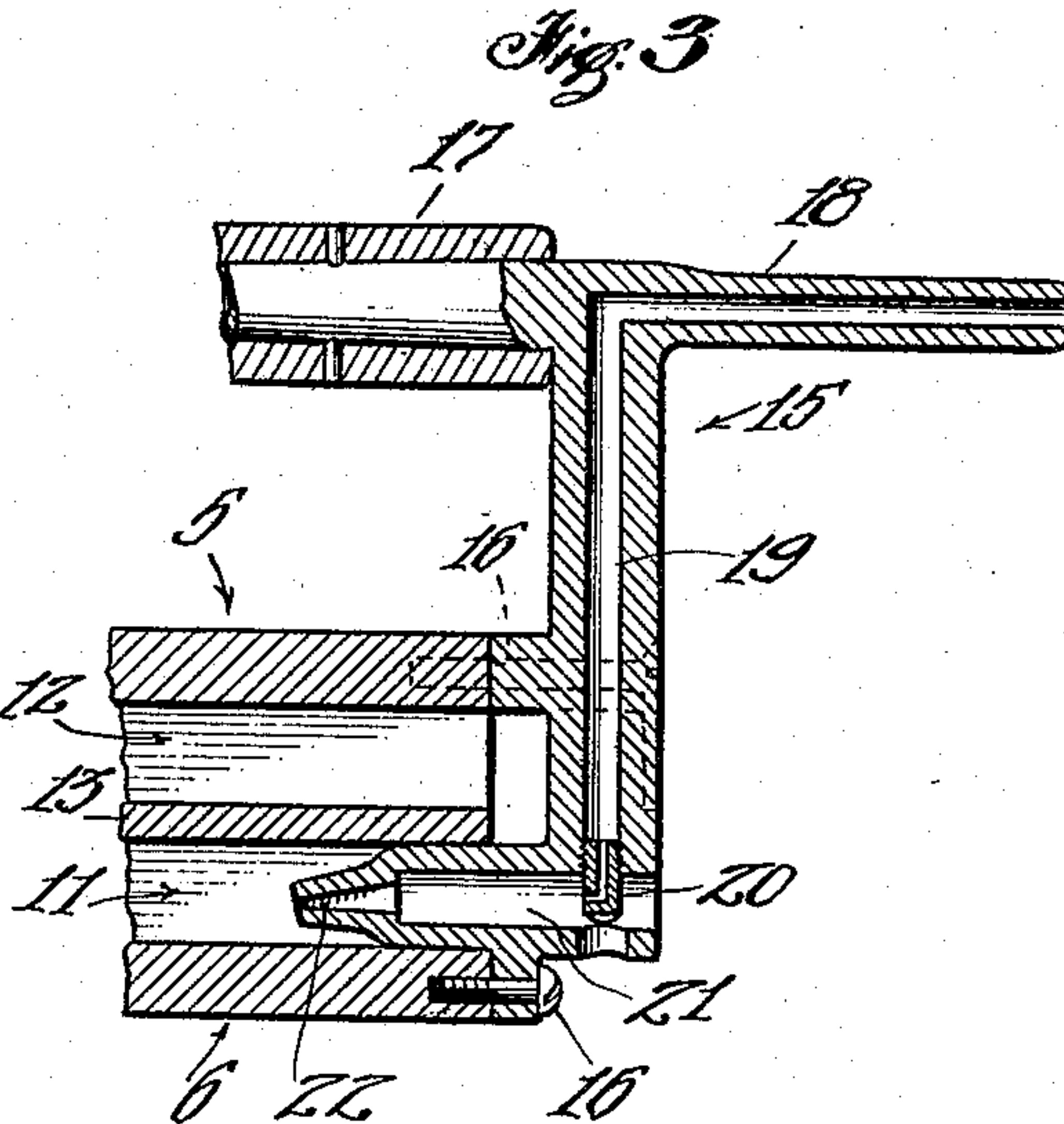
