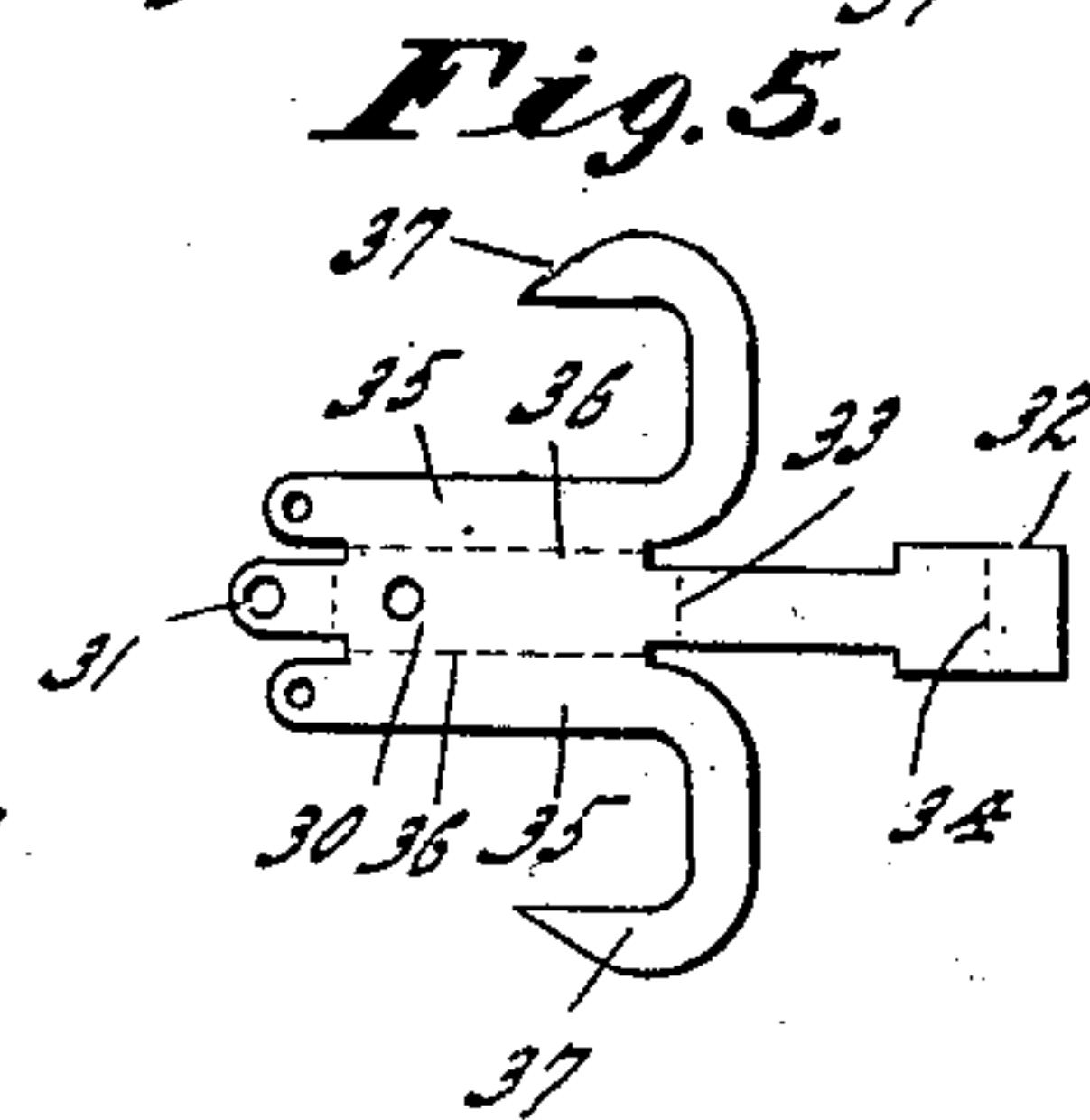
