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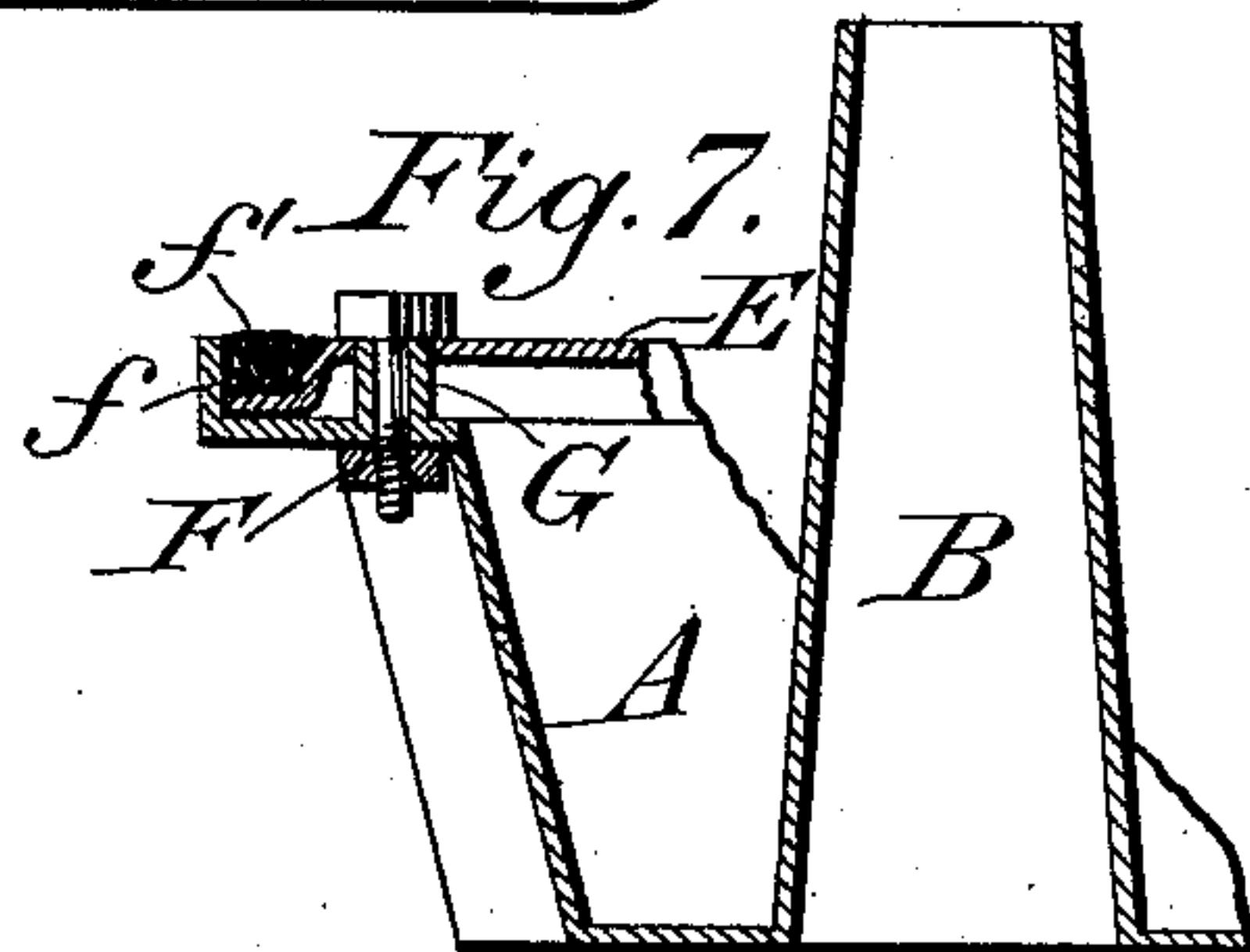
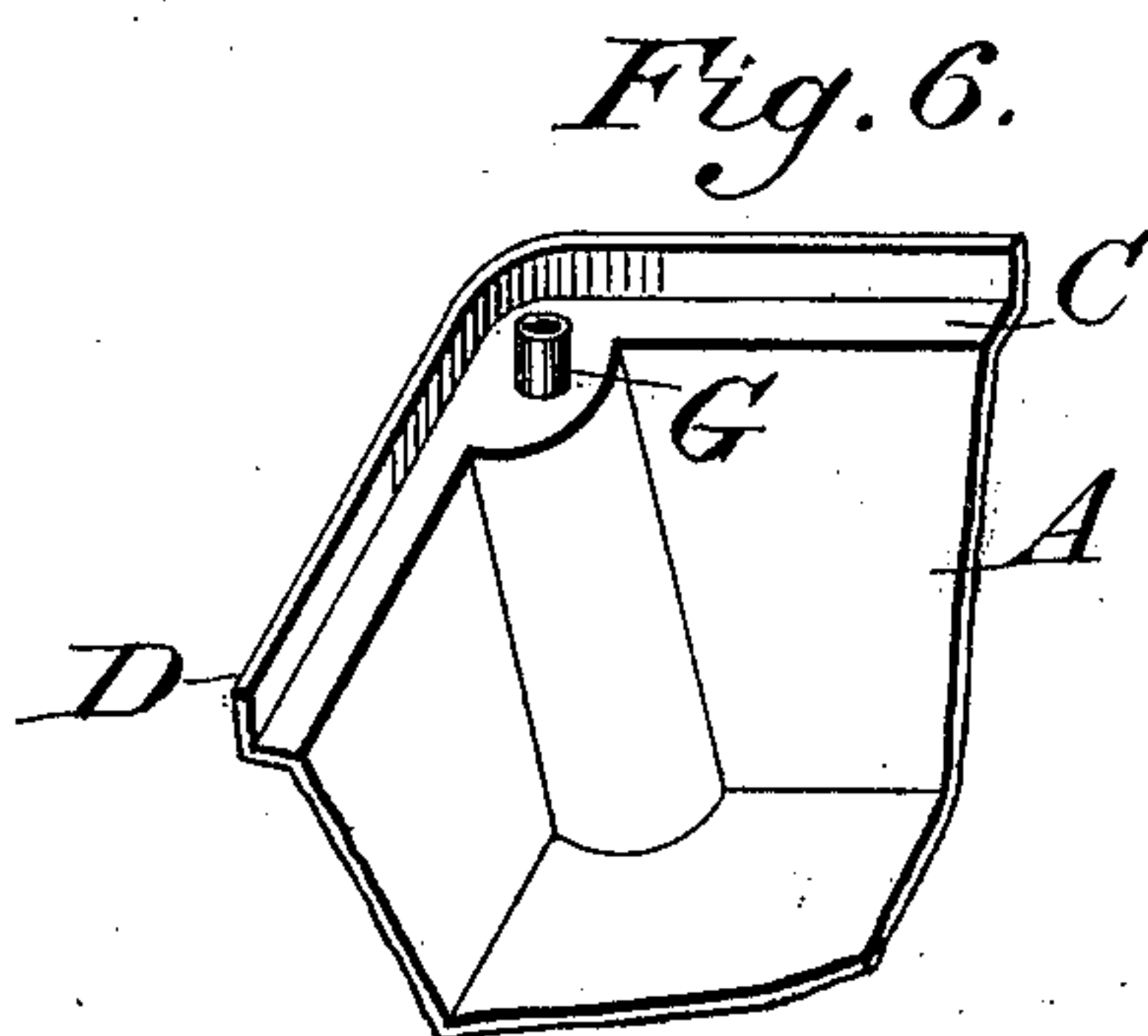
