

(No Model.)

2 Sheets—Sheet 1.

G. A. TRIGGS.
FIRE POT FOR TINNERS' USE.

No. 597,550.

Patented Jan. 18, 1898.

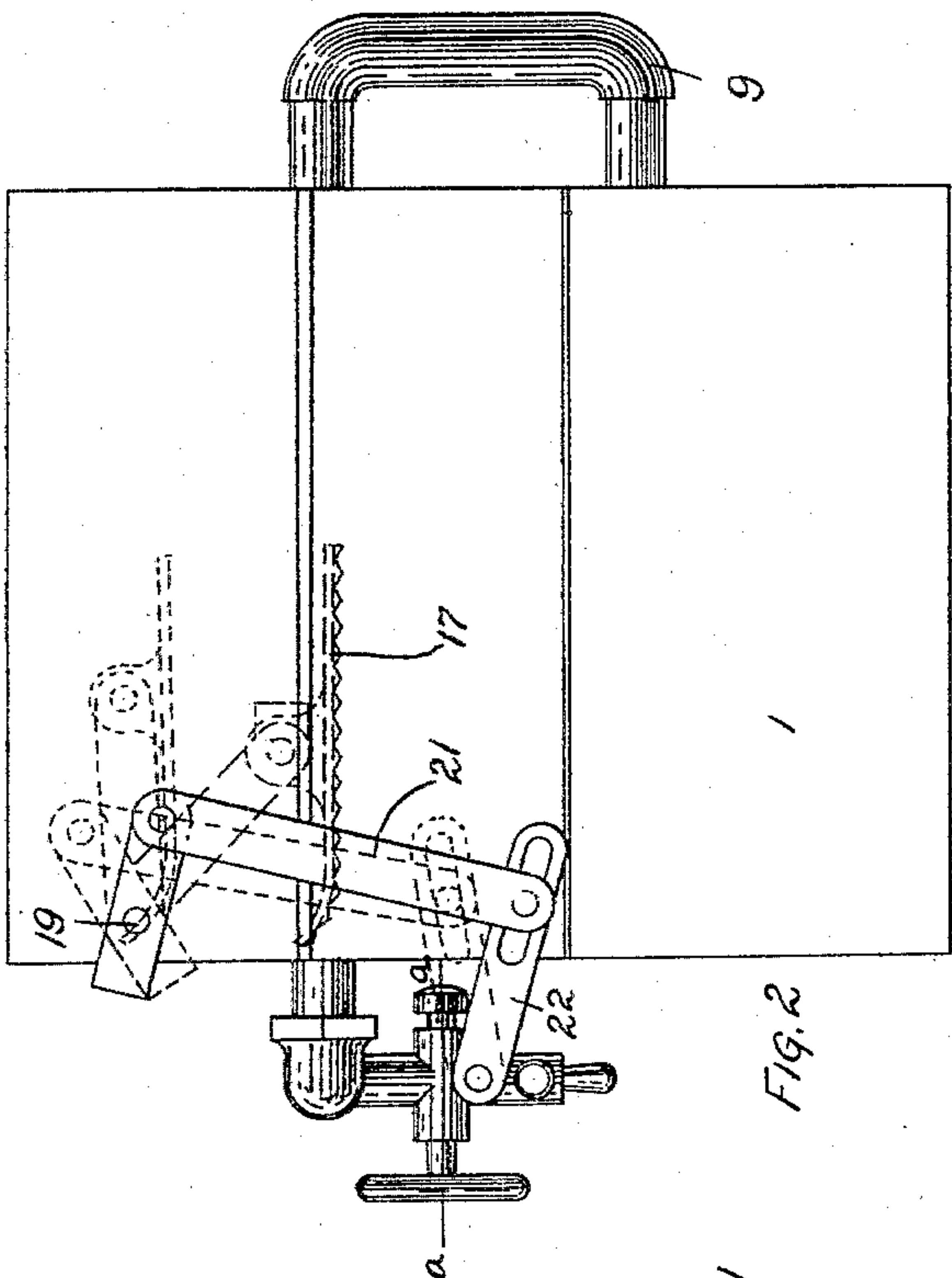


FIG. 2

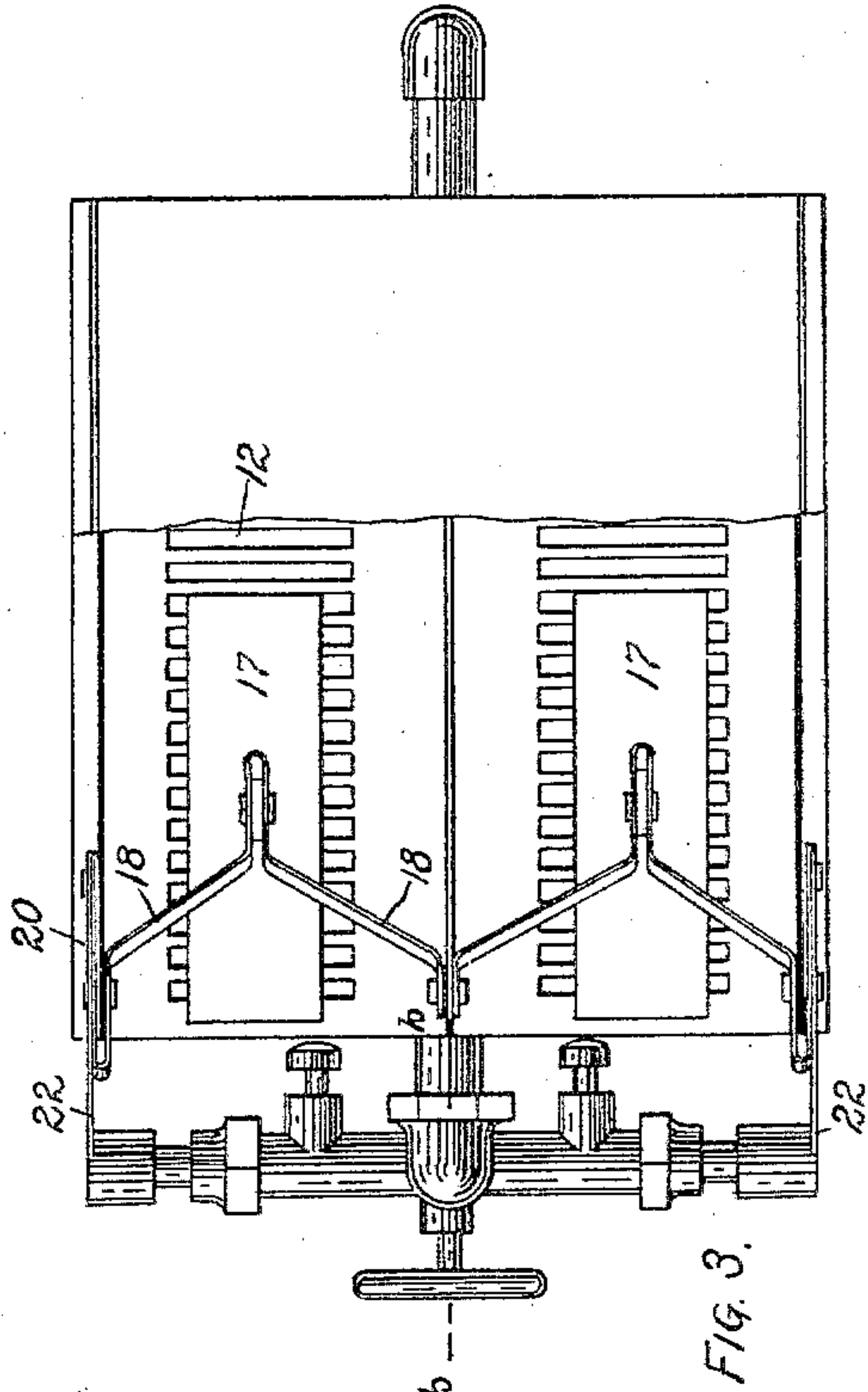


FIG. 3.

