

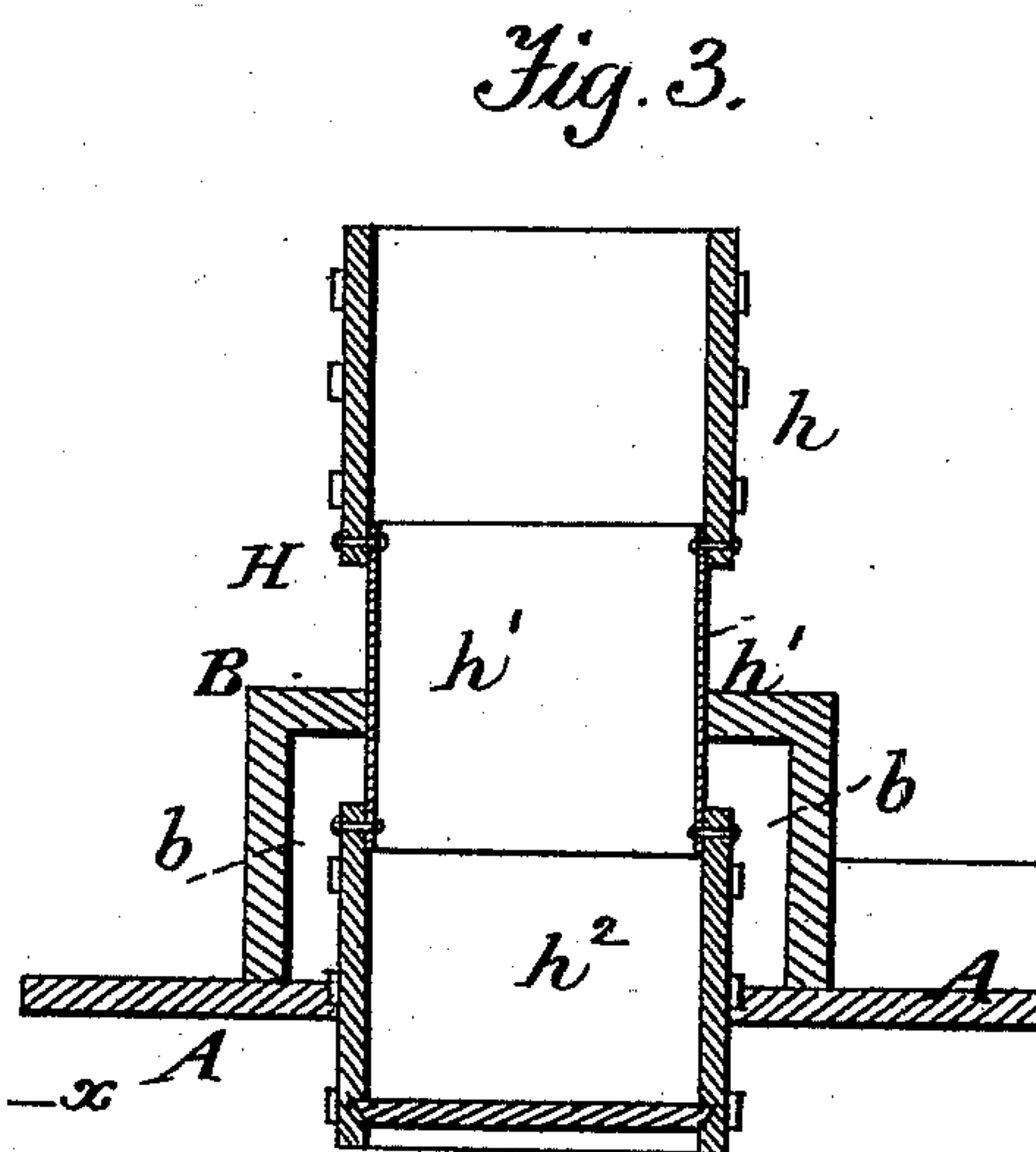
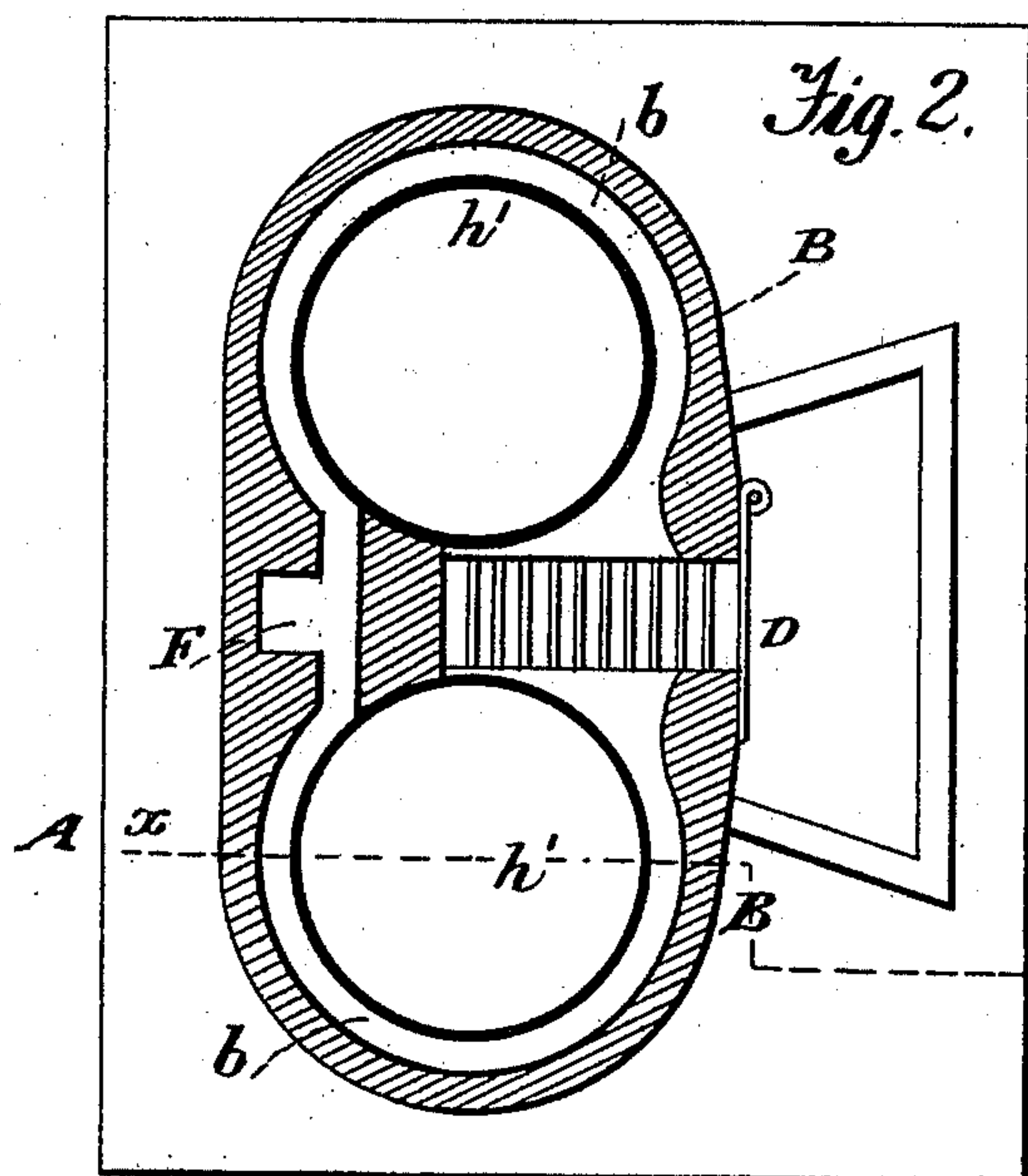
