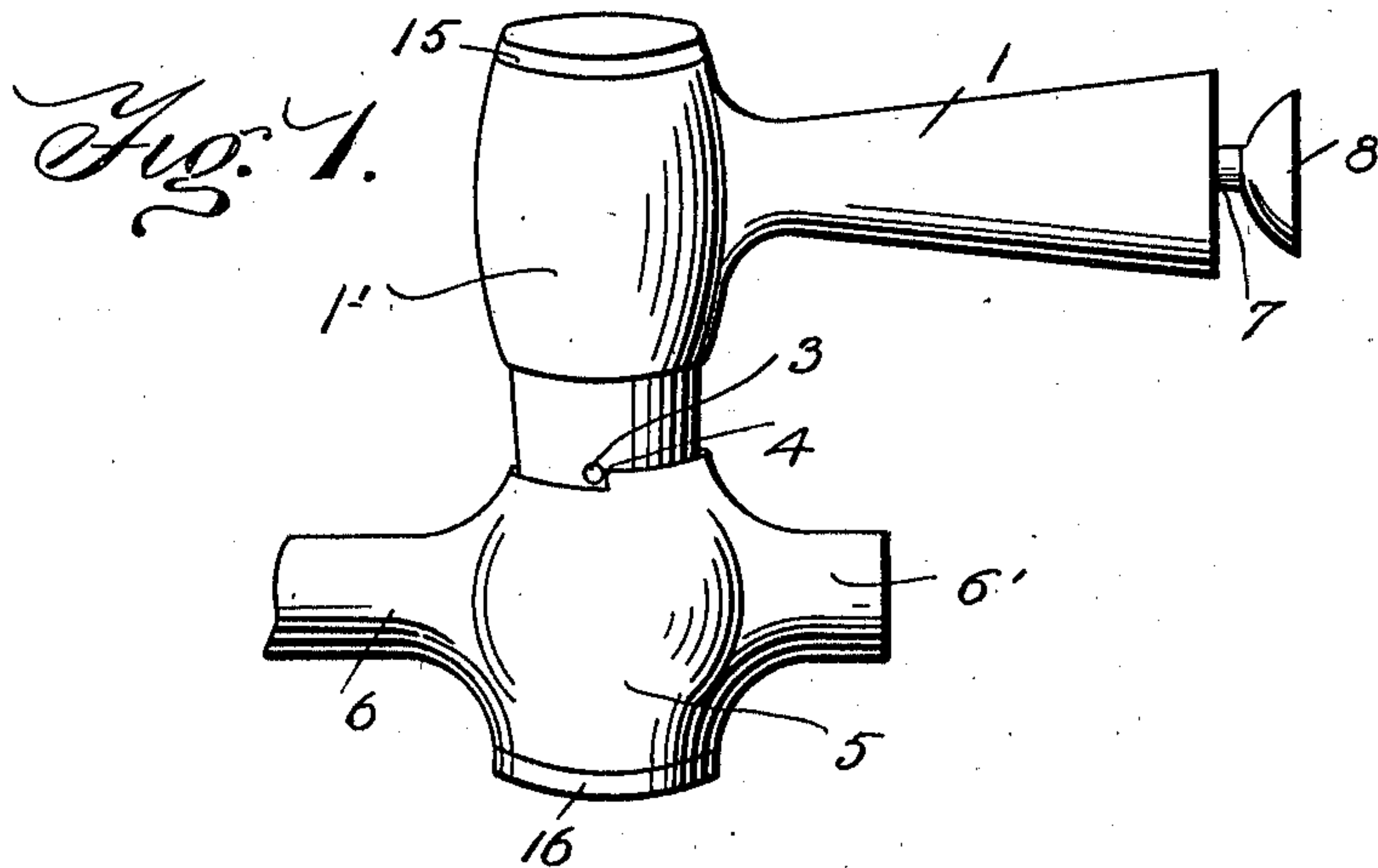


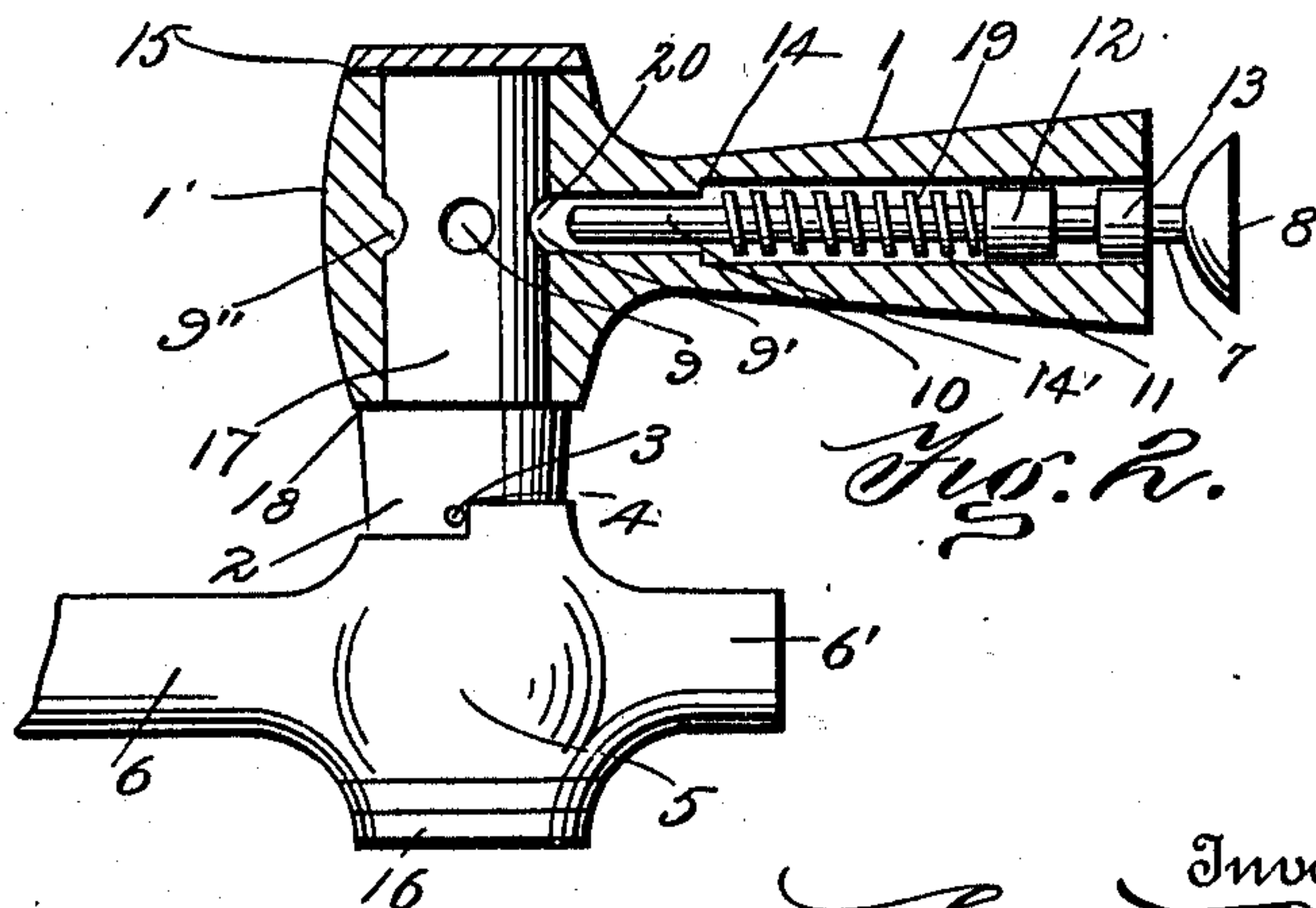