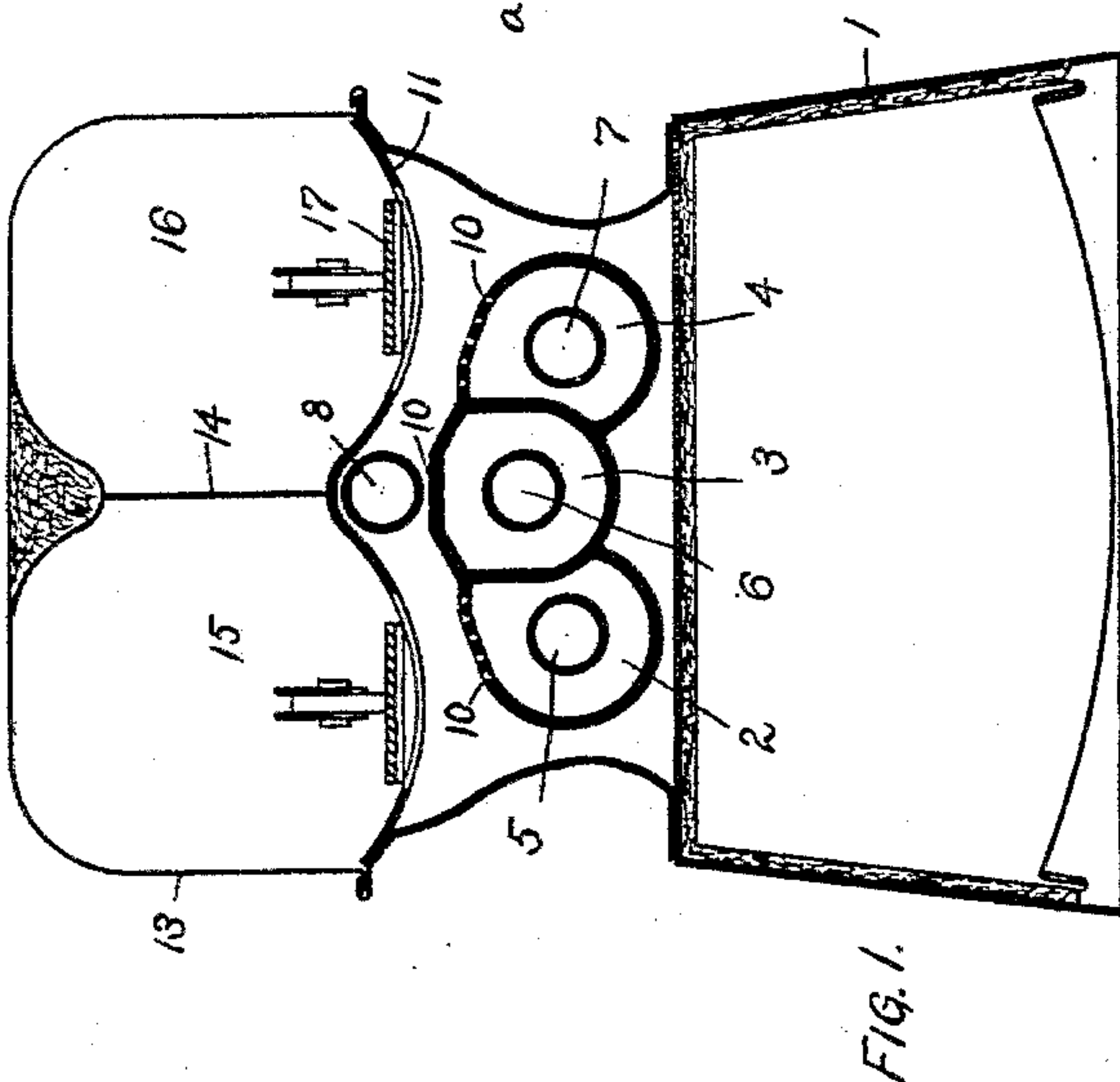


FIG. 1.