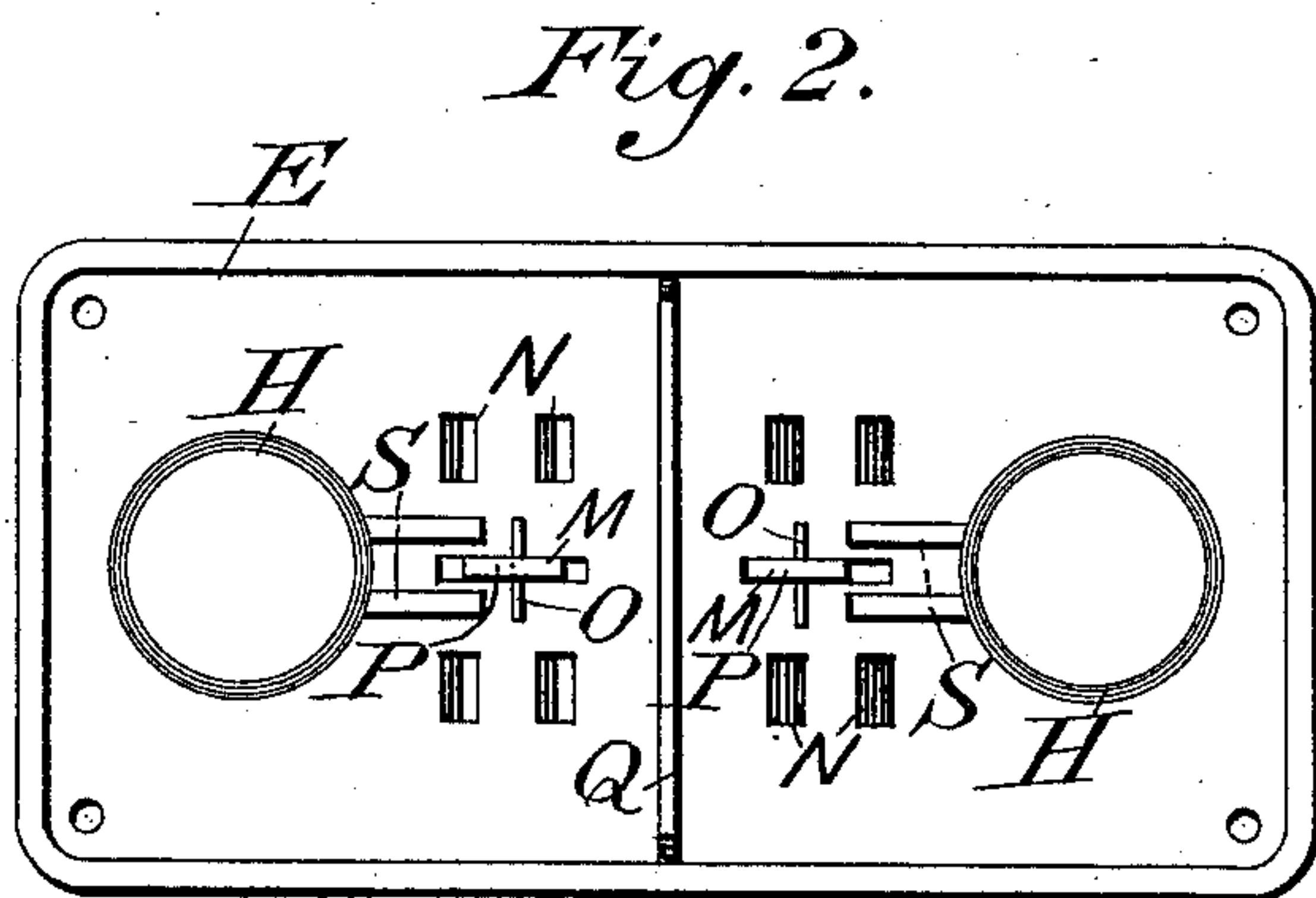