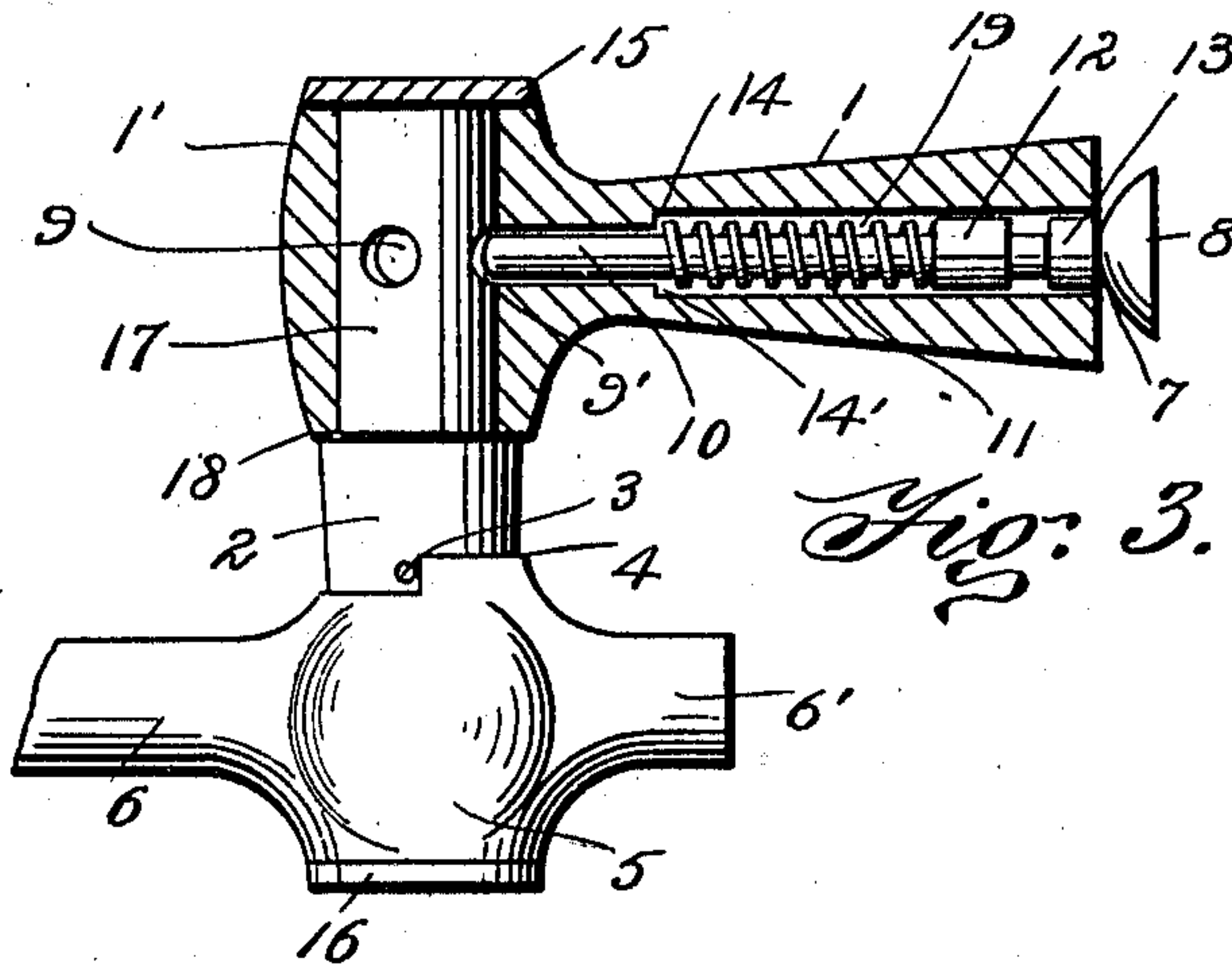
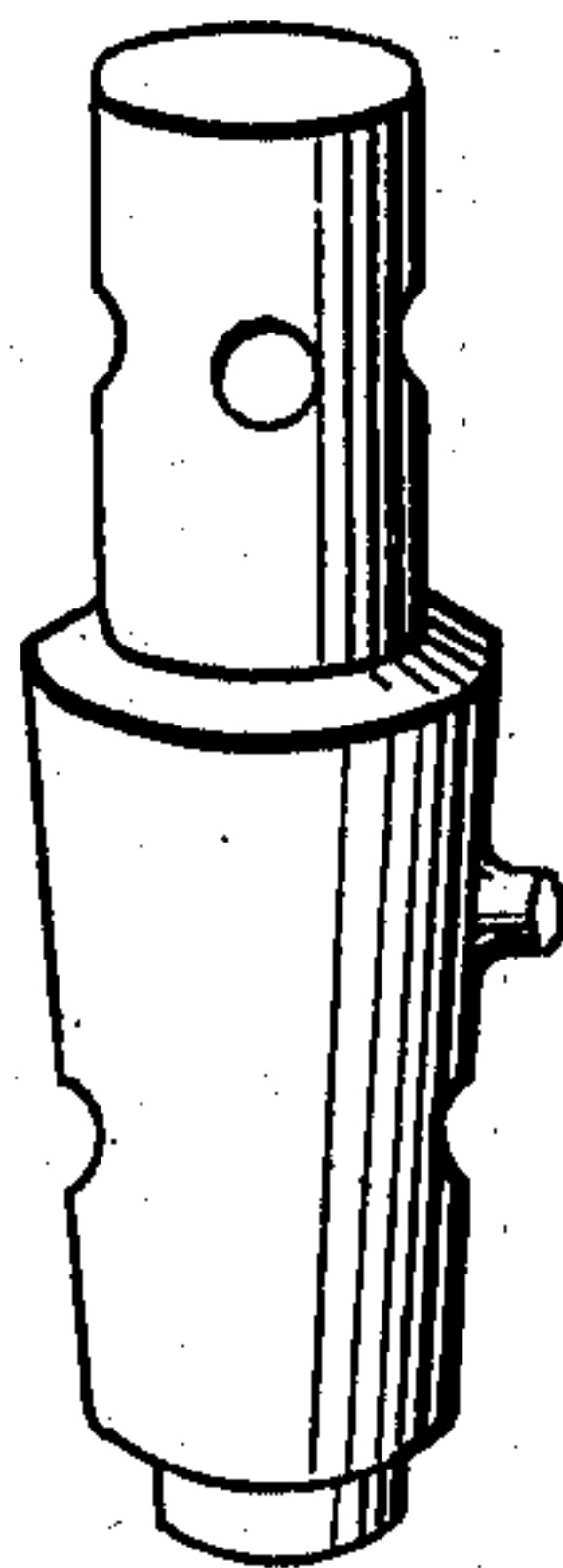
L. POPP.  
SAFETY GAS COOK.  
APPLICATION FILED MAY 22, 1909.