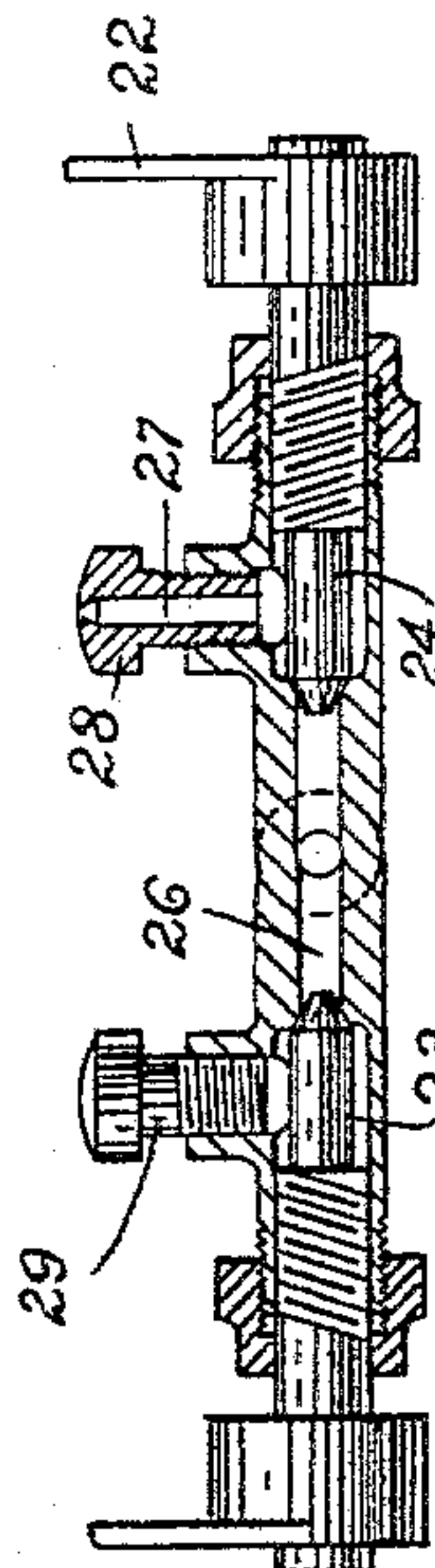


FIG. 4.

