

M. FALK.
CUTTING AND STAMPING DIE.
APPLICATION FILED OCT. 20, 1909.

999,303.

Patented Aug. 1, 1911.

2 SHEETS—SHEET 1.

FIG. 1.

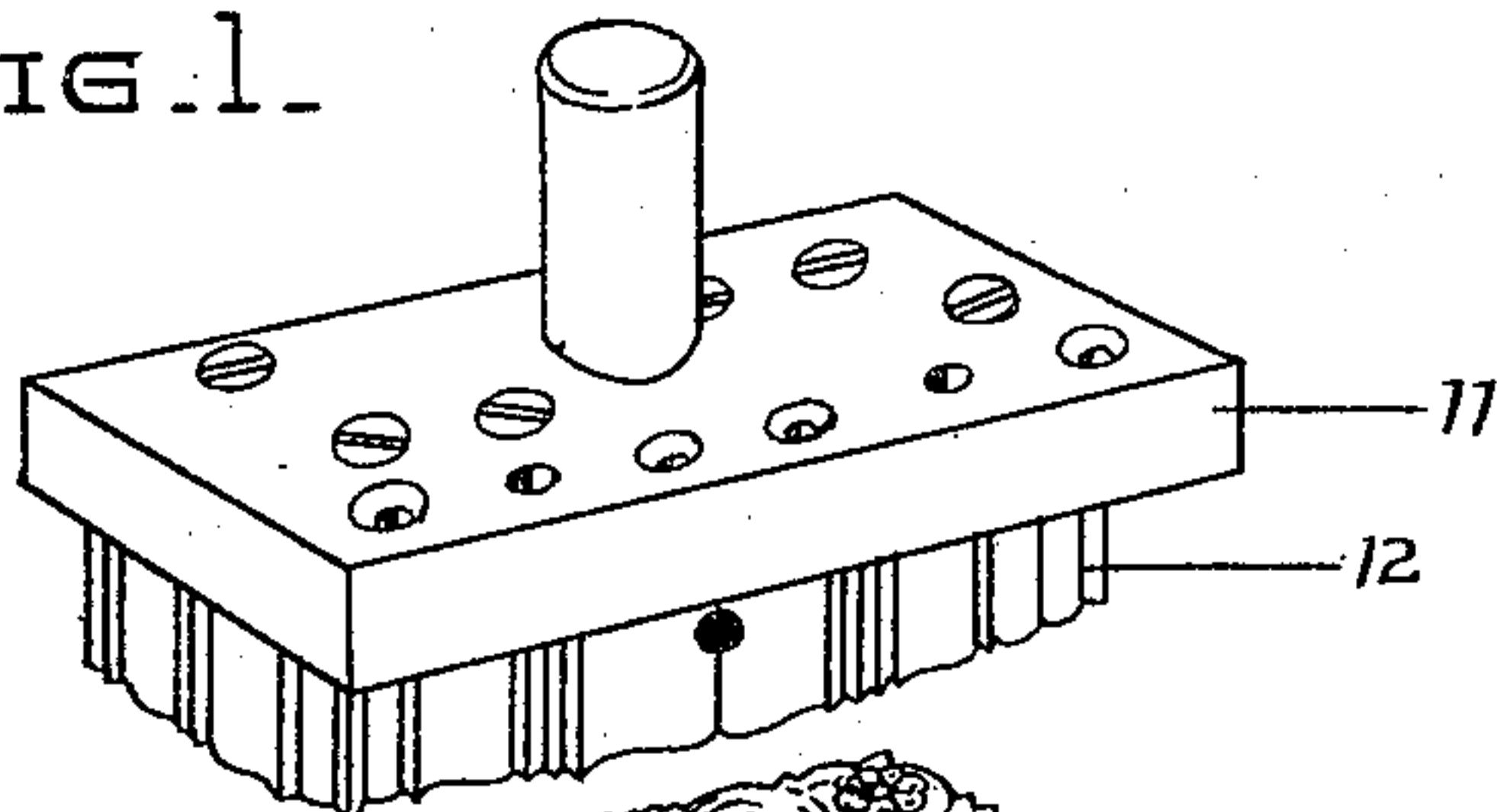


FIG. 2.