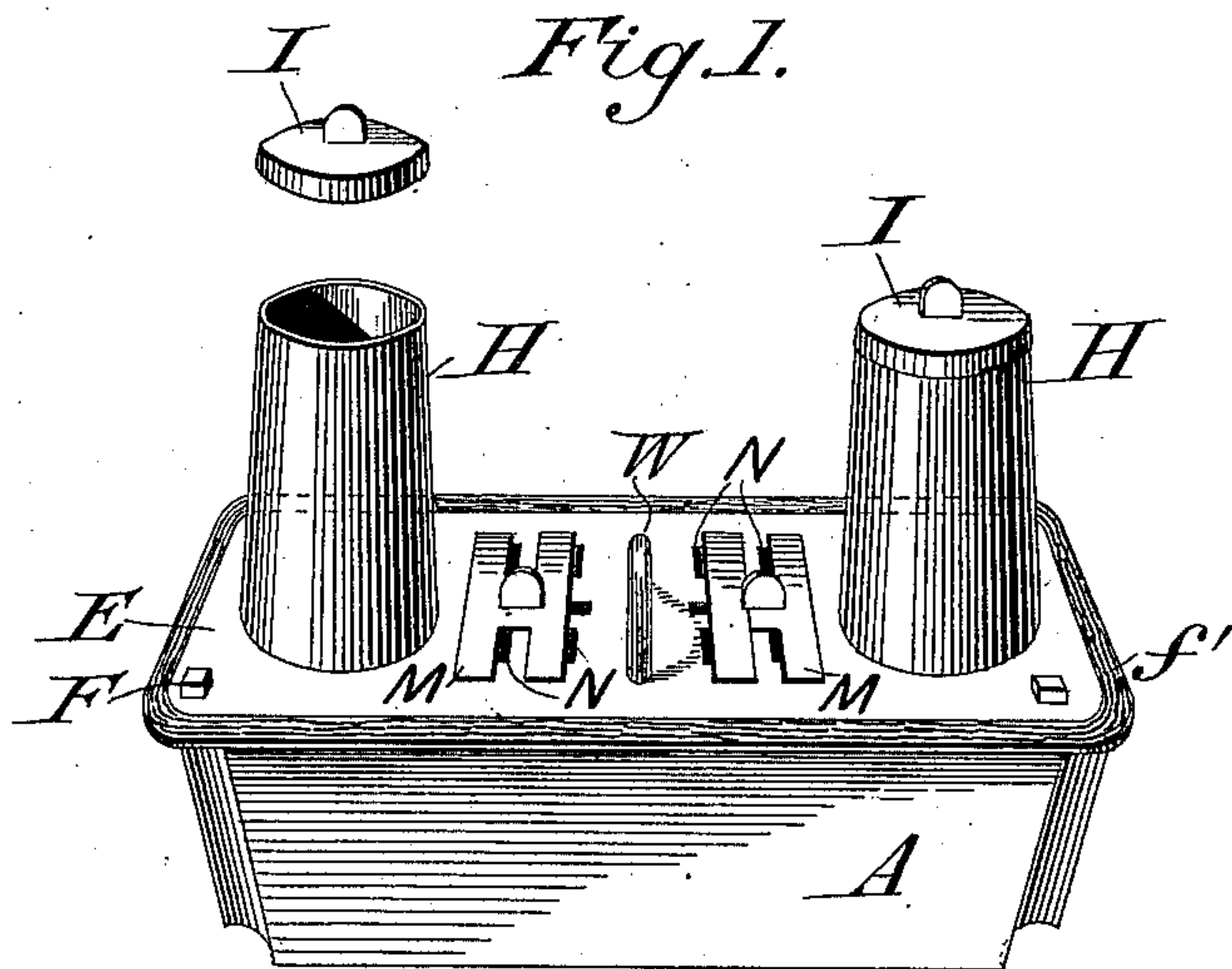
2 Sheets—Sheet 1.