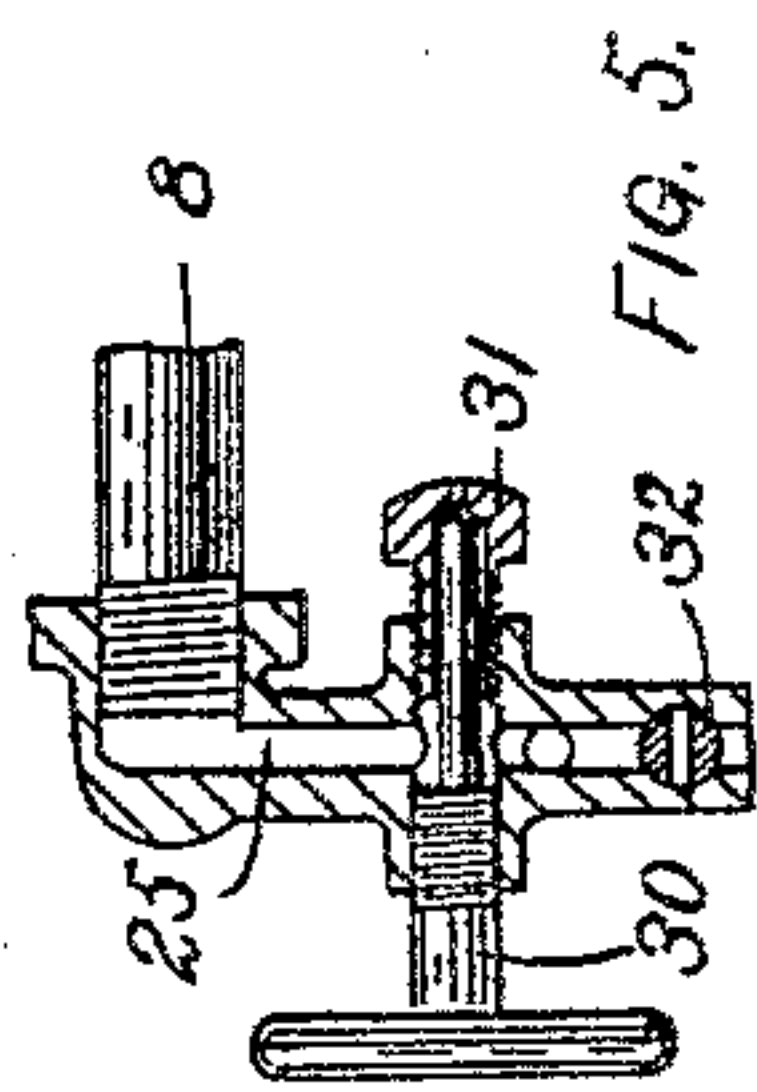


FIG. 5.

WITNESSES

Chas. Plummer.
F. D. Andley.

INVENTOR

George A. Triggs

BY *Henry F. Noyes*
ATTORNEY

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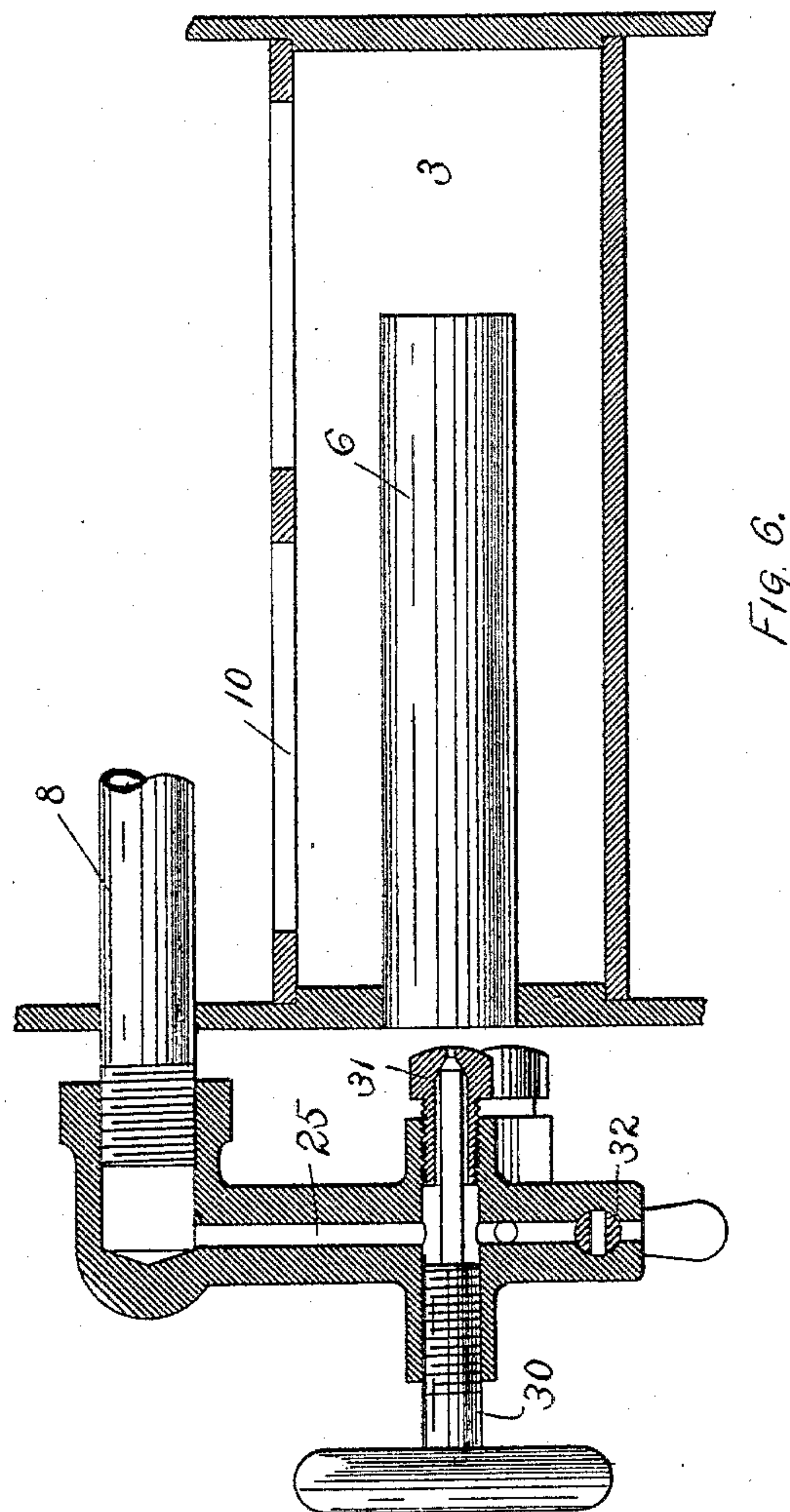