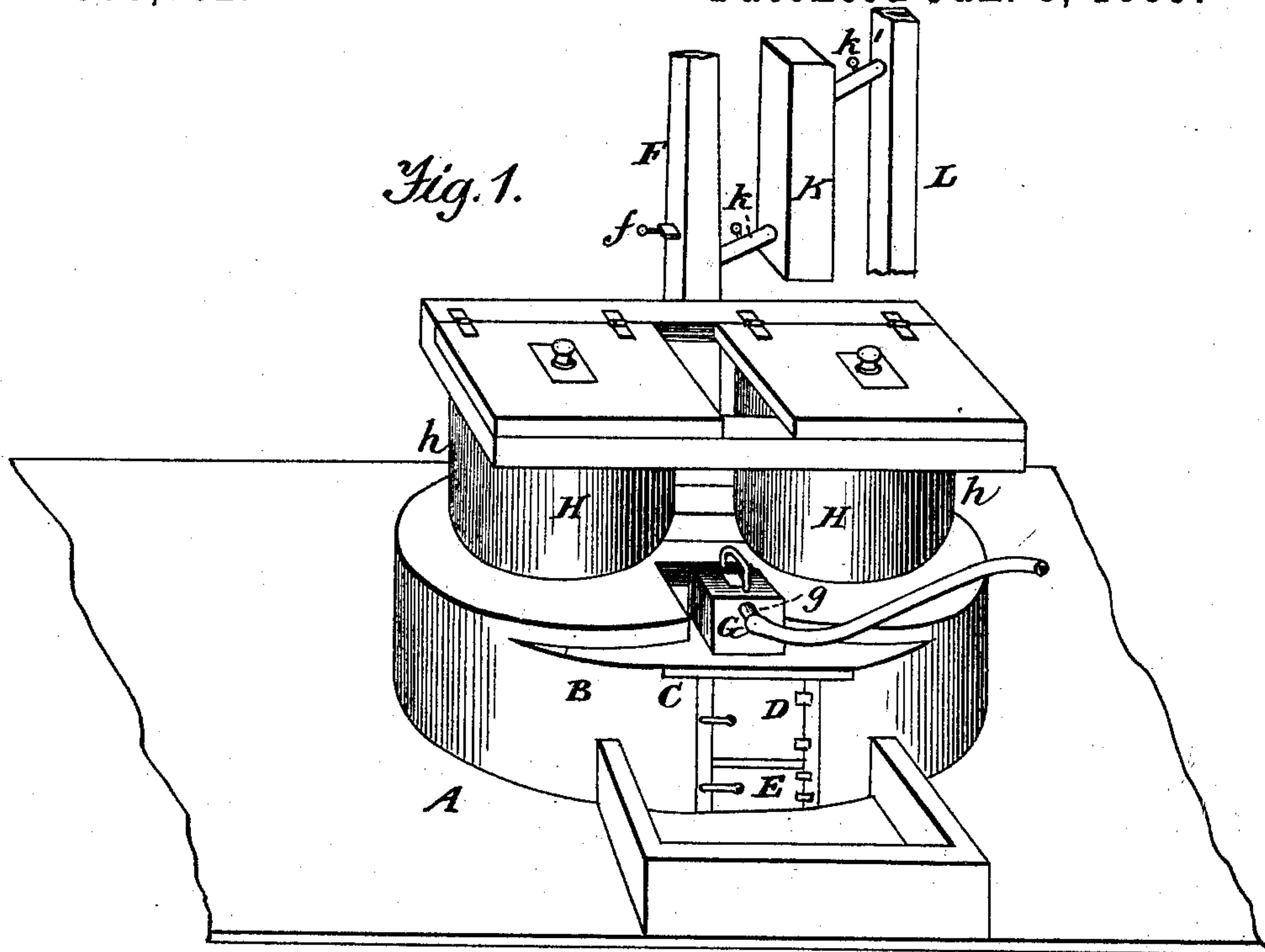
(No Model.)

