

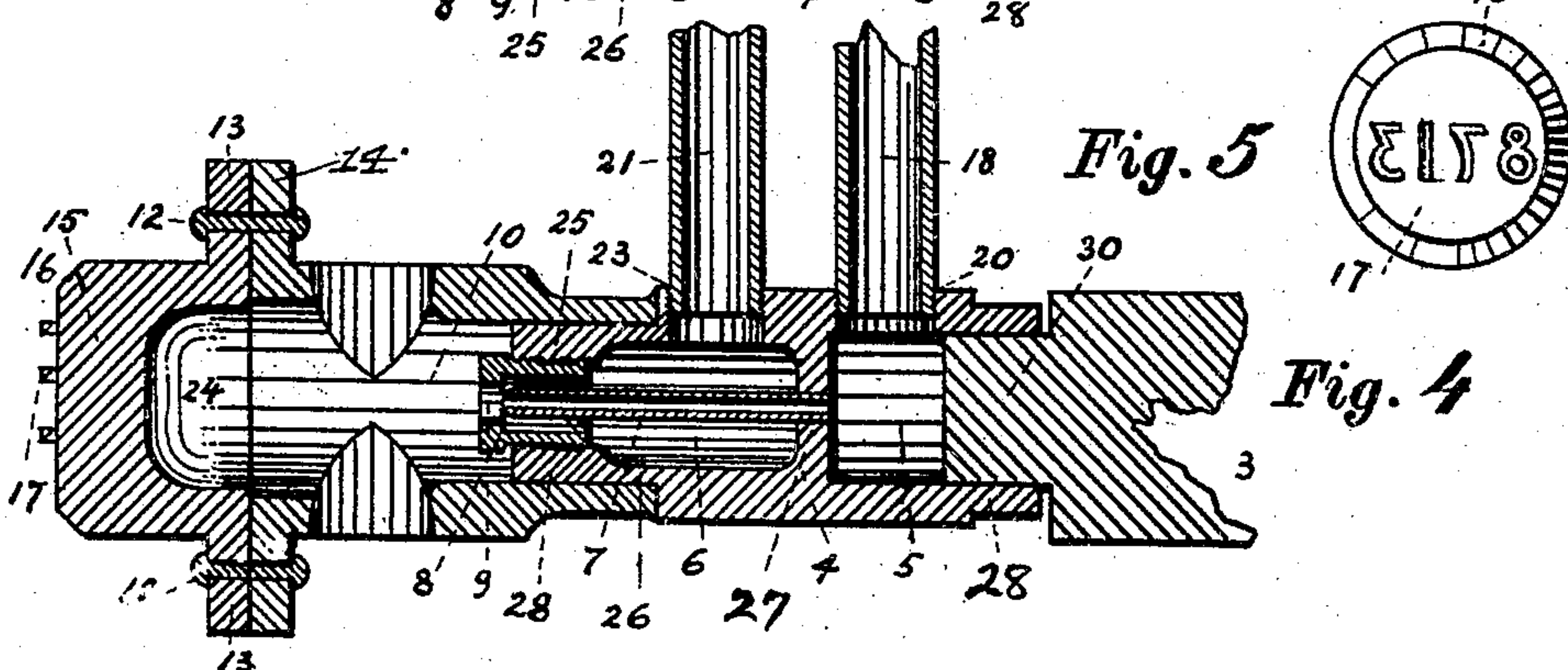
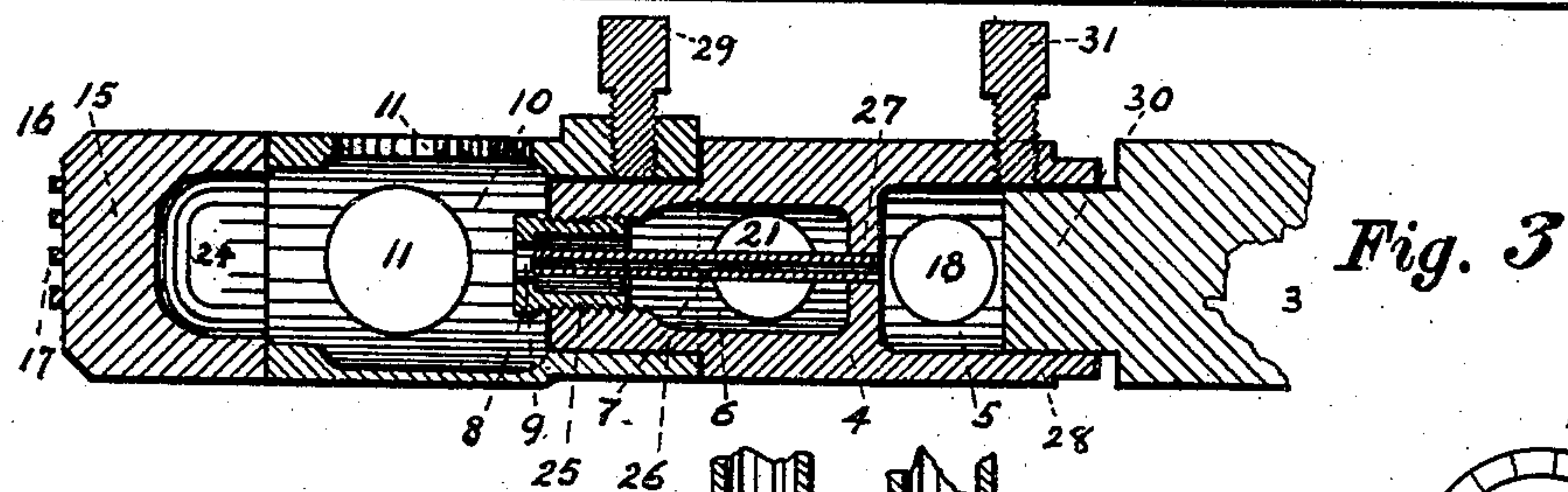