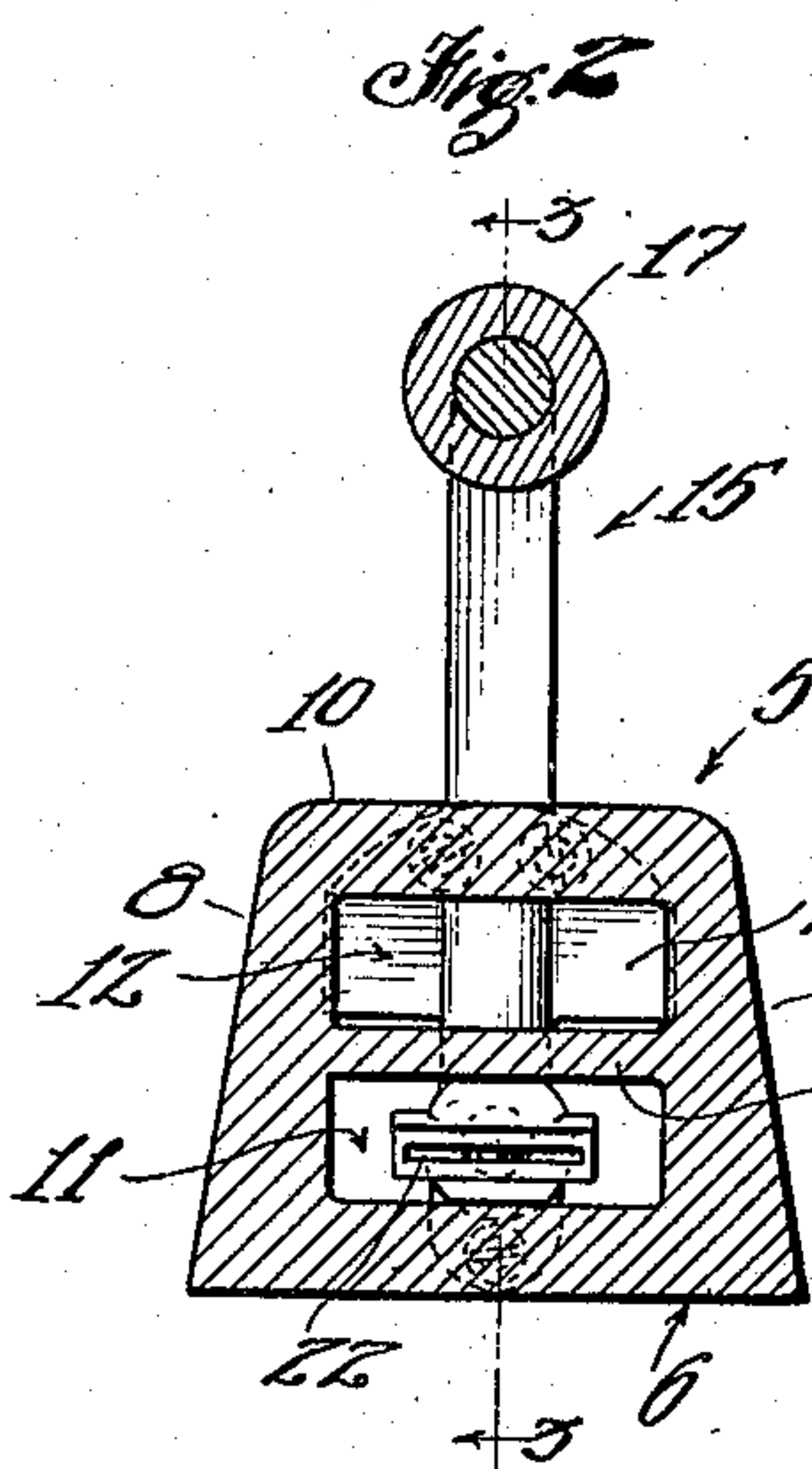