Fig. 6.

WITNESSES

Samuel J. Johnston
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INVENTOR

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UNITED STATES PATENT OFFICE.

GEORGE A. TRIGGS, OF ELGIN, ILLINOIS.

FIRE-POT FOR TINNERS' USE.

SPECIFICATION forming part of Letters Patent No. 597,550, dated January 18, 1898.

Application filed March 30, 1896. Serial No. 585,373. (No model.)

To all whom it may concern:

Be it known that I, GEORGE A. TRIGGS, of Elgin, Kane county, Illinois, have invented certain new and useful Improvements in Fire-Pots for Tinnerns' Use, of which the following is a full and complete specification.

My invention relates to that class of fire-pots in which vapor is used as fuel and in particular where the vapor used is that generated from a volatile oil, and also relates to a former invention of mine, for which Letters Patent were issued to me May 21, 1895, No. 539,456.

This invention has for its object to provide a positive means whereby the valves governing the flow of vapor to the mixing-tubes may be automatically controlled by the operation of inserting and removing the soldering-irons in and from the chambers in which they are placed to be heated, whereby the vapor is only admitted into each chamber as it is needed. The mechanism which I have invented to meet these requirements is clearly described in the specification, more particularly pointed out in the claims, and illustrated in the drawings, in which—

Figure 1 is a vertical cross-section of my device. Fig. 2 is an end elevation of the same. Fig. 3 is a plan of the same with the hood partially removed. Fig. 4 is a horizontal section taken on line *a a* of Fig. 2. Fig. 5 is a vertical section of the same, taken on line *b b* of Fig. 3. Fig. 6 is a partial vertical section through the center of the tube 7.