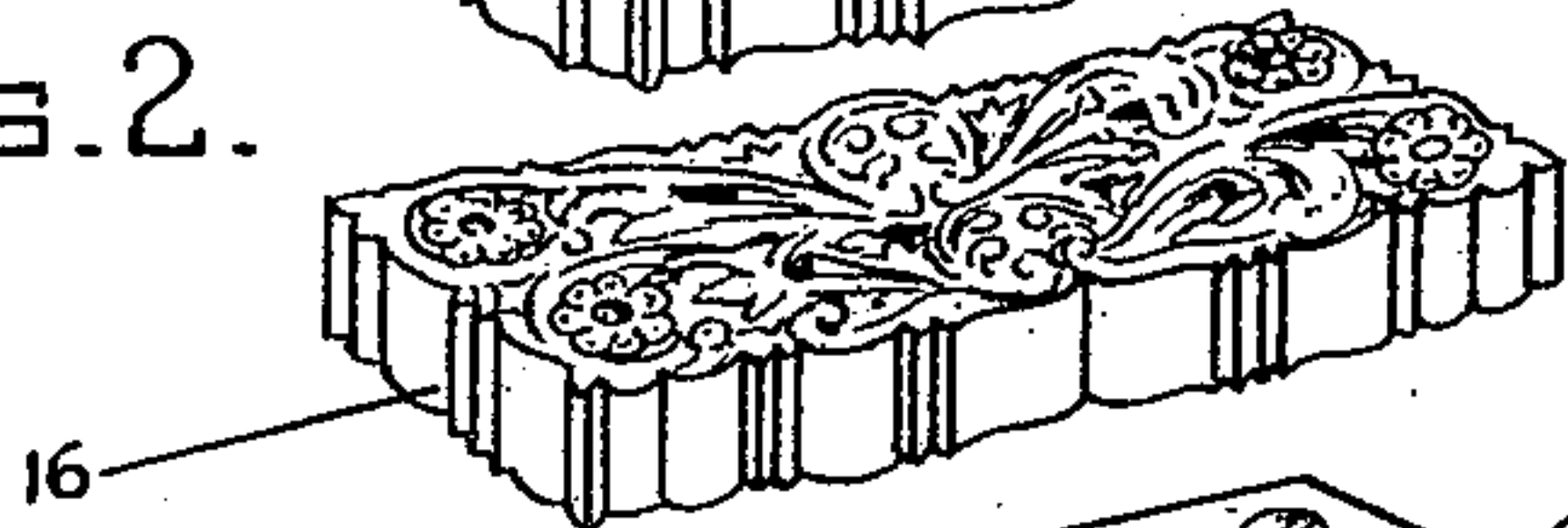


FIG. 3.

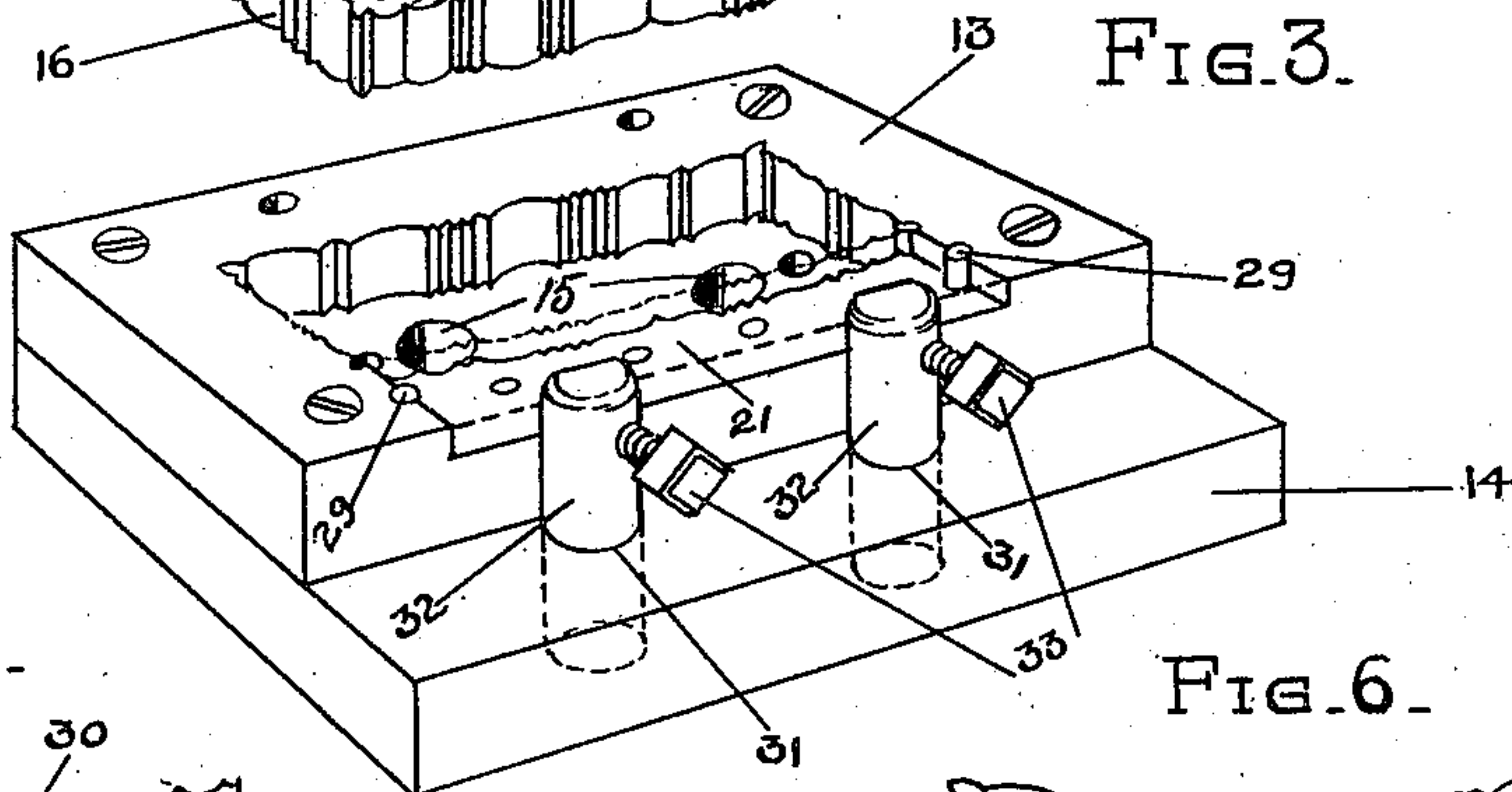


FIG. 5.