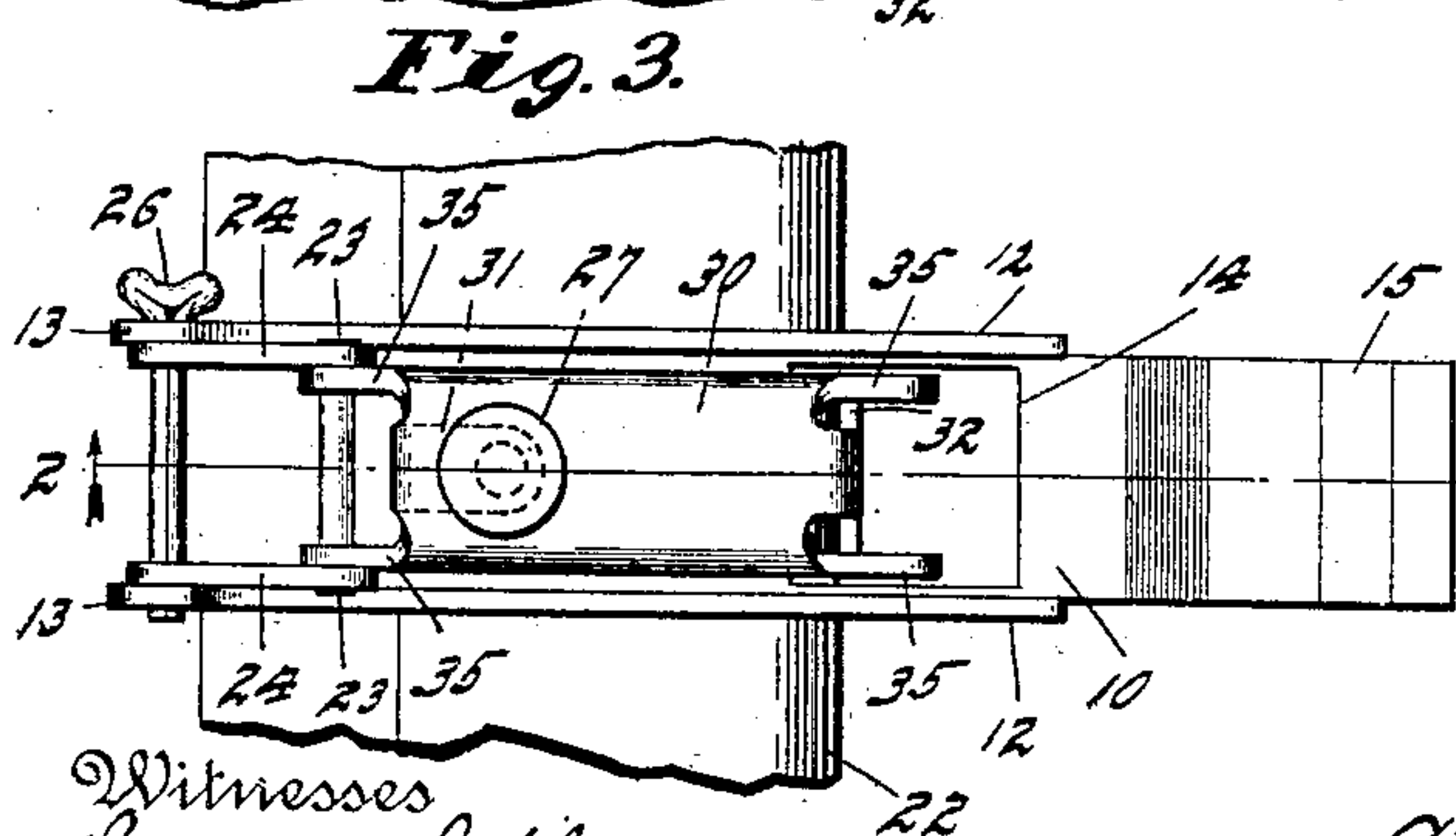
