

J. E. TROTTER & H. A. CREVIER.

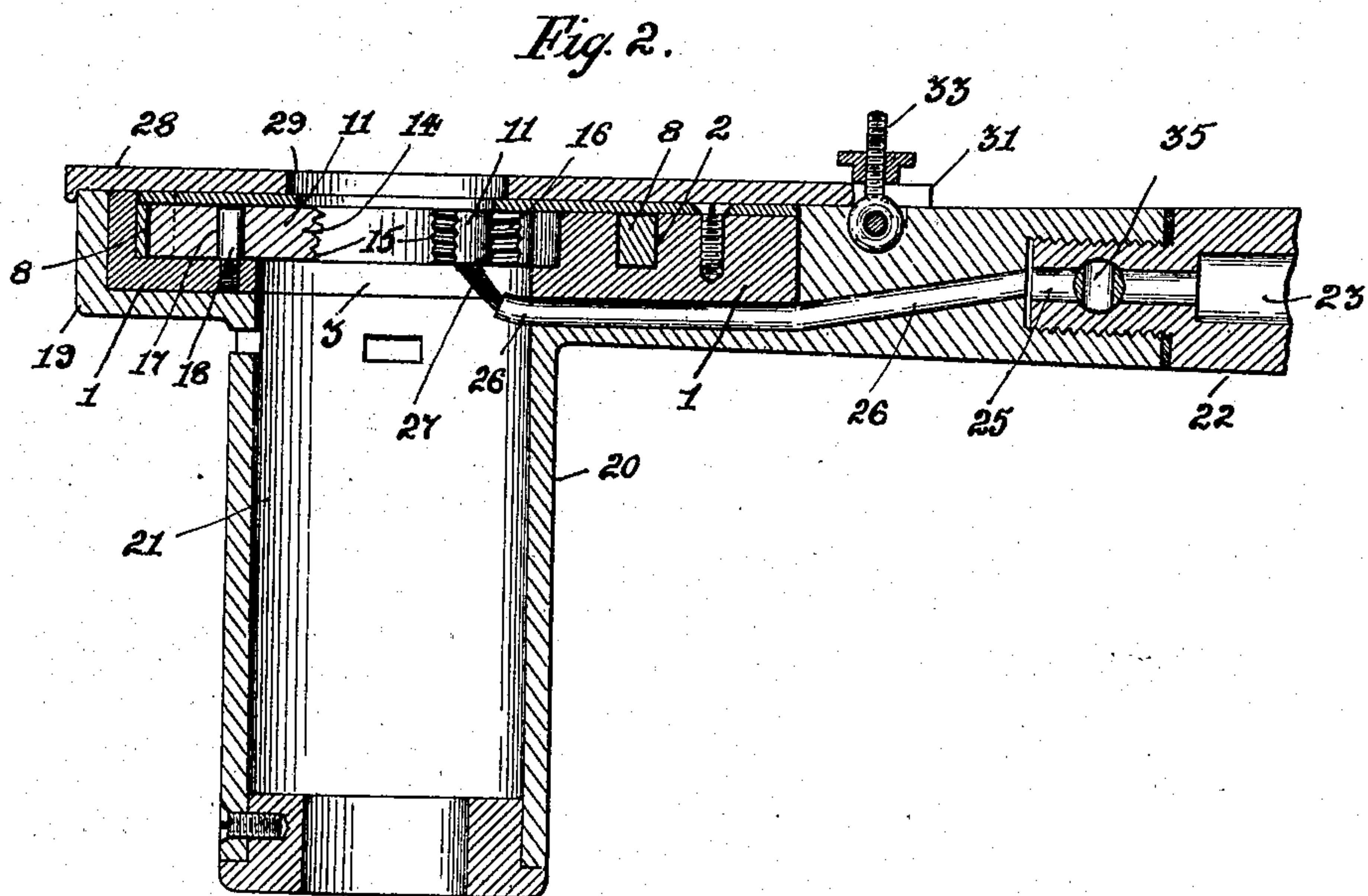
