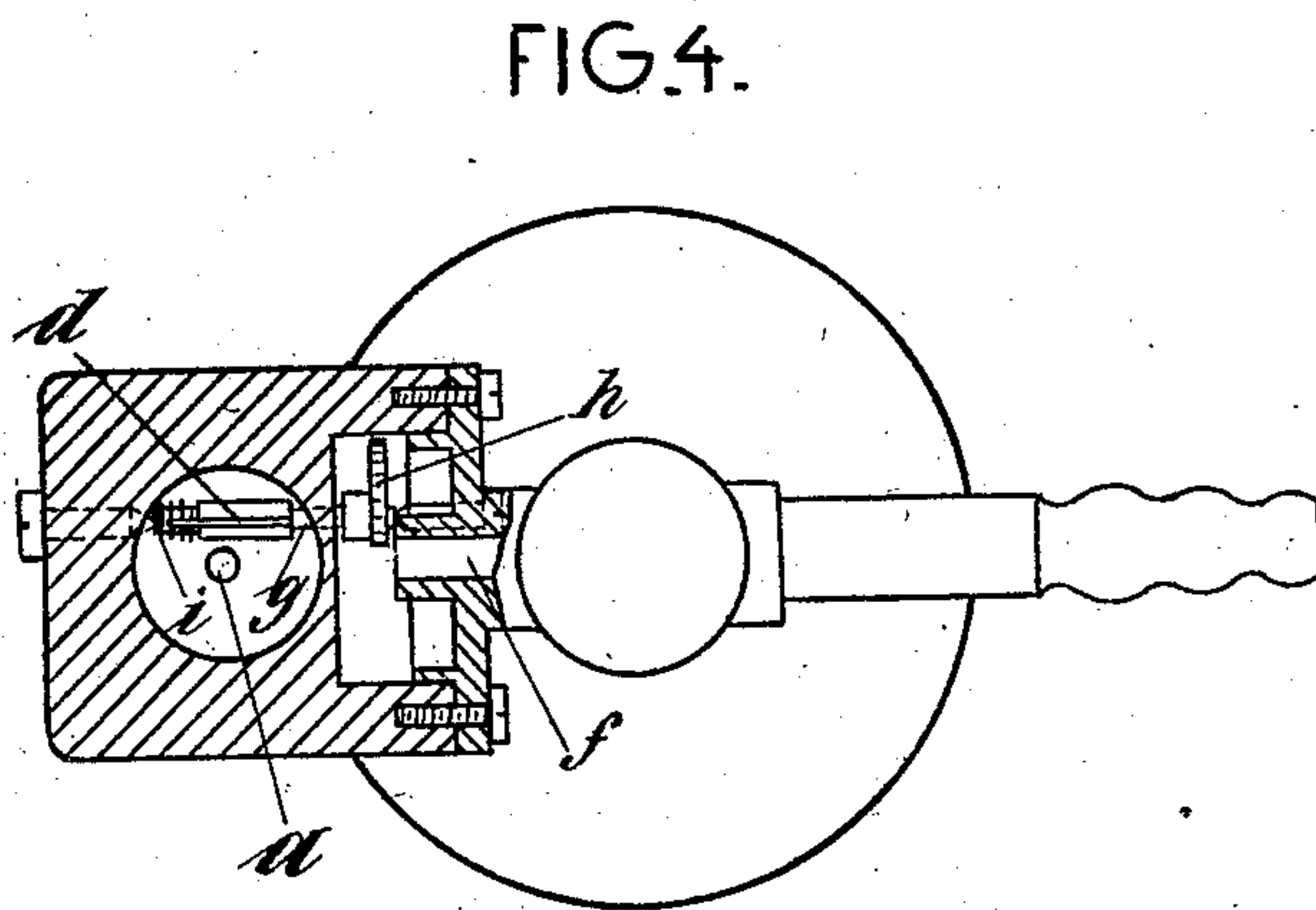