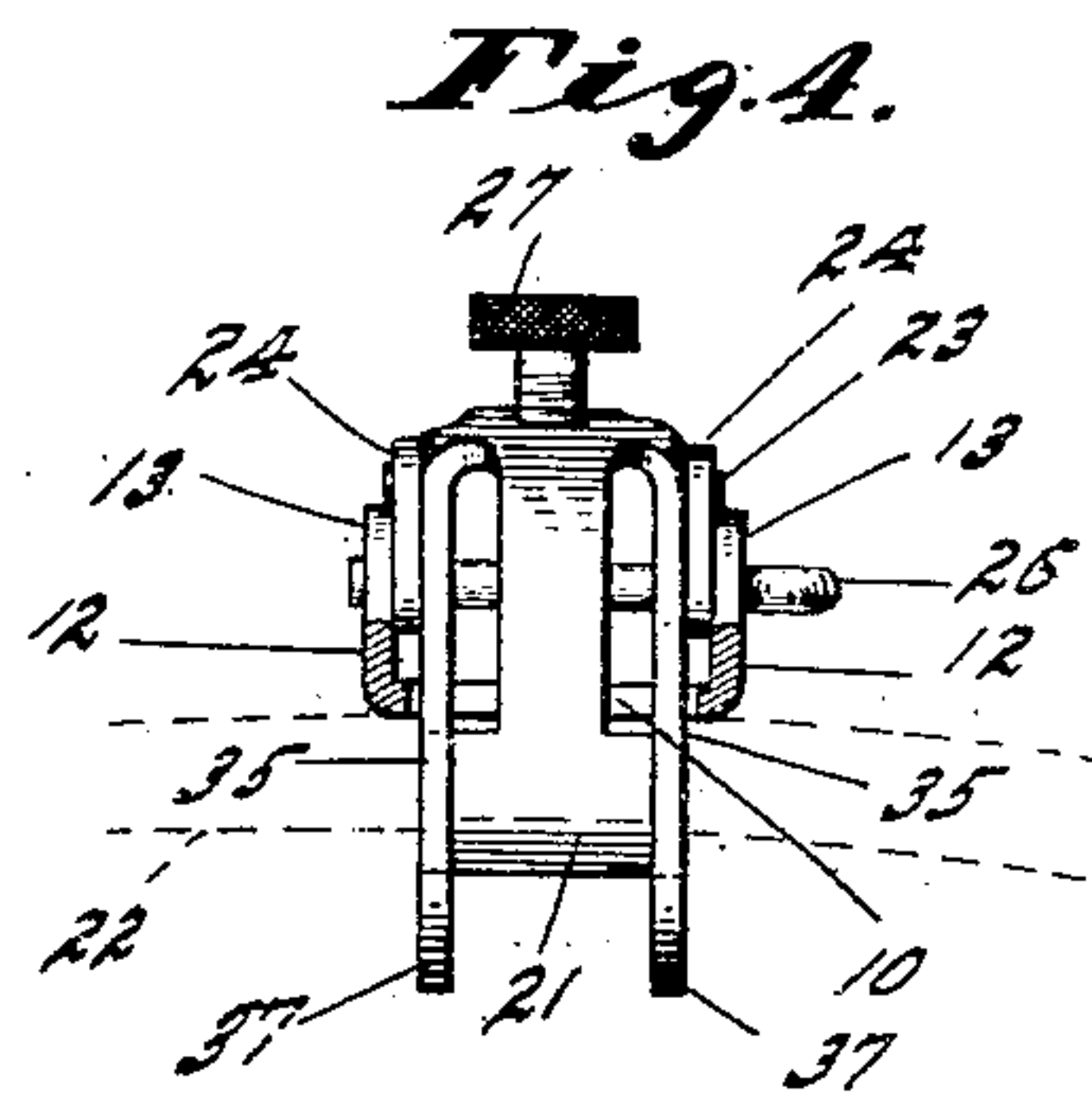