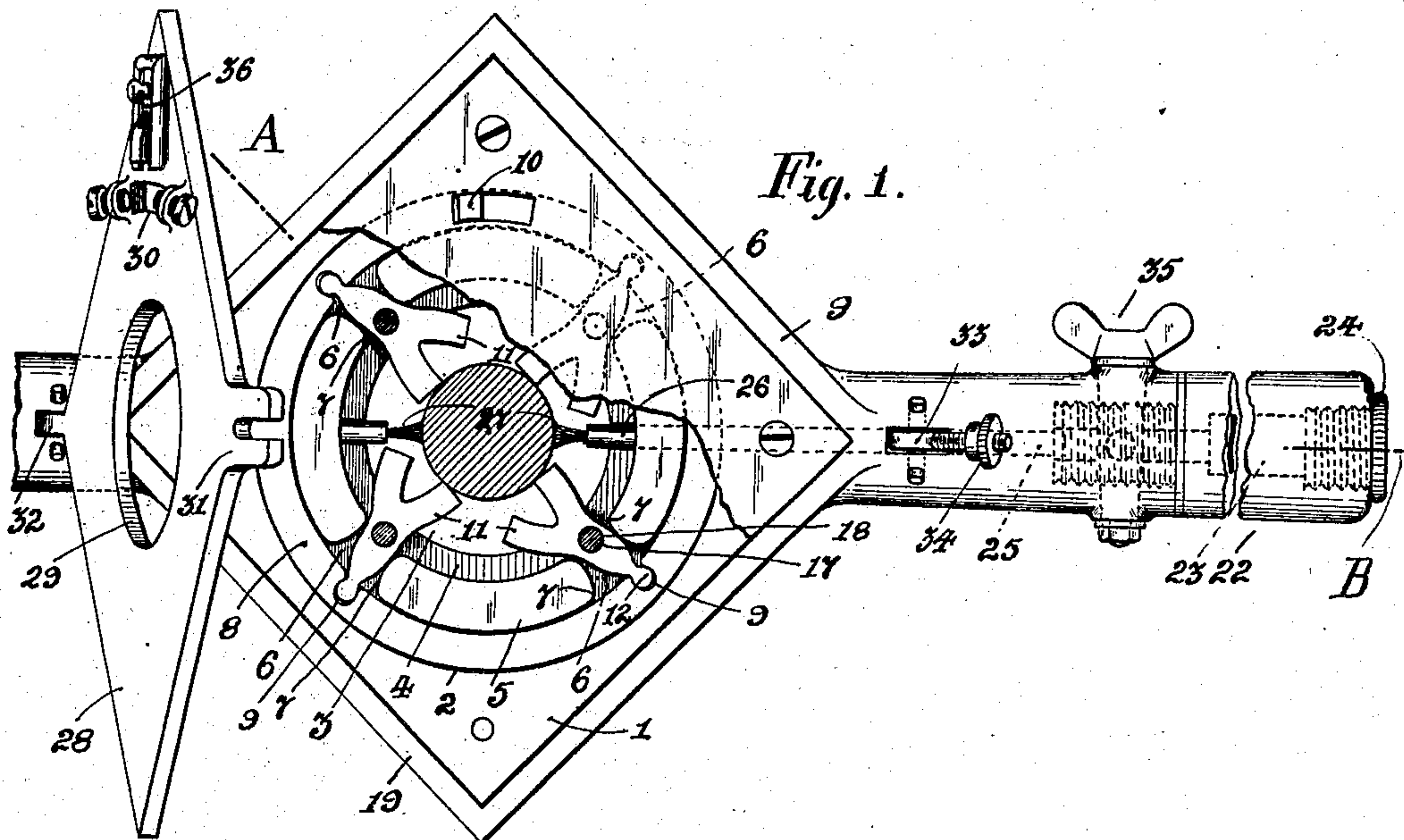
STOCK AND DIE.