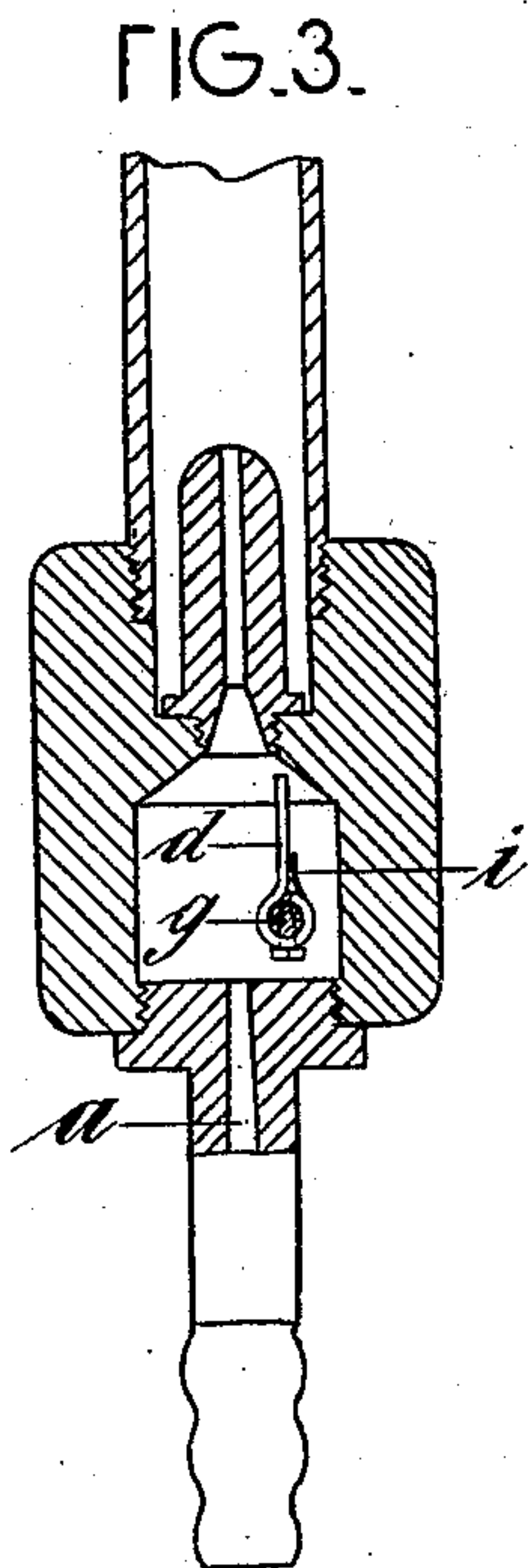
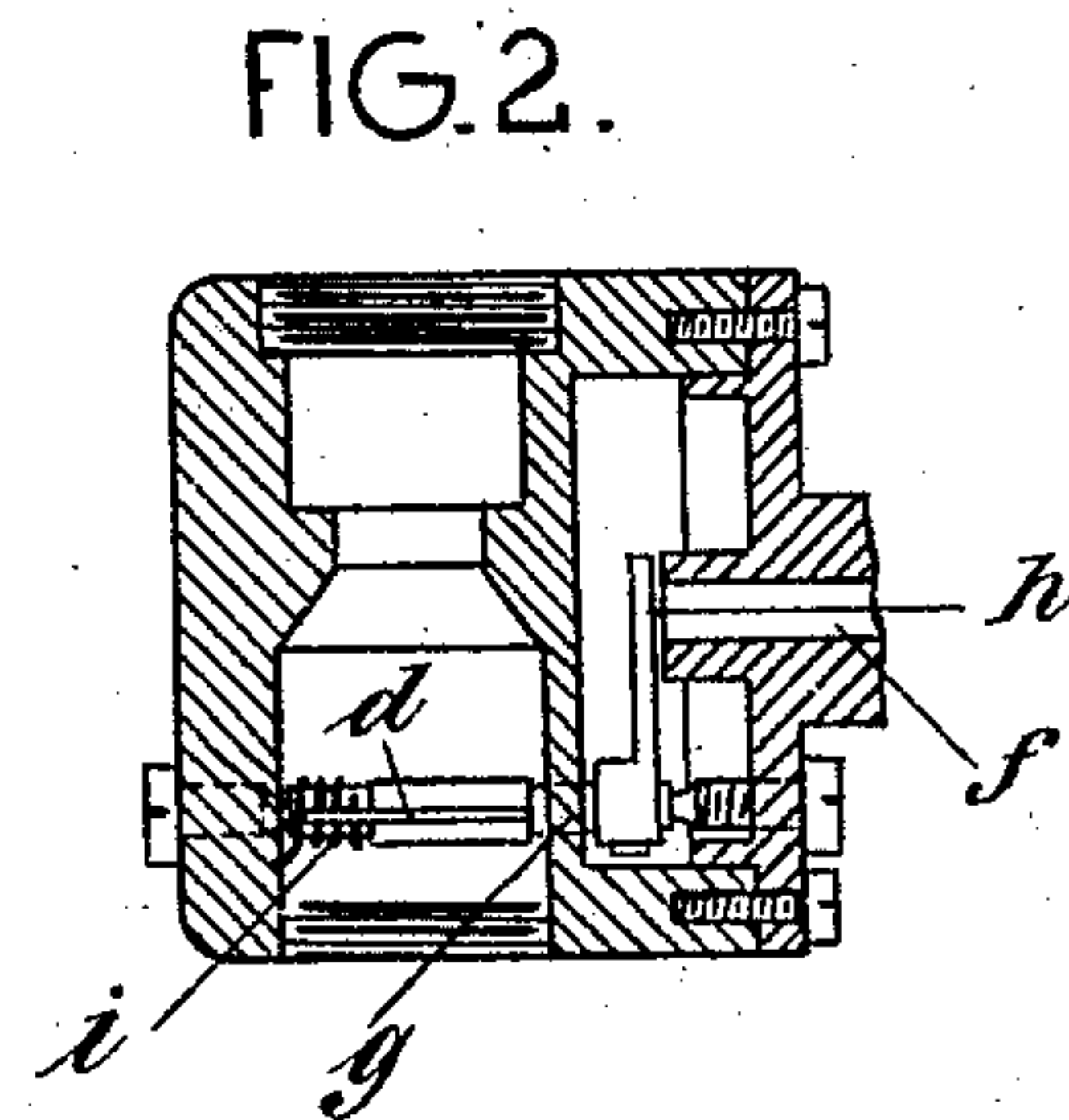