I provide a closed oil or gasolene tank 1. For convenience I use this as a base and mount upon it in any suitable manner the chambers 2, 3, and 4. Within these chambers are situated the mixing-tubes 5, 6, and 7, and directly above the central chamber 3 is the leading-in pipe 8, which connects with the tank 1 by the elbow 9. These chambers are provided with lateral openings 10, through which the vapor is fed and at which points it burns when lighted, the opening in chamber 3 being directly beneath the pipe 8. I provide a plate 11, curved up over the pipe 8 and having hollow places adapted to receive the soldering-irons, directly above the chambers 2 and 4 and having a number of openings or parallel slots 12. A hood 13 rests upon this plate, being divided by means of the parti-

tion 14 into the chambers 15 and 16. In each of these chambers is a floating plate or shoe 17, carried by the double arms 18. These arms are pivoted upon the pins 19, and the ends of these arms are bent around the sides of the hood, forming the arms 20, to which, by means of the link 21, the lever 22 is connected. To these two levers are connected the valves 23 and 24, one having a right-hand thread and the other a left-hand thread, each of very coarse pitch. The pipe 8, by means of the channel 25, leads to the channel 26, each end of which is controlled by the valves 23 and 24. When these valves are opened, this channel leads, by the opening 27 in the screw 28 and by means of a similar opening in the screw 29, to the tubes 7 and 5, respectively. The hand-valve 30 controls an opening in the screw 31, which leads to the tube 6.

The operation of the apparatus is as follows: A pan with gasolene is placed below the cock 32 and ignited, and when burned the hand-wheel 30 and cock 32 are turned to admit the passage of vapor through the screw 31 to the tube 6, where the vapor, drawing a certain amount of air with it, passes into the chamber 3 and, issuing through the slot 10, is ignited and, being directly beneath the tube 8, heats the latter and vaporizes the gasolene which is forced into it. An iron being now pushed beneath the float 17 raises the latter, as shown in the broken lines, and the float by its connections operates the lever 22 to open its corresponding valve 24, admitting a quantity of vapor and air to the tube 7 and chamber 4, which, being lighted as it issues from the slots 10, readily heats the iron on the plate above it. When the iron is removed, the weight of the float and its attached levers is sufficient to close the valve, thereby shutting off and economizing the supply of vapor. It is obvious that an iron may be placed in the chamber 15 at the same time and the two used alternately. Thus will be made evident the advantage of this apparatus. By its use an economy of fuel is obtained and an automatic operation secured, and at the same time the mechanism is arranged so as to secure a positive action.

I claim—

1. In a tinner's fire-pot, a plate adapted to receive soldering-irons, a chamber situated

beneath such plate, a valve controlling the admission of vapor to such chamber, a weighted shoe situated in proximity to such plate, a hood adapted to cover said shoe and plate, said shoe being hung from Y-shaped arms, which are pivoted to said hood, one of said arms having a return-bend around the outside of said hood, where it is suitably connected by a link to an arm fastened to said valve, as and for the purpose set forth.

2. In a tinner's fire-pot, a plate adapted to receive soldering-irons, a chamber situated beneath said plate, a valve controlling the admission of vapor to said chamber, a weighted shoe situated in proximity to said plate, a hood adapted to cover said shoe and said plate, said shoe being hung from two arms which are pivoted to said hood, one of said arms being suitably connected with said valve, as and for the purpose set forth.

3. In a tinner's fire-pot, a plate adapted to receive soldering-irons, a chamber situated beneath such plate, a valve controlling the ad-

mission of vapor to said chamber, a weighted shoe situated in proximity to said plate, a hood adapted to cover said shoe and plate, said shoe being connected to an arm within said hood, said arm being bent around the outside of said hood, and there provided with suitable connections with said valve, as and for the purpose set forth.

4. In a tinner's fire-pot, a plate adapted to receive soldering-irons, a chamber situated beneath such plate, a valve controlling the admission of vapor to such chamber, a weighted shoe situated in proximity to said plate, a hood adapted to cover said shoe and plate, Y-shaped arms pivoted to said hood, and at their trunk connected to said shoe, and one of said arms suitably connected with said valve, as and for the purpose set forth.

GEORGE A. TRIGGS.

Witnesses:

HENRY F. NOYES,

OLIVER L. PLUMTREE.