides against the edges of opening 14 will ordinarily prevent accidental displacement.

It is apparent that the same principle may be employed in round or other forms of cartons, the various parts and openings being arranged to form a spout upon the assembly of a stamped sheet of material.

While I have described my invention as taking a particular form, it will be understood that modifications may be made without departing from the spirit thereof, and hence I do not limit myself to the precise construction set forth, but consider that I am at liberty to make such changes and al-

terations as fairly come within the scope of the appended claims.

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

1. A piece of material in the form of a container comprising side pieces and cover pieces, an extension on one of said cover pieces, the line therebetween acting as a hinge, portions of said extension adapted to be folded to form a spout and swing through said cover piece and an opening in the other cover piece at a second point on said extension serving as a hinge, said extension being folded on the first cover piece in a position between the cover pieces.

2. A container consisting of a single piece of material formed into side pieces, two cover pieces and an extension on one of said cover pieces, an opening through one of the cover pieces, an opening in the second cover piece, said extension being folded at the extremity of the second cover piece and folded again whereby the second fold is at an extremity of the opening in the second cover piece, said extension being arranged to form a spout adapted to swing on said second fold in one direction to close the opening in the second cover piece, and in the opposite direction to project through the opening in the first cover piece.

3. A container made of a single piece of material having a cover with an opening therein, a second cover with an opening adapted to register with the first opening, said second cover having an extension arranged to form a hinged spout, the extension being positioned between the covers, the bottom of said spout being larger than the opening in the second cover and smaller than the opening in the first cover so that it may be manually swung through the first cover and rest when in disuse on the second cover.

4. A container consisting of a single piece of material having a cover with an opening therein; a second cover having an opening therein adapted to register with the first opening and having an extension arranged to form a hinged spout, the bottom of said spout being larger than the opening in the second cover and smaller than the opening in the first cover, the spout being accessible through the first opening, and having means to limit its movement through the second opening and being swingable on a part of the extension positioned between the covers.

In testimony whereof I have signed my name to this specification.

GLENDON T. WOOD.