Z. WATERS & J. B. STOUTEMYER.

LAMP STOVE.

No. 358,235.

Patented Feb. 22, 1887.



Witnesses

J. H. Schott
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Inventors
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(No Model.)

2 Sheets—Sheet 2.

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Fig. 3.

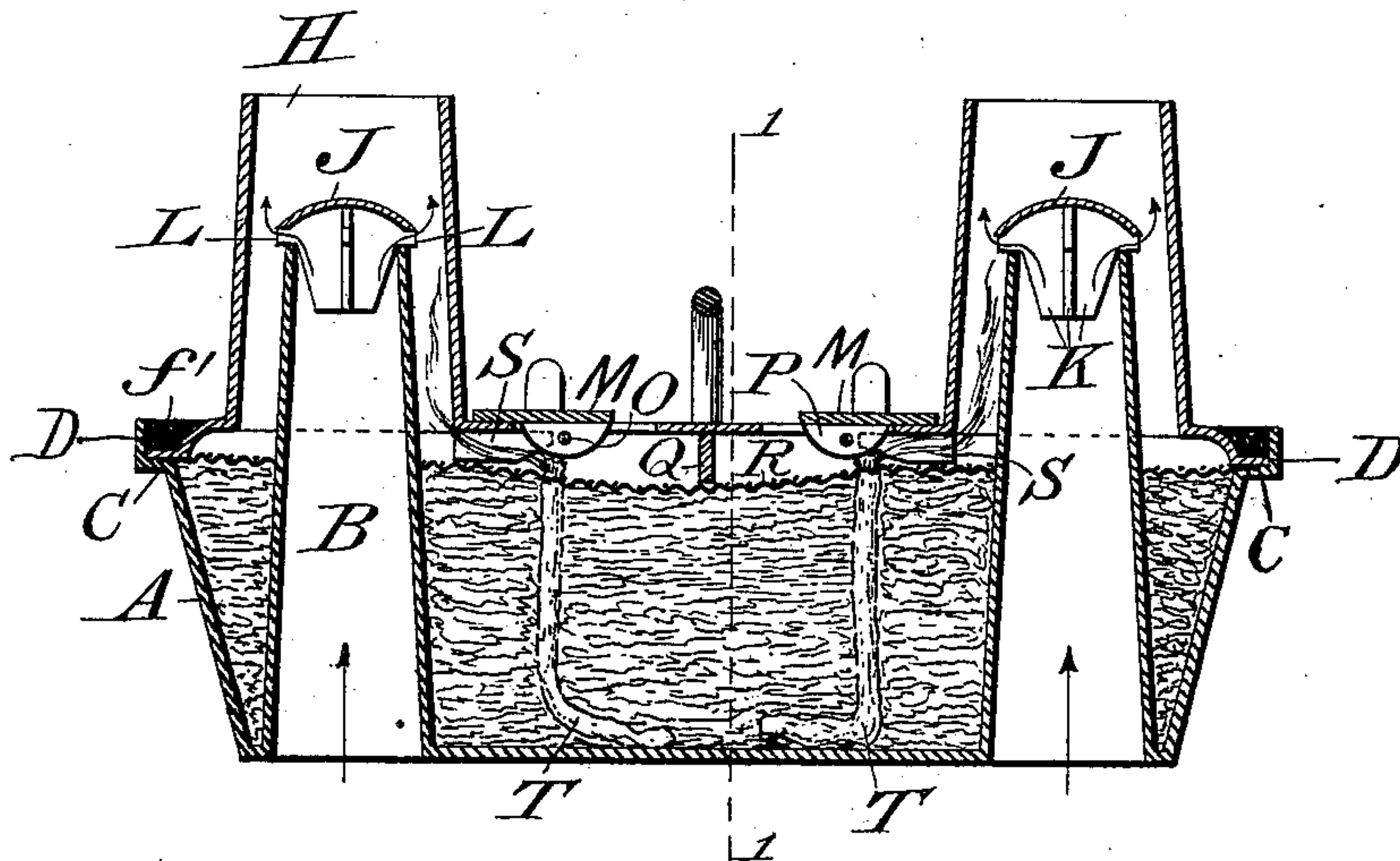


Fig. 4.
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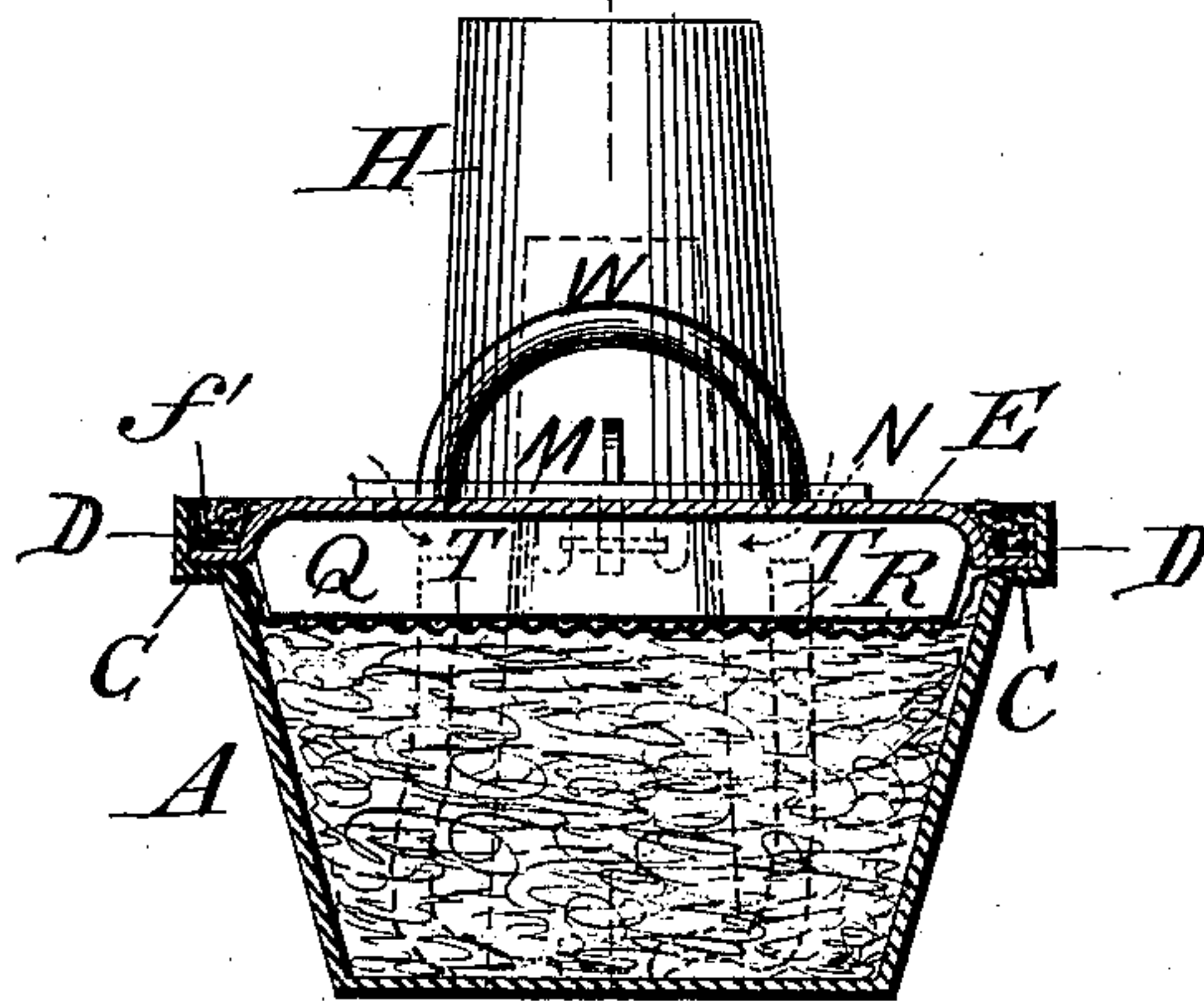
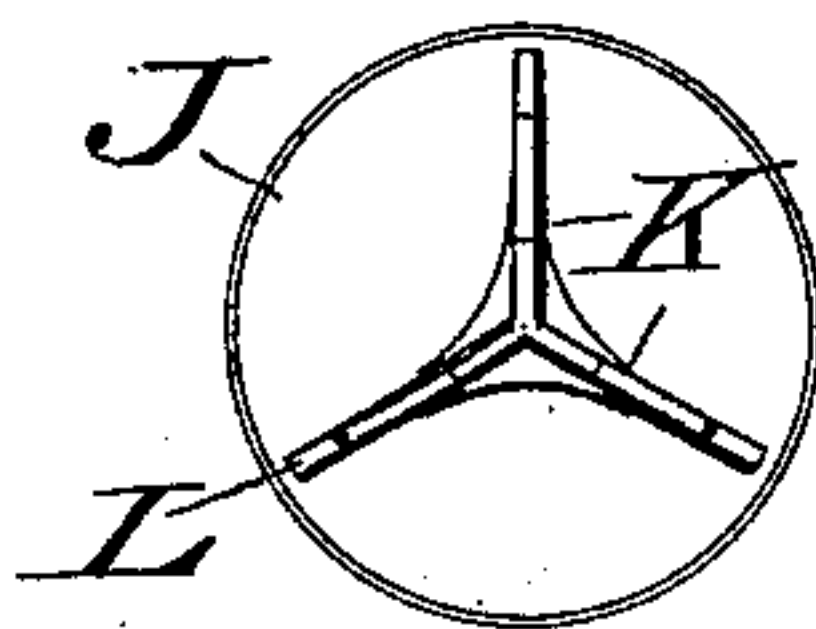