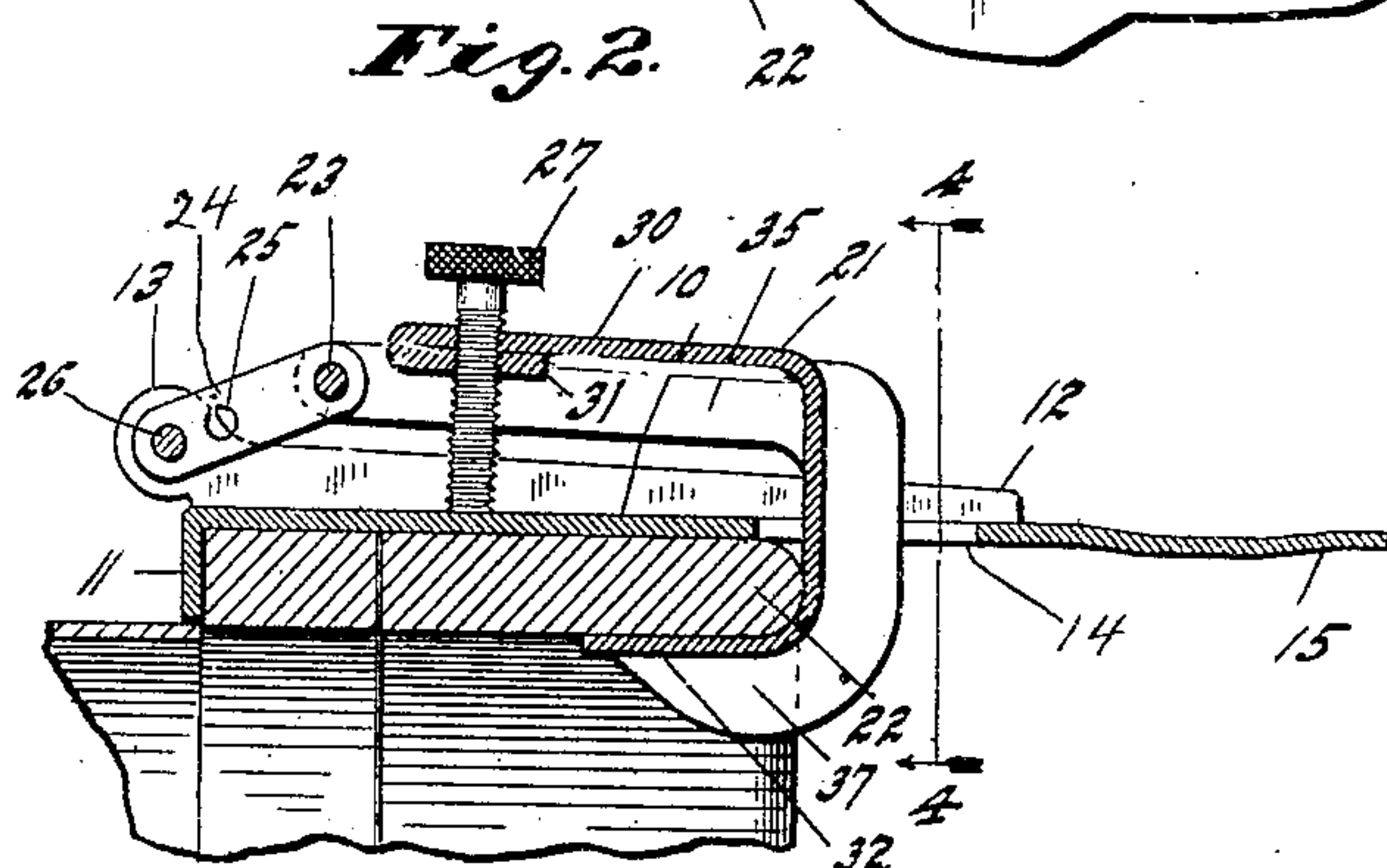