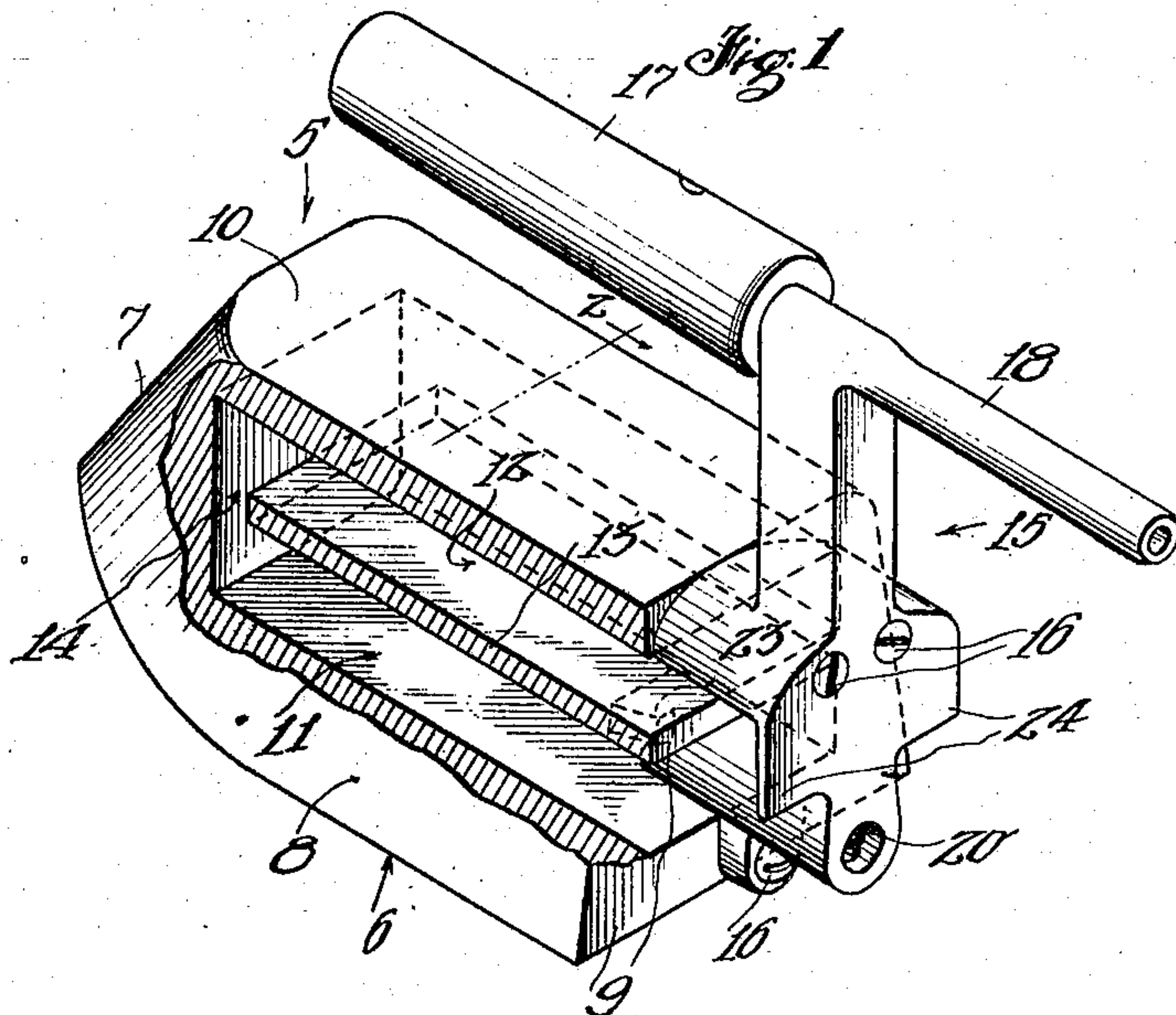