APPLICATION FILED MAY 15, 1908.

900,617.

Patented Oct. 6, 1908.

2 SHEETS—SHEET 1.



Witnesses.

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2 SHEETS—SHEET 2.

Fig. 3.

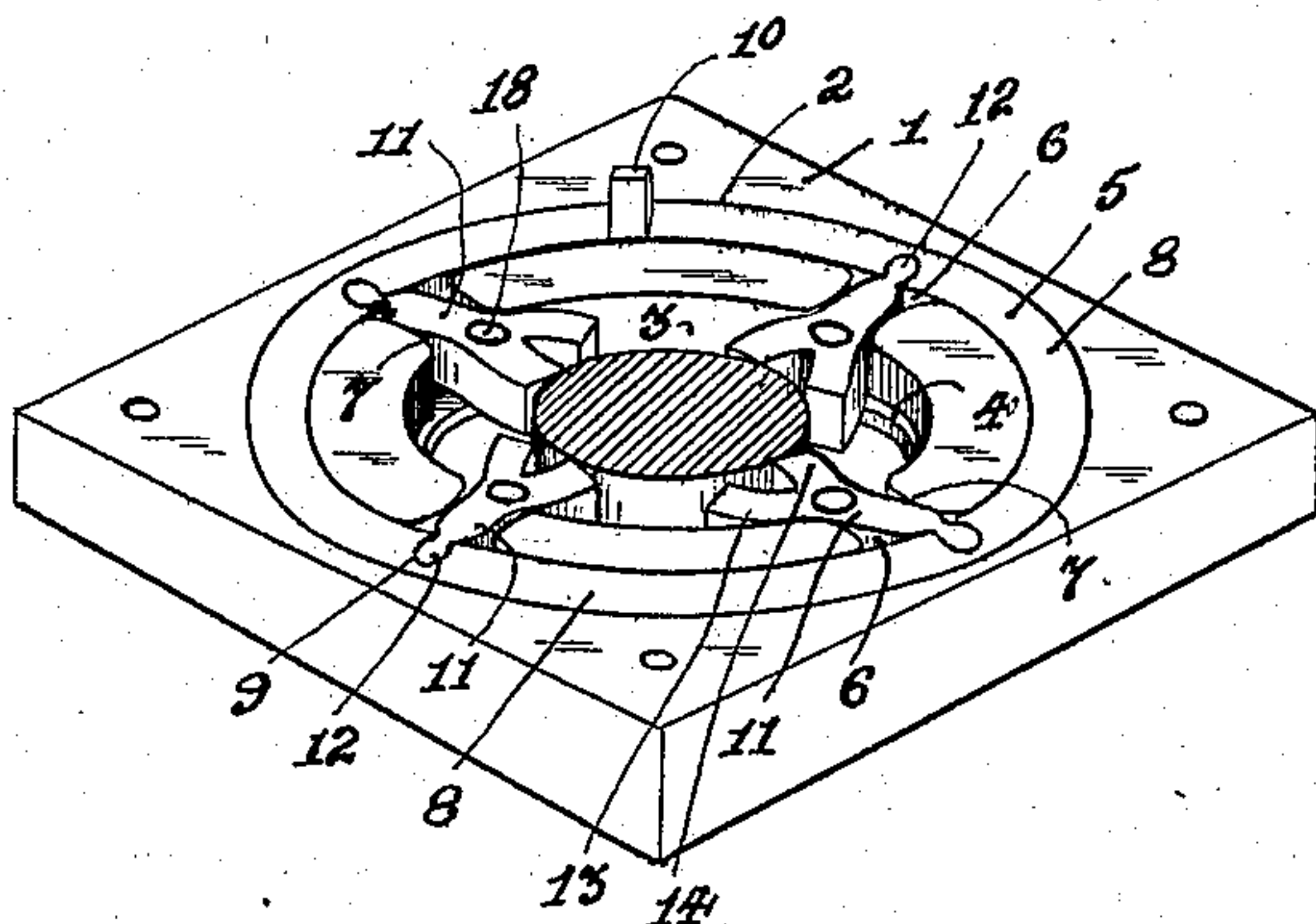


Fig. 4.