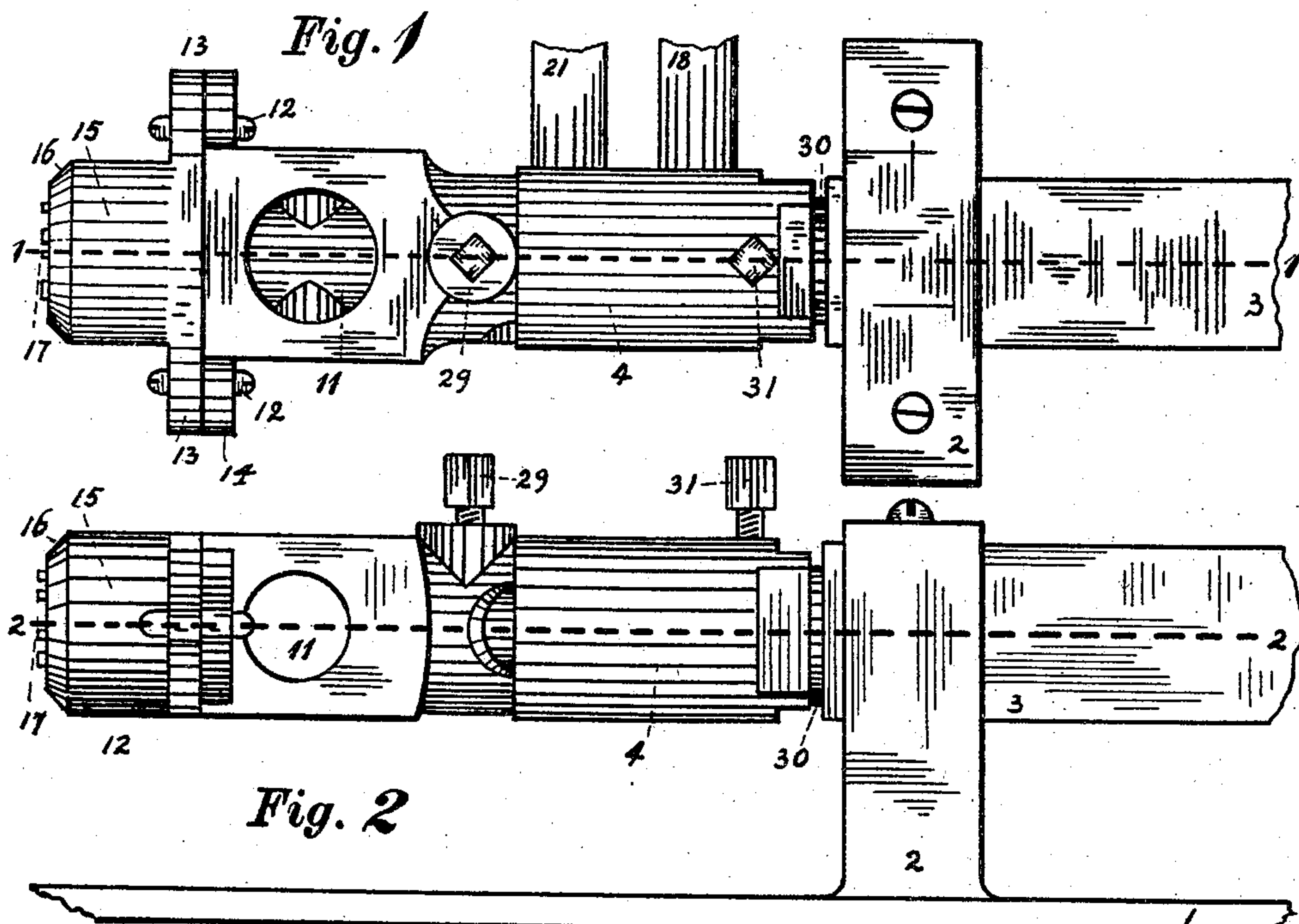
No. 768,648.