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GAS HEATED SAD IRON.  
APPLICATION FILED JAN. 28, 1907.

924,037.

Patented June 8, 1909.



Witnesses  
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# UNITED STATES PATENT OFFICE.

CARL F. CAPELL, OF LOS ANGELES, CALIFORNIA.

## GAS-HEATED SAD-IRON.

No. 924,037.

Specification of Letters Patent.

Patented June 8, 1909.

Application filed January 28, 1907. Serial No. 354,396.

*To all whom it may concern:*

Be it known that I, CARL F. CAPELL, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented new and useful Improvements in Gas-Heated Sad-Irons, of which the following is a specification.

My invention relates to a sad iron that is self-heating by an interior gas flame.

One of the principal objects is to provide a sad iron with a gas burner in which there is perfect combustion, which will produce a broad flame, free from smoke or offensive odors. I accomplish this object by the iron described herein and illustrated in the accompanying drawings, in which:—

Figure 1— is a perspective view of my improved sad iron with the side partly broken away to show the interior construction. Fig. 2—is a section on line 2 of Fig. 1. Fig. 3—is a section taken on line 3—3 of Fig. 2.

The sad iron body 5 comprises a sole 6, toe 7, sides 8, heel 9 and top 10. Within the body are two central disposed chambers, the lower or heating chamber 11 and the upper or draft chamber 12. These chambers are divided by a central horizontal partition 13, which is integral with the body of the iron. This partition terminates a little in front of the rear wall of the toe, thereby forming an aperture 14 which gives egress to the burned up gases from the heating chamber to the draft chamber, and said gases pass out at the heel.

A T-shaped metal handle 15 is fastened to the heel of the iron body by screws 16, and the front portion thereof projects over the body and is provided with a heat insulating jacket 17, preferably of wood. To the upper portion of the handle and projecting rearwardly therefrom is a hose connection 18, which is connected to channel 19 in the vertical portion of the handle. Hose connection 18 forms means for attaching the hose which connects the iron to the gas supply. In the lower end of channel 19 is a tip 20, which is adapted to discharge the gas into the mixing chamber 21, which is bored in the lower member of the handle. The end of the mixing chamber is provided with a wide thin inclined nozzle 22, which discharges the gas into the lower chamber directed toward the floor thereof. By making this nozzle wide and thin all danger of back firing is avoided

and a wide surface of the floor is subjected to the action of the flame, when the gas is lighted.

The handle is provided with a hood 23 which abuts upon the body above the upper chamber and has a back plate 24, which projects downwardly the depth of the upper chamber and is as wide as the width of said chamber, so that when the iron is moved backwardly, the air is deflected so as not to enter the upper chamber. Between the back plate and the rear of the upper chamber is sufficient clearance so that there is a good draft when the iron is moved in either direction.

By this construction I have provided a cheap and effective sad iron, whose especial merit lies in the fact that the burner flame is broad and thin and is directed upon the top of the surface, devoted to smoothing the goods, and the heat is all caused to pass to the front of the iron and then to pass to the draft chamber and then out at the rear, whereby the heat is utilized to its fullest extent. I have found in practice that an iron thus constructed is susceptible of continuous use for hours.

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

1. A sad iron having in the body a combustion chamber in the lower portion thereof extending from the rear to the toe of the iron and closed at the front and open at the rear and a draft chamber in the upper portion closed at the front and open at the rear, said upper and lower chambers being in communication at the front portions thereof; a handle secured to the rear portion of the body; an L-shaped plate secured to the handle and having the downwardly projecting portion of said plate forming a shield to prevent the air from entering the upper chamber when the iron is moved rearwardly; a burner projecting into the combustion chamber; and means to convey gas to said burner.

2. A sad iron having two chambers in the body thereof, said chambers being parallel and of substantially equal size, and open at the rear and extending forwardly to the toe and being in communication at the rear of the toe by an aperture; a T-shaped handle secured to the rear portion of said body; a burner secured to the end of said handle and projecting into the lower chamber of the

body, said handle having a channel therein providing means to convey gas to said burner; and an L-shaped hood secured to said handle and having the downwardly projecting portion thereof forming a shield to prevent the air from entering the upper chamber when the iron is moved rearwardly.

In witness that I claim the foregoing I have hereunto subscribed my name this 21st day of January, 1907.

CARL F. CAPELL.

Witnesses:

G. E. HARPHAM,  
F. A. MANSFIELD.