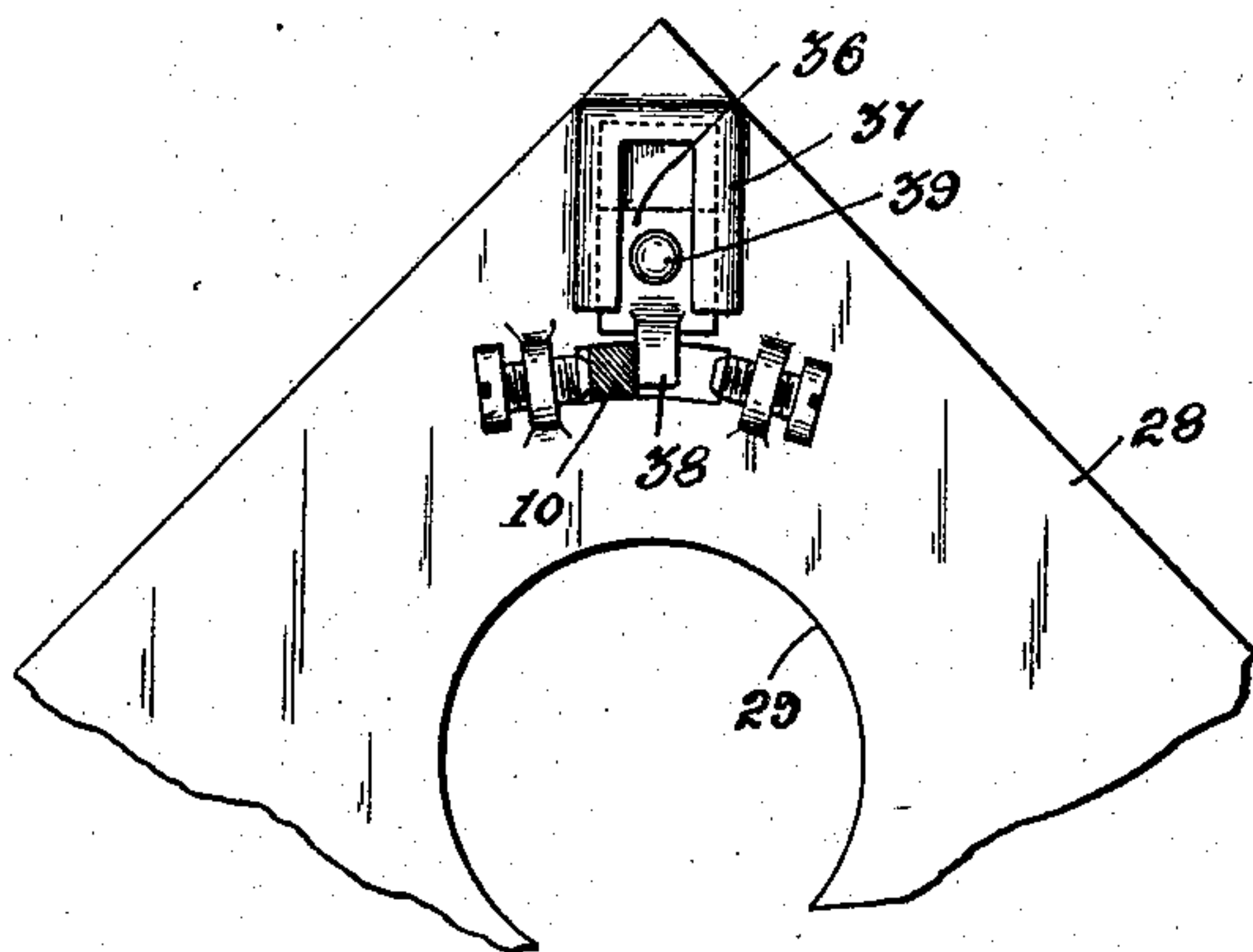
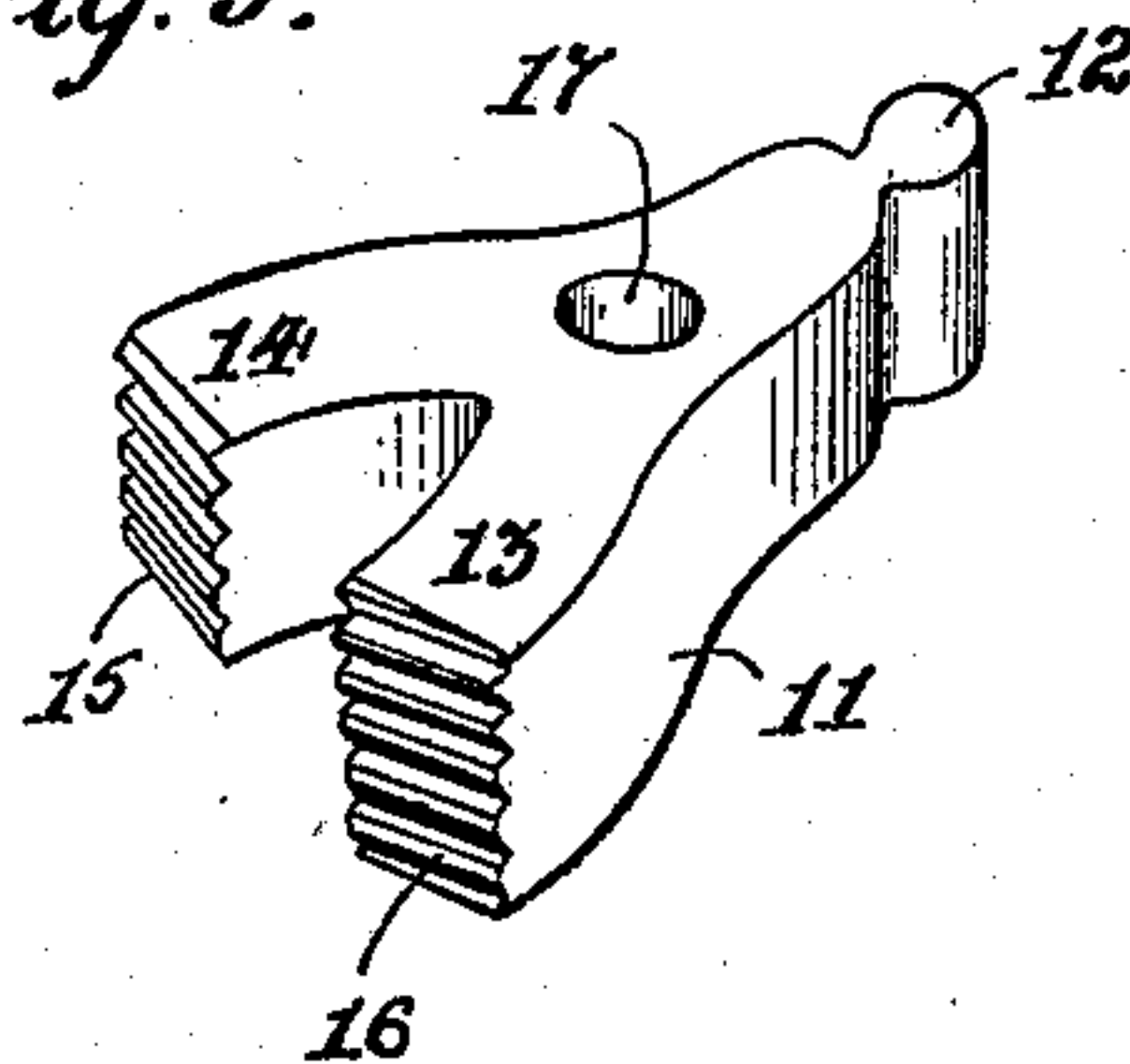