PATENTED AUG. 30, 1904.

E. H. BAARE.  
CARBURETER.

APPLICATION FILED OCT. 16, 1903.

NO MODEL.



**WITNESSES:**

Robert Campbell  
Gladys Walton

**INVENTOR:**

INVENTOR:  
Edwin H. Baare

BY  
Hugh R. Wagner,  
his ATTORNEY.



# UNITED STATES PATENT OFFICE.

EDWIN H. BAARE, OF ST. LOUIS, MISSOURI, ASSIGNOR TO ARTHUR E. POSS,  
OF ST. LOUIS, MISSOURI.

## CARBURETER.

SPECIFICATION forming part of Letters Patent No. 768,648, dated August 30, 1904.

Application filed October 16, 1903. Serial No. 177,233. (No model.)

*To all whom it may concern:*

Be it known that I, EDWIN H. BAARE, a citizen of the United States, residing at the city of St. Louis, in the State of Missouri, have  
5 invented certain new and useful Improvements in Carbureters, of which the following is a specification.

This invention relates to a new and improved form of gas-burner and carbureter which I  
10 have found to be especially useful in heating branding-irons for branding corks, but which may also be employed for or adapted to other uses.

In the drawings, in which like numbers of  
15 reference denote like parts wherever they occur, Figure 1 is a top plan view. Fig. 2 is a side elevation. Fig. 3 is a vertical longitudinal section on the line 1 1, Fig. 1. Fig. 4 is a horizontal longitudinal section on the line  
20 2 2, Fig. 2; and Fig 5 is an end view of the branding-iron.

1 is a table or frame which has fixed to it a standard 2, which is slotted or otherwise arranged for the reciprocation in connection  
25 therewith or therethrough of the plunger 3, bearing the cylinder 4, containing the air-chamber 5, gas-chamber 6, a tube 7, which communicates with both said gas-chamber and said air-chamber, the burner-head 8, having  
30 an opening 9 therethrough, and the combustion-box 10, having the openings 11 in its two side walls and top and a solid bottom wall and having affixed to its outer end by means of the bolts 12, passing through the plate 13  
35 and received into the lugs 14, the branding-iron 15, having the beveled portion 16 leading down to the embossed plate or portion 17. Air is admitted into the chamber 5 through the tube 18, the admission of which may be  
40 controlled by a cock, (not shown,) said tube being provided with a screw-threaded end (not shown) cooperating with the screw-threads in the opening 20. Gas is admitted into the chamber 6, through the pipe 21, which may be  
45 controlled by a cock, (not shown,) being attached by screw-threading in the opening 23 in the same manner as tube 18. Air under pressure having been admitted into chamber 6 it passes through the small opening in the