993,714.

Patented May 30, 1911.



*Fig. 4.*



Witnesses  
M. P. M. Ke.  
M. L. L. L.

Inventor  
Leonard Popp  
by [Signature]  
Attorney



# UNITED STATES PATENT OFFICE.

LEONARD POPP, OF CINCINNATI, OHIO.

SAFETY GAS-COCK.

993,714.

Specification of Letters Patent.

Patented May 30, 1911.

Application filed May 22, 1909. Serial No. 497,806.

*To all whom it may concern:*

Be it known that I, LEONARD POPP, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented a new and useful Safety Gas-Cock, of which the following is a specification.

My invention relates to improvements in gas-cocks in which the handle to the valve-shank is provided with a spring-held stem so adapted as to engage the valve-shank and open the valve as the handle is turned whenever a flow of gas is desired. The stem, being spring-held, is kept free and disengaged from the valve-shank at all other times, thus effecting the purpose of my invention, namely, to provide an ordinary gas-cock with a safety device, conveniently located in the handle, so as to insure absolute safety from accidental opening of the valve.

My invention is particularly adapted to, and intended for, use on gas cocks to gas stoves.

In the attached drawings, Figure 1 is a full side view of a gas cock commonly used on gas stoves; showing inlet and supply pipes, valve chamber, valve-shank and the handle containing my patented safety device. Fig. 2 is a view of a gas cock similar to that shown in Fig. 1 except for the vertical section of the handle. This view shows the stem disengaged from the valve-shank. Fig. 3 presents the same view as shown in Fig. 2 except that the stem is engaged with the valve-shank as it would be when the valve is being opened or closed. Fig. 4 is a perspective view of the valve-plug.

In all of these drawings, similar parts are designated by similar numerals.

The following detailed description explains in concise terms the construction, use and operation of my invention.

In Fig. 1, 6' is the inlet pipe and 6 is the supply pipe to the burner. 5 is the valve chamber containing an ordinary conical valve, 2, of which Fig. 4 is a full perspective view. 4 is a stop-shoulder on the valve chamber, 5, so located as to come in contact with the stop-pin, 3, on the valve, thus insuring a closing of the valve when the cock is turned off. 1 and 1' represent the handle revolving around the valve-shank, 17, on the shoulder, 18. 8 is the thumb button and 7 is the projecting portion of the stem. The three main pieces, the valve casing, 5, the valve proper, 2, and its shank, 17, and the

handle, 1 and 1', are held together by the caps, 15 and 16.