Fig. 5.



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UNITED STATES PATENT OFFICE.

JOSEPH EDDY TROTTER AND HUGUES ALDONY CREVIER, OF STE. ANNE DE BELLEVUE,
QUEBEC, CANADA.

STOCK AND DIE.

No. 900,617.

Specification of Letters Patent.

Patented Oct. 6, 1908.

Application filed May 15, 1908. Serial No. 433,084.

To all whom it may concern:

Be it known that we, JOSEPH EDDY TROTTER, a subject of the King of Great Britain, and HUGUES ALDONY CREVIER, a subject of the King of Great Britain, residents of Ste. Anne de Bellevue, in the Province of Quebec, in the Dominion of Canada, have invented certain new and useful Improvements in Stocks and Dies, of which the following is a specification.

10 The invention relates to improvements in stocks and dies, as described in the present specification and illustrated in the accompanying drawings that form part of the same.

15 The invention consists essentially of the novel construction and arrangement of parts whereby a plurality of chasers pivotally secured have right and left hand cutting edges adapted to be swung into a cutting position respectively by a rotating part, and whereby a lubricant is directed to the said cutters during operation.

20 The objects of the invention are to devise a tool of simple construction by means of which right and left hand threads may be cut on pipes and other surfaces without resorting to extensive changes and adjustments in the said tool and generally to facilitate matters for the workman, with the purpose of economizing time in view.

30 In the drawings, Figure 1 is a plan view showing the arrangement of chasers and the handles broken away. Fig. 2 is a longitudinal sectional view on the line A—B in Fig. 1. Fig. 3 is a perspective detail of the die. Fig. 4 is a plan view of a portion of the cover partially broken away. Fig. 5 is a perspective detail of the chaser.

Like numerals of reference indicate corresponding parts in each figure.

40 Referring to the drawings, 1 is the base of the die having the circular recess 2, the central hole 3 and the ledge 4 surrounding said central hole.

5 is a wall formed by the recess 2 and out from the ledge 4 and concentric with the hole 3 and having slots 6 therethrough arranged in diametrically opposite pairs, said slots having suitably rounded shoulders 7.

8 is a ring introduced into the recess 2 and rotatably arranged therein, said ring having the rounded slots 9 extending thereinto from the inner edge.

10 is a pin projecting upwardly from the ring 8 intermediate of the distance between any two of said slots.

11 are chasers formed with the rounded heads

12 inserted in the rounded slots 9 and the legs 13 and 14 and the right and left hand thread cutting edges 15 and 16 at the extremities of said legs respectively and having a pivot hole 17 adjacent to the crotch of each pair of legs.

18 are pivot pins inserted through the hole 17 and into the ledge 4 and on which said chasers turn.