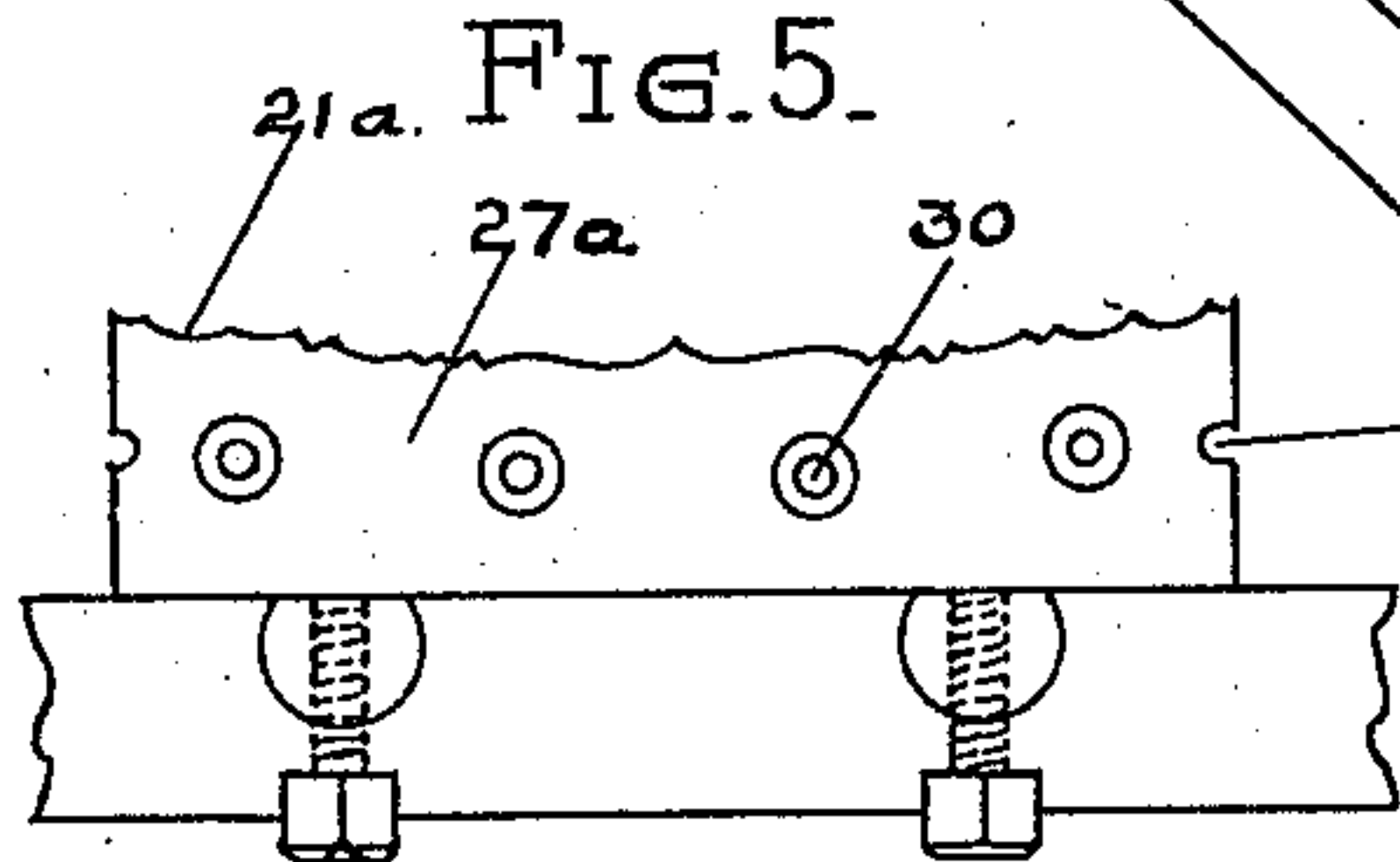


FIG. 6.