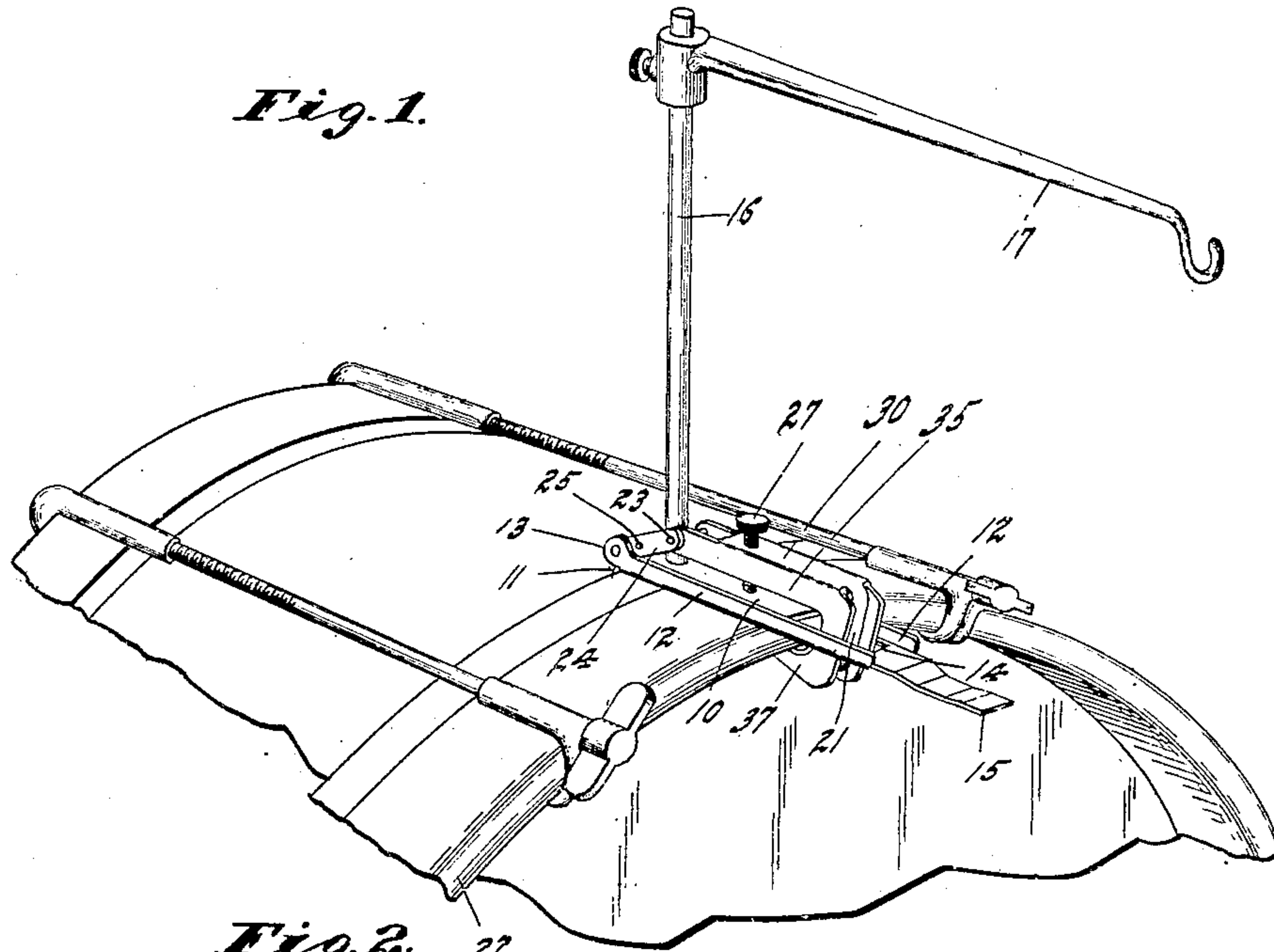