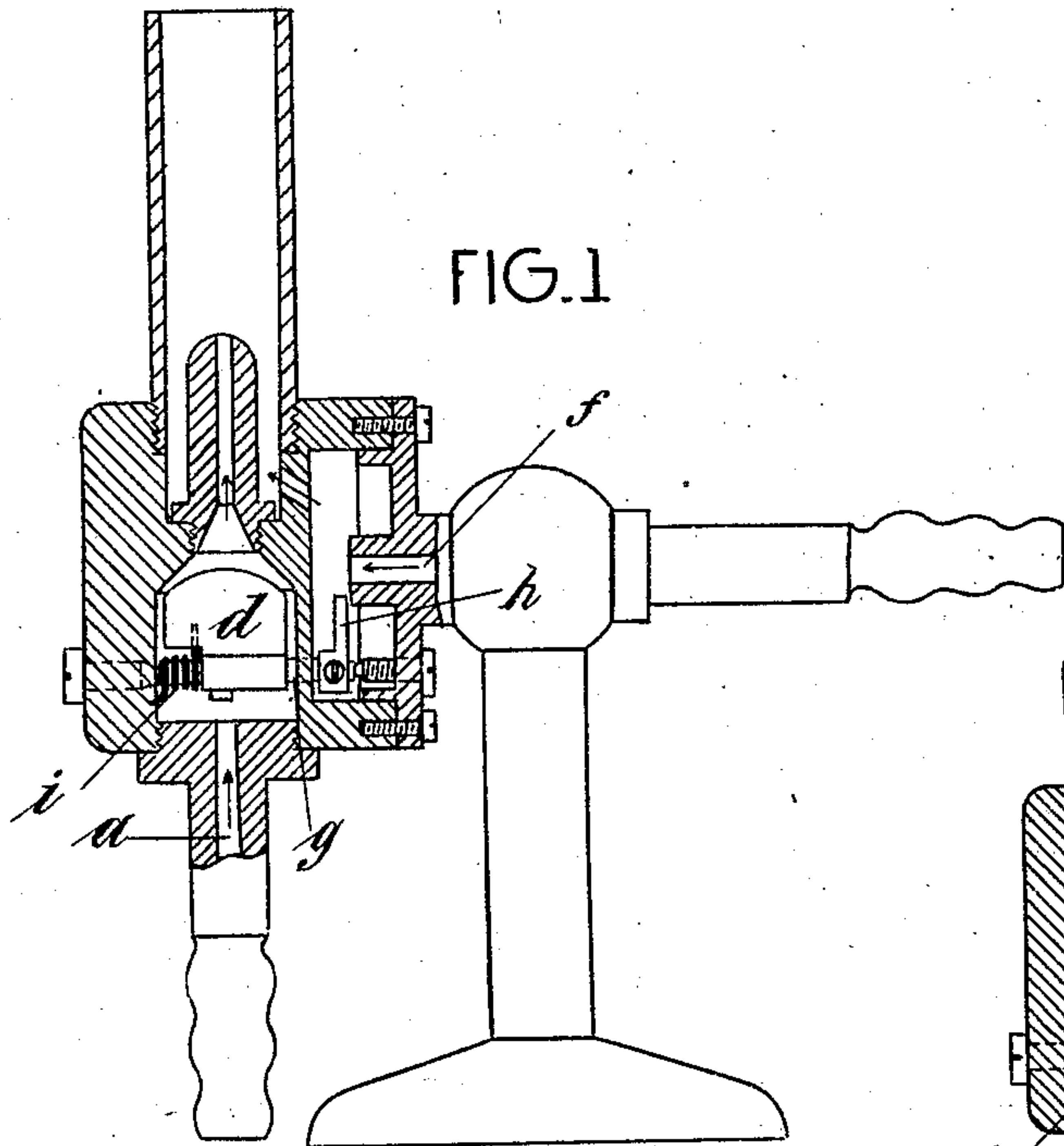