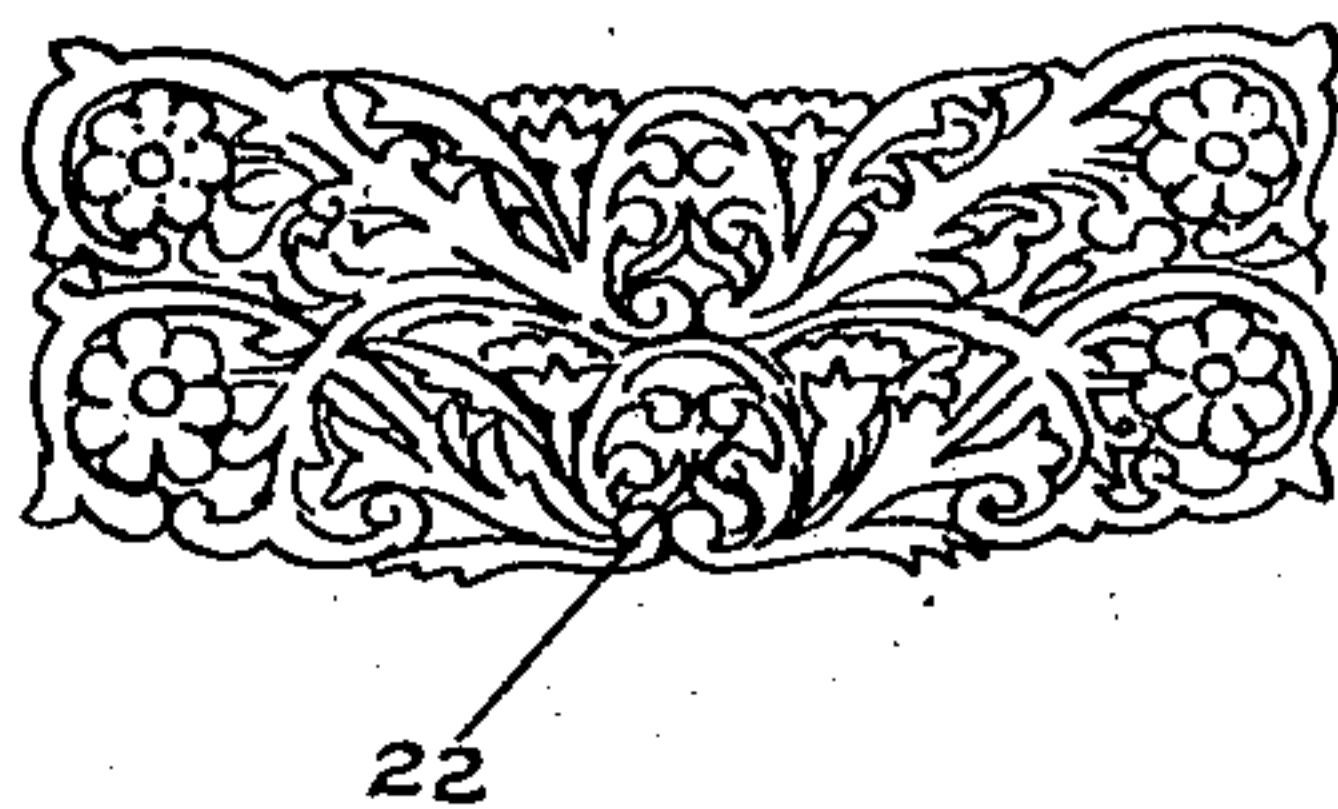
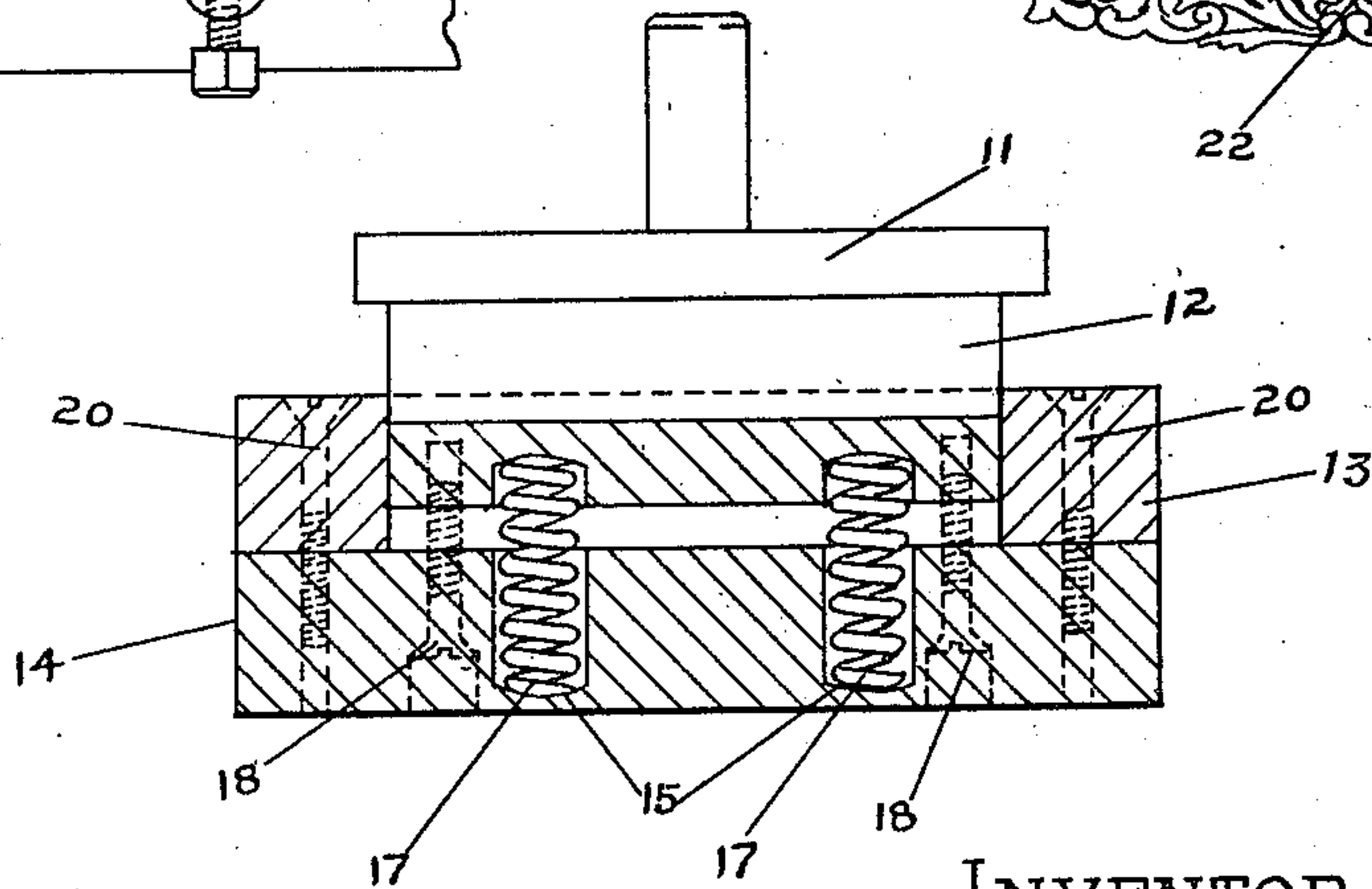


FIG. 4.