C. B. WANAMAKER.  
CLAMP.  
APPLICATION FILED NOV. 16, 1908.

923,610.

Patented June 1, 1909.



Witnesses  
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# UNITED STATES PATENT OFFICE.

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## CLAMP.

No. 923,610.

Specification of Letters Patent.

Patented June 1, 1909.

Application filed November 16, 1908. Serial No. 462,809.

*To all whom it may concern:*

Be it known that I, CHARLES B. WANAMAKER, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Clamps, of which the following is a specification.

The object of my invention is to produce a clamp by means of which the manipulation of a single screw or operating member will serve to exert two clamping forces in planes substantially at right angles to each other.

The device is especially designed as a clamp by means of which suitable holders may be attached to the ring of a bass drum to receive and firmly support drummer's traps of various kinds, but of course is not limited to such use.

The accompanying drawings illustrate my invention.

Figure 1 is a perspective view showing an embodiment of my clamp; Fig. 2 a longitudinal section on line 2—2 of Fig. 3; Fig. 3 a plan; Fig. 4 a section on line 4—4 of Fig. 2, and Fig. 5 a plan of the original sheet from which the hook-shaped member is folded.

In the drawings, 10 indicates a main body, preferably of sheet metal, provided at one end with a lip 11 and at each side with side flanges 12 each provided with an ear 13 at one end. Formed through the plate 10, at a suitable distance from ear 11, is an opening 14. Plate 10 is adapted to receive and carry any suitable member for the reception of any device to be carried or supported by the clamp and in the drawings I have shown the end of plate 10 extended at 15 to form a receiving finger. An upright 16 (as shown in Fig. 1) may also be carried by the plate 10 in order to form a support for a cross arm 17 adapted to receive a cymbal. Extended through opening 14 is one end of a hook-shaped finger 21 the short under end of which extends toward lip 11 and is adapted to pass beneath the drum ring 22 while the long arm of the finger lies substantially parallel with plate 10 and is pivoted at 23 to a pair of short links 24 each provided with several perforations 25 adapted to receive a cotter pin or other suitable pivot pin 26 passed through eyes 13. Threaded through the long arm of the finger 21 is an operating screw 27 which is adapted to be forced into engagement with plate 10.

The operation is as follows: The short arm of the hook-shaped finger 21 is placed beneath one edge of hoop 22 and lip 11 then thrown down beyond the opposite edge of the hoop. Thereupon a rotation of screw 27 will cause the hook-shaped finger 21 to first move away from plate 10 until the short arm of the finger engages the under surface of the hoop. Further rotation of the screw moves the long arm of the finger farther away from the plate and swings links 24 upon pin 26 and therefore draws finger 21 bodily toward lip 11 thereby exerting two clamping forces upon the hoop, bringing the short arm of the hook against the under face of the hoop and also against that edge of the hoop opposite lip 11.

The hook, of course, may be formed in any desired manner, by casting or otherwise, but for ease of manufacture I have found it advisable to produce a blank like that shown in Fig. 5. In this form the main body 30 of the blank is provided at one end with a short finger 31 adapted to be folded beneath the part 30 so as to increase the thickness of the material within which threads may be formed for screw 27. At the other end of body 30 is a finger 32 bent upon the line 33 to a position substantially at right angles to plate 30 and bent on the line 34 so as to return beneath and to substantially parallelism with the main body 30. The main body 30 is flanked on each side by portions 35 bent along lines 36 so as to lie substantially parallel with each other and substantially at right angles to the main body. The parts 35 have hook-shaped ends 37 which, when bent down as described, pass beneath and stiffen the bent end of the portion 32.

I claim as my invention:—

1. A clamp comprising a main body having a clamping member, a movable clamping member having two relatively fixed clamping portions arranged at an angle to each other, a single member carried by one of said members and adapted to engage the other, and connections whereby said single member is adapted to cause a movement of one clamping member relative to the other in two directions substantially normal to the two clamping portions of said movable member.
2. A clamp comprising a main body having a lip 11, a hook-shaped finger cooperating with said lip 11 and movable bodily relative



thereto in two directions, and a single operating means engaging said body and finger to cause such movement.

3. A clamp comprising a main body having a non-moving lip 11, a hook-shaped finger cooperating with said lip 11 and movable bodily relative thereto in two directions, and operating means causing such movement.

4. A clamp comprising a main body having a lip 11, a hook-shaped finger 21, a link connection between said hook-shaped finger and the main body, and a screw 25 engaging the main body and hook-shaped finger to cause relative movement thereof, substantially as described.

5. A clamp comprising a main body having a finger 11, a sheet-metal hook-shaped finger 25, formed of a blank comprising a

main body, a portion 32 bent into a hook-shaped finger relative to the main body, and side portions 35 having hook-shaped portions bent into cooperation with the hook-shaped finger 32, substantially as described, a link pivotally connecting one arm of the hook-shaped finger with the main body, and a clamping screw threaded through said finger and engaging the main body, substantially as and for the purpose set forth.

In witness whereof, I have hereunto set my hand and seal at Indianapolis, Indiana, this eleventh day of November, A. D. one thousand nine hundred and eight.

CHARLES B. WANAMAKER. [L. s.]

Witnesses:

ARTHUR M. HOOD,  
U. G. LEEDY