It will be thus seen that by grasping the pin 10 and rotating the ring 8 in the recess 2, the chasers 11 will be swung on the pivot pins 18, as the heads of said chasers are free to turn in the rounded slots 9 and the rounded shoulders 7 of the slots 6 permit the said chasers a certain freedom in the movement, for the said chasers extend through said slots to said ring, consequently as the said chasers are swung, either the leg 13 or the leg 14, as the case may be, will be moved over the edge to the central hole 3, so that when the pipe or rod is inserted in said central hole, the particular cutting edges of the legs over said edge will engage the periphery of said pipe or rod for thread cutting purposes.

19 is the head of similar shape to the die base 1 and recessed to receive said base and having the cylindrical extension 20 therefrom and surrounding a hole 21, corresponding to the hole 3 in said die base.

22 are handles extending laterally from the head 19 and having oil chambers 23 at the ends thereof formed by hollows in said handles, said chambers being closed by the caps 24. 25 are passages through said handles from the oil chambers 23 and leading into the head 19, said passages being preferably formed of tubes projecting at 26 immediately to the rear of the cutting edges 15 or 16, as the case may be, the ends of said tubes being stuffed with a suitable material 27 to prevent too rapid a flow of oil therefrom.

28 is a cover closing the die base 1 into the head 19, said cover having the central hole 29, the curved slot 30 to one side of said hole and directly over the ring 8 and concentric therewith, the slotted projection 31 and the hinge member 32 securing it to a handle 22.

33 is a screw fastener hinged in a handle and in the closed position of the cover projecting upwardly through the slotted projection 31 and held therein by the nut 34.

35 are keys inserted in corresponding orifices through the handles and crossing the passages 25, said keys having lateral orifices therethrough in alinement with said passages

and forming oil cocks by means of which the supply of oil from the chamber may be turned off or on into the die head as desired.

36 is a panel slide held to the cover 28 by the flange projections 37, said panel slide having a tongue 38 projecting therefrom and in the outer position of said panel extending centrally over the slot 30. 39 is a pin projecting upwardly from said panel slide 36 and moving said slide in the flanges 37.

In the operation of this device, the pipe or rod to be threaded is inserted into the die head and the pin 10 from the ring extending through the curved slot 30 in the cover is swung to one end of the said slot according as to whether a right or left hand thread is to be cut on said pipe or rod, as the ring will be rotated by moving said pin to the extent of putting one or other of the legs of the chasers in engagement with said pipe or rod. The pin 10 is held to the end of the slot by sliding the panel slide 36 over said slot and against said pin and in this simple manner the chasers are held in the proper position for cutting the thread. So soon as these parts have been properly adjusted, the die is turned by means of the handle, the oil cocks having previously been turned on to allow the oil to drip on the work as it is being done and thus provide a lubricant for the cutting edges while in operation.

The exact construction as described will not necessarily be adhered to, as many changes may be made in the parts without altering their relative positions and also additions may be made to secure greater efficiency in the operation of the die for its double duty of cutting right and left hand threads.

What we claim as our invention is:

1. In stocks and dies, a die having a central circular recess arranged in the body por-

tion thereof and arc-shaped concentric bosses projecting upwardly from the bed of said recess and therewithin, a plurality of chasers having leg projections and pivotally secured to said body between said bosses and having right and left hand threads on their leg projections respectively at one end and a head projecting beyond said bosses at the other end and a ring engaging the heads of said chasers and turning between the said bosses and the wall of said recess and a suitable stock containing said die.

2. In stocks and dies, a rectangular die having a central circular recess in the body portion and arc-shaped bosses projecting upwardly from the bed of said recess concentric therewith, said bosses being suitably spaced in said recess and terminating in curved ends, a plurality of chasers pivotally secured to said body between said bosses and having a rounded head at one end and spreading legs at the other, said legs having right and left hand threads respectively cut on their end faces, a ring rotatably arranged between the said bosses and the wall of said recess and having rounded slots therein arranged into which the said heads of the chasers extend, a pin rigidly secured to said ring and extending upwardly, a cover plate closing in said dies and having a curved slot through which said pin extends and a stock having a rectangular shaped receptacle receiving the said die and suitable handles extending outwardly therefrom.

Signed at the city and district of Montreal, in the Province of Quebec, in the Dominion of Canada, this 29th day of April 1908.

JOSEPH EDDY TROTTER.

HUGUES ALDONY CREVIER.

Witnesses:

G. H. TRESIDDER,
HARRY DAVIS.