WITNESSES

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[Signature]

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2 SHEETS—SHEET 2.

FIG. 7.

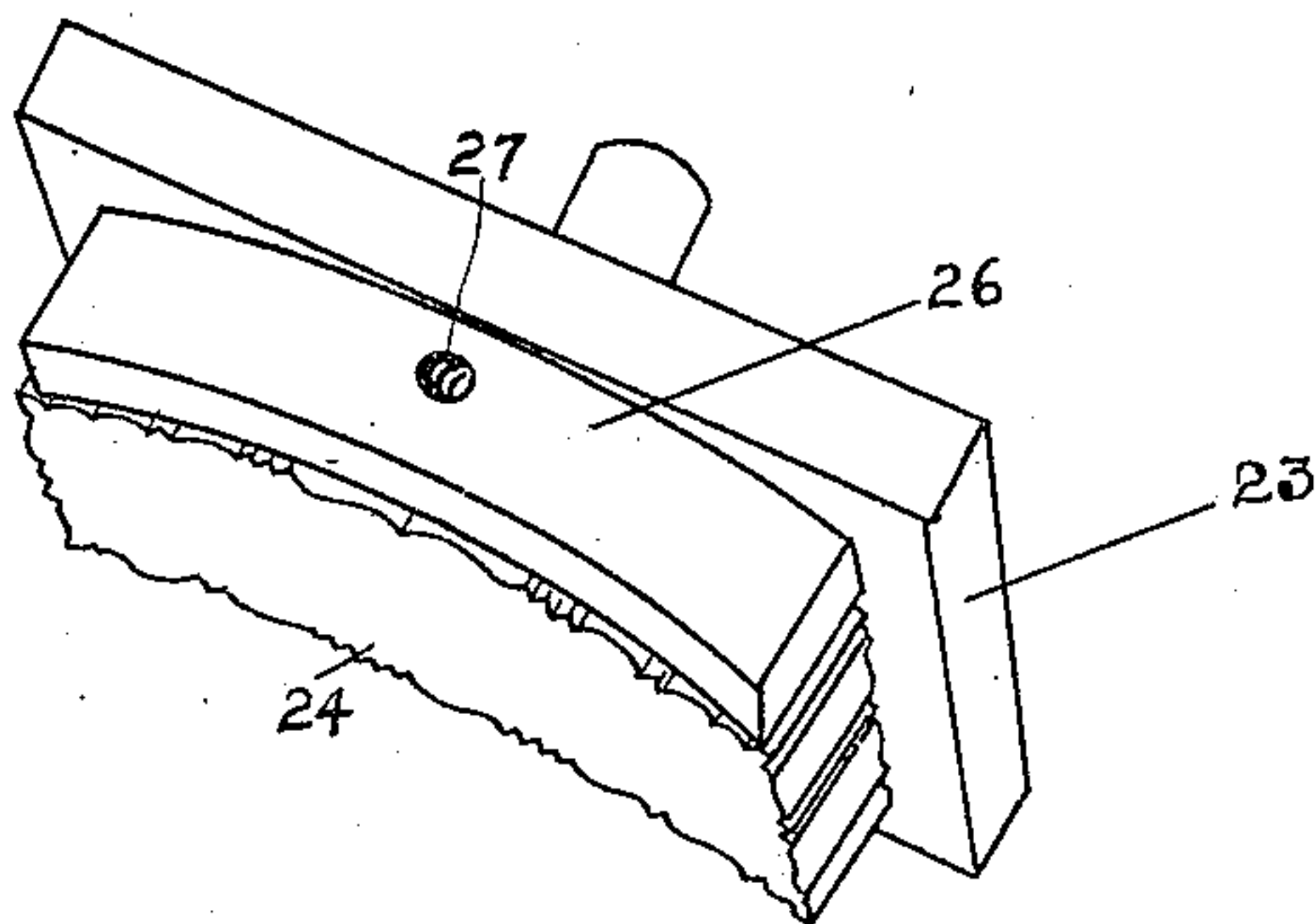


FIG. 8.