slender tube 7 until it reaches a point adjacent  
50 to the opening 9 in the burner 8. Gas under pressure having been similarly admitted into chamber 5 the air and the gas mix at a point immediately adjacent to the opening 9, from which the flame issues and fills the combustion-box 10 and cavity 24 in the branding-  
55 iron, maintaining in this manner when lighted a steady and reliable heat in the branding-iron 15. The burner-head 8 is screw-threaded at 25 and coöperates with similar screw-  
60 threads on the inside of the reduced portion 26 of the cylinder 4.

The cylinder 4 has an interior wall or diaphragm 27, which separates the chambers 5 and 6, and the combustion-box 10, which terminates in the cylindrical portion 28, is removable from the end of said cylinder 4, being ordinarily held in place thereon by the  
65 set-screw 29. The cylinder 4 is in like manner removable from the reduced portion 30 of the plunger 3, on which it is normally held by the set-screw 31. Thus the branding-iron  
70 15 may be removed from the combustion-box, as it is merely attached thereto by the bolts 12, the combustion-box, with its connected  
75 cylindrical portion 28, may be removed from the cylinder 4 by unscrewing the set-screw 29, and the cylinder 4 may be released from the reduced solid portion 30 of the plunger 3 by  
80 loosening the set-screw 31. As the plunger 3, cylinder 4, box 10, and branding-iron 15 are adapted and intended to reciprocate together in order to accomplish successive operations of branding, it is obvious that the  
85 pipes 18 and 21 are preferably in the form of flexible tubes, although rigid pipes can be employed if arranged with suitable extensions at right angles to the pipes or tubes shown in the drawings, said extensions being provided with sleeve-couplings, supply-reservoirs, or  
90 other means allowing for reciprocation.

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

1. A device of the type set forth comprising  
95 a cylinder having a diaphragm therein dividing the cylinder into compartments, a gas and an air inlet leading into said compart-



ments, means of communication between the compartments, a burner arranged at the forward end of the cylinder, and means for supporting the cylinder, said means entering the  
5 other end of the cylinder and forming the rear wall of one of the compartments.

2. A device of the type set forth comprising a cylinder having a diaphragm therein forming compartments, air and gas inlets leading into the compartments respectively, a  
10 burner communicating with one compartment and means for forming a communication between said burner and the other compartment, means for supporting the cylinder extending  
15 into one of the chambers and forming the rear wall thereof, and a branding-iron inclosing the forward end of the cylinder.

3. In a device of the type set forth, a plunger with a cylinder carried thereby, said cylinder formed in compartments, the end of said  
20 plunger forming one wall of one of said compartments, a burner connected to the other compartment and means leading from the first-named compartment into the burner.

25 4. A device of the type set forth comprising

ing a cylinder with a branding-iron supported thereby at its forward end a diaphragm in the cylinder forming compartments, an air-inlet and a gas-inlet leading into the compartments respectively, a burner communicating with  
30 one compartment and leading into the branding-iron, a tube supported by the diaphragm communicating with the other compartment and leading into the burner, and means for supporting the cylinder forming the rear wall  
35 of the last-named compartment.

5. A device of the type set forth comprising a cylinder formed with compartments, means for supporting the cylinder entering one of said compartments, a burner connected  
40 to the other compartment and communicating with the first-named compartment, and a branding-iron received over the said cylinder.

In testimony whereof I have affixed my signature, in presence of two witnesses, this 28th  
45 day of September, 1903.

EDWIN H. BAARE.

Witnesses:

GLADYS WALTON,  
MAUD E. LETCHER.