Fig. 5.
2



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UNITED STATES PATENT OFFICE.

ZERA WATERS AND JOHN B. STOUTEMYER, OF BLOOMINGTON, ILLINOIS.

LAMP-STOVE.

SPECIFICATION forming part of Letters Patent No. 358,235, dated February 22, 1887.

Application filed September 8, 1886. Serial No. 2:3,030. (No model.)

To all whom it may concern:

Be it known that we, ZERA WATERS and JOHN B. STOUTEMYER, of Bloomington, in the county of McLean, and in the State of Illinois, have invented certain new and useful Improvements in Lamp-Stoves; and we do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

Our invention relates to certain new and useful improvements in the construction and operation of lamp-stoves, the same being more especially designed as an improvement upon the stove shown and described in Letters Patent No. 327,613, issued to John E. Stephens, of Detroit, Michigan, bearing date October 6, 1885.

The object of the invention is to make certain new and important changes over the stoves now in use, whereby a more perfect control of the combustion is obtained and a much more successfully-operating device is secured.

A further object is to provide a stove of the above character which shall be simple and economical in construction and durable and efficient in use; and with these ends in view our invention consists in the certain features of construction and combinations of parts, as will be hereinafter fully described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a perspective view of the stove. Fig. 2 is a bottom plan view of the cover E. Figs. 3 and 4 are sectional views of Fig. 1. Fig. 5 is a bottom plan view of the caps J. Figs. 6 and 7 are detail views, and Fig. 8 is a view of the lighter.