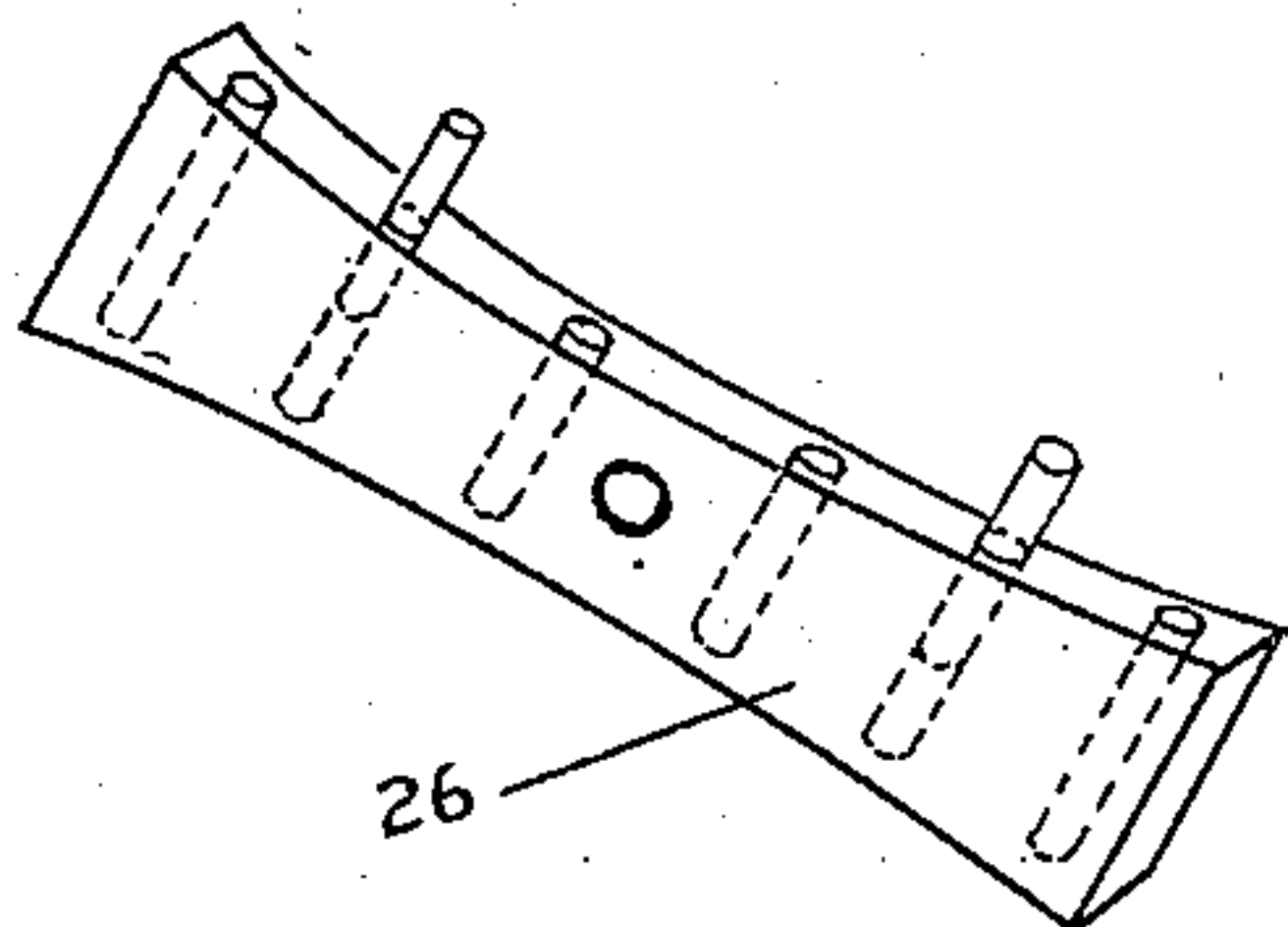


FIG. 9.