No. 869,268.

PATENTED OCT. 29, 1907.

J. SIMMENDINGER.  
BLAST GAS BURNER.  
APPLICATION FILED DEC. 27, 1906.



Witnesses:  
E. W. W. W.  
*Julius Schönfeld*

Inventor.  
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by *Frederick M. M.*  
Attorney.

# UNITED STATES PATENT OFFICE.

JOSEPH SIMMENDINGER, OF WENIGENJENA, GERMANY.

## BLAST-GAS BURNER.

No. 869,268.

Specification of Letters Patent.

Patented Oct. 29, 1907.

Application filed December 27, 1906. Serial No. 349,596.

*To all whom it may concern:*

Be it known that I, JOSEPH SIMMENDINGER, a citizen of the German Empire, and a resident of Wenigenjena, Germany, have invented certain new and useful Improvements in Blast-Gas Burners, of which the following is a specification.

This invention relates to blast-gas burners and more particularly to a device for cutting-off the gas supply at the same time when the supply of air under pressure is cut off. The device is self-acting, and when in operation it allows only such quantity of gas to pass to the burner as is required for the byflame. The cut-off valve is automatically opened by the blast of air under pressure.

In the accompanying drawings the device is shown by way of example.

Figure 1 is a vertical section through a blast-gas burner furnished with the cut-off device, which is represented in the position where the full quantity of gas is supplied to the burner, while Fig. 2 shows the cut-off device in the cutting-off position. Figs. 3 and 4 are vertical and horizontal planes at right angles to the plane of Fig. 1.

In a chamber of the conduit *a* for the compressed air, an axle *g* is revolvably mounted which projects through the partition which separates the said chamber from the gas-supply pipe *f*. The axle *g* is gas-tightly packed in said partition. A wind-wing *d* is fixed on axle *g* in the air-chamber and a spring *i* is provided for keeping the axle in such a position that the wind-wing *d* lies

horizontally over the orifice of the blast-pipe *a*. On the end of axle *g* which is situated in the widening of the gas supply-pipe *f* an eccentric plate *h* is fixed in such a manner that when the wind-wing *d* is in normal, horizontal position, the eccentric-plate *h* shuts off the orifice of the gas-supply pipe *f* leaving just enough room that the small quantity of gas can pass, which is required to keep the byflame alive. When the blast is turned on the wind-wing *d* is blown into vertical position against the action of spring *i* and the eccentric plate *h* is brought into the position shown in Fig. 2, in which the orifice of gas supply pipe *f* is open, so that the full quantity of gas is supplied to the burner.

What I claim as my invention and desire to secure by Letters Patent, is:—

A self-acting cut-off device for the gas-supply in blast gas burners comprising in combination an axle revolvably mounted in a widening of the air-supply pipe and prolonged through a widening of the gas-supply pipe, a spring for securing the axle in its position, a wind-wing fixed upon the axle in the widening of the air-supply pipe in horizontal position and an eccentric plate fixed upon the axle in the widening of the gas-supply pipe in vertical position for cutting-off the supply of gas to the burner, substantially as described and shown and for the purpose set forth.

In witness whereof I have hereunto set my hand in presence of two witnesses.

JOSEPH SIMMENDINGER.

Witnesses:

PAUL STREITNARTH,  
PAUL FLEISHMANN.