A represents a metallic tank or reservoir, the interior of which is filled with mineral wool or any other non-combustible absorbent. The tank is provided with one or more upright funnel-shaped tubes, B, the same being open at both ends, and are preferably cast integral with the bottom of the tank. The tank is provided around its inner edges with the flange C, the rim D extending a suitable distance beyond the flange. The purpose of the flange is to serve as a rest for the cover E, which rests thereon and is elevated above the

absorbent packing, affording an air-passage-way and leaving a space between the lid and the line of the oil, the cover being secured thereto by means of the screws F, which pass through the cover into the nipples G. The nipples are formed integral with the tank, and project a suitable distance above the flange C, as shown in Fig. 6, the object of which is to prevent the oil escaping therein, as would be the case were the nipples flush with the flange. The construction of the edges of the cover is such that when it is placed on the tank a groove, *f*, is formed, into which is packed the oil and fire-proof cement *f'*, thus effectually preventing the leakage of oil through the seams and overcoming a heretofore annoyance.

The cover E is provided with the tubes H, preferably formed integral therewith and adapted, when secured to the tank, to concentrically cover the funnels B. The tubes H are longer than the funnels B, and are likewise formed with open ends, and are provided with the removable lids I, for the purpose of closing the tubes and serving as extinguishers.

The inner tubes, B, are provided with the removable dish-shaped caps J, provided on their bottoms with the conically-extending projections K, which are in turn provided near their upper ends with the lugs L, upon which the caps rest and are kept a suitable distance above the mouth of the tube. It will be observed that the construction of the cap is such as to give a flaring and circumferential movement to the air-current as it passes into the tubes H from the tubes B.

One or more openings, N, are formed in the cover, which are opened and closed by means of the dampers M, which are secured by the pin O, passing through the lug P on the bottom of the damper.

The cover E is provided on its bottom at or near the center with the transverse bar Q, which is intended to press upon the packing or wire-gauze R, thus keeping an air-space between the packing and cover and also separating the ends of the tank, so that the stove may at pleasure be used either as a single or double burner. The bottom of the cover is provided with the elongated lugs S, as shown in Fig. 2, extending from the opening to the flue, for the purpose of facilitating the current of air, gas, or vapor in

the funnels H from the generating-points. The packing is saturated with oil, the same being delivered thereto from any convenient point, and is supplied with wicks T, preferably made of asbestos fiber, the same extending to the bottom of the tank in order to absorb the oil from that point. The wicks extend to the openings N, as shown, which are the lighting-points. The gauze may be made of wire, tin, or any other non-inflammable material, and is designed to hold the packing in place.

The stove is intended to be set within a fire-box or combustion-chamber of a stove or range, and may be provided with as many burning-points as desired.

The drawings show the stove provided with two burning-points, each one to set, when in place, immediately below the boiling or cooking places usually found above such combustion-chamber. If the top of such range or stove should have more than two boiling places above the combustion-chamber thereof, our lamp-stove may have a corresponding number of burning-points, or the burning-points may be reduced to one in number.

In general use any grade of kerosene-oil may be used, the oil-tank being filled until the absorbent is saturated. The stove is lighted by means of the lighter U, which is provided with the asbestos tuft, which is saturated with any combustible, ignited, and applied to the wicks.

The cover is provided with the handle W, for convenience in lifting the same.

Having fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In a lamp stove or heater, the combination, with the tank and suitable absorbent packing and a wire covering on said packing, of the tubes H and a cover provided with lugs on its bottom adapted to impinge upon said gauze and furnish channels for the readier passage of air from the openings N into the tubes H, substantially as described.

2. In a lamp-stove, the combination, with the tank or reservoir having laterally and upwardly projecting flanges C D and upwardly-projecting nipples, of a cover having downwardly and outwardly projecting flanges, fastening-screws passing through said cover and registering with the nipples, and a cement or similar filling, *f'*, substantially as described.

3. In a lamp-stove, the combination, with the tank and a suitable packing, of wicks extending to the bottom of the tank and projecting through suitable openings in the gauze, substantially as set forth.

In testimony that we claim the foregoing we have hereunto set our hands this 18th day of August, 1886.

ZERA WATERS.
JOHN B. STOUTEMYER.

Witnesses:

THOS. SLADE,
C. M. HAMILTON.