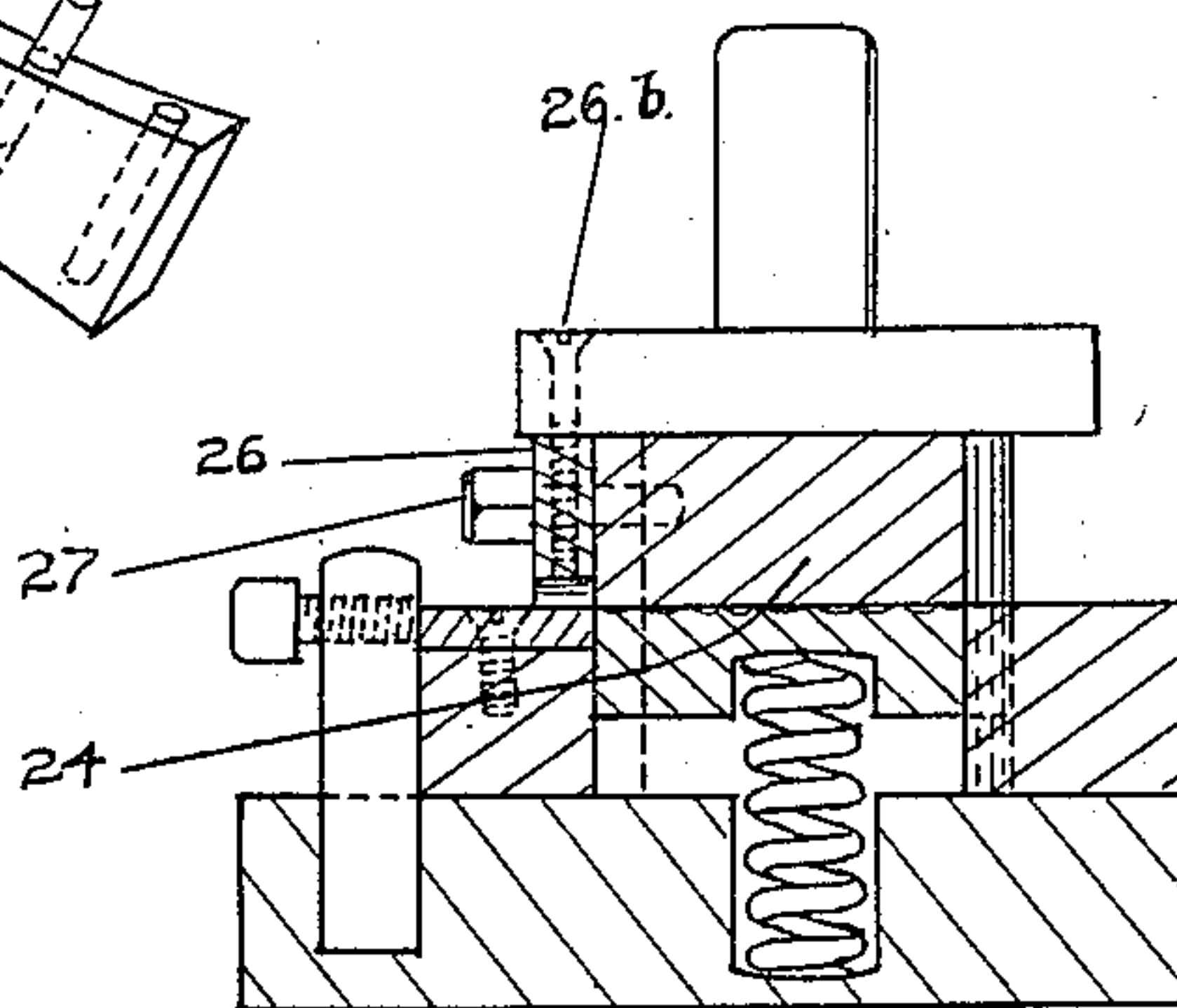
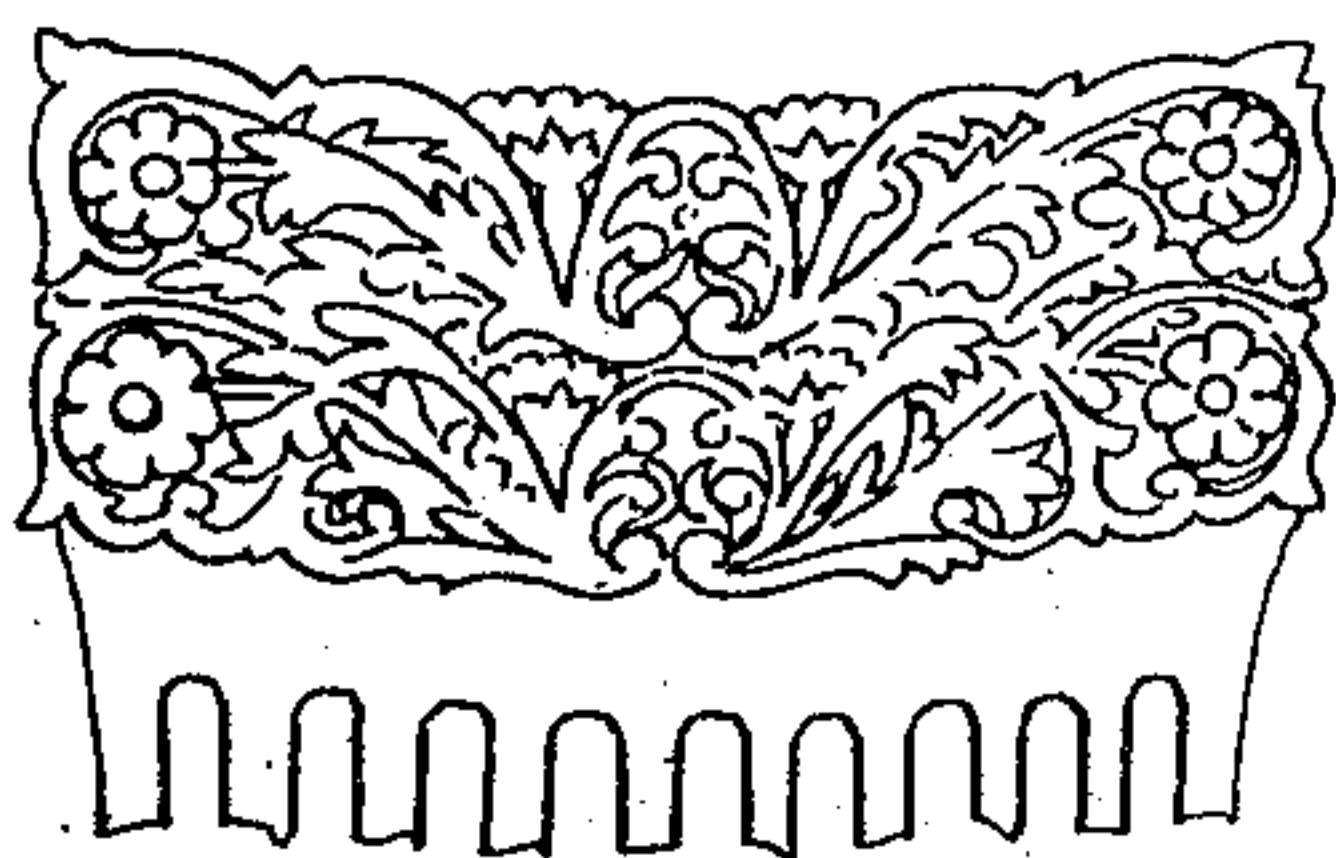


FIG. 10.



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CUTTING AND STAMPING DIE.

999,303.

Specification of Letters Patent.

Patented Aug. 1, 1911.

Application filed October 20, 1909. Serial No. 523,594.

To all whom it may concern:

Be it known that I, MORRIS FALK, a citizen of the United States of America, residing at Leominster, in the county of Worcester and State of Massachusetts, have invented certain new and useful Improvements in Cutting and Stamping Dies, of which the following is a specification.

This invention relates to cutting dies and particularly to a device for cutting and stamping barrettes, combs and the like and its object is to so construct the dies as to make them readily adaptable for use in making either barrettes or combs, the means whereby the dies are changed to fit them for either purpose being mounted exteriorly of the device, so that it may not be necessary to dismantle the apparatus to convert it in the manner stated.

With the foregoing and other objects in view, the invention consists in the details of construction and in the arrangement and combination of parts to be hereinafter more fully set forth and claimed.