In Fig. 2 the valve chamber and plug are the same as in Fig. 1 and need no further explanation. The upper portion of Fig. 2 is a vertical section showing in position, and with their various parts, the valve-shank, 17, the stem, 7 and 10, the spring, 11, and the thumb button, 8. The shank, 17, is a cylindrical extension of the conical plug, 2, forming the shoulder, 18, on which rests the handle, 1 and 1'. The extended arm, 1, of the handle has through its center the passage, 19, narrowed by the shoulders, 14 and 14' into the passage, 20, extending in all, from the outer end of the handle to the surface of the valve-shank. 11 is an ordinary cylindrically coiled spring of a size to fit snugly over the stem, 10. 12 is a plug collar of which the diameter is slightly less than the diameter of the passage, 19, in the handle and having a central bore just large enough to slip the collar on the stem, 10. 13 is a plug adapted to fit tightly into the passage, 19, and with a central bore similar to that of the collar, 12. The button, 8, and the stem, 7 and 10, are best handled if constructed of one piece of material. The plug, 13, the collar, 12 and the spring, 11, are slipped on the stem in the order named. The collar, 12, is permanently attached to the stem about one-third of the way from the button. The stem, with the spring collar and plug, is inserted into the passage, 19 and 20; and the plug, 13, is permanently attached to the passage wall at the extreme outer end of the handle, 1. The end of the stem farthest from the button fits closely in passage, 20, free enough, however, to be slidable. The spring is held in normal position by the shoulders, 14 and 14', on the handle and by collar, 12, on the stem. On the surface of the valve-shank, in line with the passage in the handle, are four small openings, 9, 9' and 9'', adapted to engage stem, 10. The handle, 1 and 1', being rotatably mounted around the valve-shank, may be freely turned without opening the valve. But by thumb pressure on button, 8, the extended portion of the stem, 10, engages the openings in the valve-shank, 17, so that any motion of the handle, 1 and 1', will open or shut the valve. Immediately upon release of the pressure on the button, the contracted spring assumes its normal position, thereby disengaging the stem from the



valve-shank, thus leaving the valve unaffected by any turning of the handle. Therefore by my device the gas valve is not opened or shut except when pressure is intentionally  
 5 applied to the thumb button, 8. The collar, 12, serves the double purpose of holding the spring, 11, in position, and of preventing the stem from slipping through the plug, 13.

Fig. 3 presents the same views as Fig. 2  
 10 except that the stem, 7 and 10, is engaged with the valve-shank, 17, due to the pressure on button, 8. It is only when the stem is in this position that the turning of the handle opens or shuts the valve.

15 Fig. 4 is a separate perspective view of the conical valve and the valve-shank with the shank openings and the transverse bore, 21, of the valve. The working of these parts has already been detailed.

20 I claim as new, and seek the issuance of Letters Patent, on the following:—

1. In combination with a gas cock, shoulders formed thereon, by means of a cut-away portion, a valve plug seated therein, said  
 25 plug having an extending shank, a seat formed on said shank, a reduced upper portion on said shank having openings therein, a handle with an integral collar on one end thereof adapted to fit over said reduced  
 30 shank portion and rest upon said seat, said handle having a bore through its center,

part of said bore being of a reduced caliber so as to form a shoulder, a plunger having a stop thereon located in said bore, a spring  
 35 on said plunger located between said stop and said shoulder, a removable plug seated in the outer end of said bore to hold said plunger in said handle and a push button on the outer end of said plunger for oper-  
 40 ating same.

2. In combination with a gas cock having a valve with openings therein, an idle handle on said valve, a plunger within said  
 45 handle for engagement with said valve, a spring within said handle for holding said plunger out of engagement, with said valve, and means for operating said plunger.

3. In combination with a gas cock having a valve with openings therein, an idle handle on said valve, a plunger within said  
 50 handle for engagement with said valve, a spring within said handle for holding the plunger out of engagement with said valve, said plunger extending beyond said handle and having a head thereon.  
 55

In testimony whereof, I have signed this specification in the presence of the two subscribing witnesses.

LEONARD POPP.

Witnesses:

WM. A. ALTEMEIER,  
 MICHAEL MINGES.