In describing the invention in detail, reference will be had to the accompanying drawings forming part of this specification wherein like characters denote corresponding parts in the several views, in which—

Figure 1 illustrates a view in perspective of a presser head; Fig. 2 illustrates a perspective view of the die plate; Fig. 3 illustrates a perspective view of the base adapted to receive the die plate; Fig. 4 illustrates a longitudinal sectional view of the parts in assembled relation; Fig. 5 illustrates a fragment of the base with an attachment thereon for converting the mechanism from a comb producing to a barrette producing apparatus; Fig. 6 illustrates a plan view of a barrette such as would be produced by the cutting die shown in the drawing (Fig. 9); Fig. 7 illustrates a perspective view of the presser head with a gage applied thereto; Fig. 8 illustrates a perspective view of the gage; Fig. 9 illustrates a transverse sectional view of the parts in assembled relation as said parts appear when a barrette is to be produced; and Fig. 10 illustrates a plan view of the head of a comb with fragments of the teeth integral therewith.

In these drawings 11 indicates a presser head having a cutting member 12 applied thereto, which presser head is designed to be reciprocated in any appropriate way. The configuration of the edge of the cutter con-

forms to that of the coacting member or supplemental base 13, which coacting member is provided with a recess forming a well designed to receive the die plate 16, which die plate may be provided with an ornamental surface. The base proper 14 is provided with a series of sockets 15 forming seats for the springs 17, which springs extend upwardly and support the die plate 16, shown as having an ornamental die surface thereon. The base 14 is provided with screws 18 threaded in the die plate 16 to limit its upward movement under the influence of the springs 17. The base proper 14 and the member 13 are secured together by means of screws 20. The member 13 has its top surface recessed at one side as shown at 21 which is for the purpose of receiving that part of the blank from which the teeth are formed, so that the blank will not be cut along that side. This recess is occupied, when a barrette is to be made, by a filling block 27^a having its inner edge 21^a shaped to the configuration of the inner edge of the well of the member 13.

In the operation of forming a barrette 22, such as is shown in Fig. 6, the blank, of material such as celluloid, shell, horn, metal, etc., is laid upon the die-plate and the cutter is caused to descend thereupon, cutting the same along all four edges, or only along three, if the filling-plate 27^a has been removed, and impressing the ornamental configuration of the die-plate into said material. The die-plate is depressed, against the resistance of the springs 17, as the cutting takes place, and returns upwardly to eject the finished work as the cutter recedes.

In Figs. 7, 8, and 9, I have illustrated a device designed to accomplish practically the same result as that heretofore described except that I provide gages for limiting the movement of the presser head in order that the material may not be cut on one side. The presser head 23 has a cutter 24 to which a gage plate 26 is applied, and removably secured by any suitable means, as by the dowel-pins and screws indicated in the drawing.

To hold the filling-block 27^a securely in place, the base proper 14 has formed in it sockets 31, to receive posts 32, the inner faces of said posts being flattened to bear against the rear edges of the filling-plate. Furthermore, I may provide set-screws 33,

threaded through said posts and engaging the said edge of the filling-plate, whereby the latter may be slightly adjusted and securely held in adjusted position against
 5 backward movement under the action of the cutting-die. The filling-plate 27^a may further be provided with recesses 28 in its side edges, adapted to fit over pins 29 in the member 13, as indicated in Figs. 3
 10 and 5.

While I have illustrated and described a preferred embodiment of the invention, I wish it to be understood that modifications may be made in the details of construction, without departing from the spirit of the invention, which is expressed and defined in the following claims.

I claim—

1. In a device of the class described, the
 20 combination of a presser head carrying a cutter, a base having a member thereon provided with a recess, the wall of the recess and the edge of the cutter conforming in contour, the upper surface of the said
 25 member being cut away on one side from the edge of the wall of the recess, springs extending upwardly from the base, and a die plate supported by the springs.

2. In a device of the class described, the
 30 combination of a presser head carrying a cutter, a base having a member thereon provided with a recess, the wall of the recess and the edge of the cutter conforming in contour, the upper surface of the said
 35 member being cut away on one side from the edge of the wall of the recess, springs extending upwardly from the base, a die plate supported by the springs, and a filling block adapted to be secured in said cut-
 40 away portion of said wall.

3. In a device of the class described, the combination of a presser head carrying a

cutter, a base having a member thereon provided with a recess, the upper surface of said member being removed on one side, a
 45 die seated in said recess, springs for yieldably supporting the die, a filling block adapted to be placed in said recess, and means on said base to secure said block in position.

4. In a device of the class described, the combination of a reciprocatory head carrying a cutting-die, a base member having a cooperating, conjugate cutting die, one of
 55 said dies being internal and the other external, the internal die having a plate movably fitted therein, springs beneath said plate and means to limit its movement under the influence of said springs, one side of said internal die having a recess adapted
 60 to receive a filling-block, and means to removably secure said block in position.

5. In a cutting die, a presser head, a cutter thereon, a gage block attached to said presser head and said cutter, a base having
 65 a member therein provided with a recess, the upper surface of said member being removed on one side adapted to receive the gage block, a die seated in the recess, and springs for yieldably supporting the die.

6. In a cutting die, a presser head, a punch thereon having an extension, a base having a member provided with a recess, the upper surface of said member being removed on one side adapted to receive the
 70 said extension, a plunger seated in the recess, and springs for yieldably supporting the plunger.

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

MORRIS FALK.

Witnesses:

J. WARD HEALEY,
 CROFTON C. HOLDEN.