T. TVEDLER.

AGRICULTURAL BOILER OR BARREL HEATER.

No. 395,762.

Patented Jan. 8, 1889.



*Witnesses.*  
*A. Ruppert.*  
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# UNITED STATES PATENT OFFICE.

TORGER TVEDLER, OF CAMBRIDGE, IOWA.

## AGRICULTURAL BOILER OR BARREL-HEATER.

SPECIFICATION forming part of Letters Patent No. 395,762, dated January 8, 1889.

Application filed March 3, 1888. Serial No. 266,048. (No model.)

*To all whom it may concern:*

Be it known that I, TORGER TVEDLER, a citizen of the United States, residing at Cambridge, in the county of Story and State of Iowa, have invented certain new and useful Improvements in Agricultural Boilers or Barrel-Heaters; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

The special object of the invention is to improve such barrel-heaters or agricultural boilers as are described in Patents Nos. 135,005, 206,349, and 209,134. The boilers or barrel-heaters described in these patents have the fire-place at the base, while I make mine about the middle of the height of the barrels and between them. By this construction the fire-heat is applied more uniformly and with less heat-waste either to one or both of the barrels, while it also enables me to have a hot-water tank directly over the fire-place, where steam may be also generated and supplied through a hose for thawing the ice in troughs or vessels of any kind.

Another object which I have in view is to utilize the escaping products of combustion for smoking meat, fish, and other things, as hereinafter described.

Figure 1 of the drawings is an elevation in perspective of my barrel-heater; Fig. 2, a horizontal section thereof, and Fig. 3 is a vertical cross-section on dotted line *xx* of Fig. 2.

In the drawings, A represents the ground floor; B, the brick-work shell; C, the iron

fire-place; D, the fuel-door; E, the ash-door, 40 and F the smoke-stack.

G is a hot-water tank located directly over the fire-place C, and provided with an education-tube, *g*, for receiving a hose-pipe, through which steam may pass out and be used for 45 melting ice in troughs or other vessels.

H H are the feed barrels, vats, or receptacles for the food which is to be cooked. Each barrel H is made in three sections, *h h' h''*, the middle one of metal and the end ones of 50 wood. Around the middle metallic section, *h'*, is the brick-work or wall B, between which and the metallic section is the fire or smoke flue *b*, through which the products of combustion pass to the smoke-stack F. In 55 the latter I make a damper, *f*, and just below it connect the smoke-stack with a chamber, K, which has an inlet-pipe, *k*, at the bottom and an outlet-pipe, *k'*, at the top, the latter connecting with a smoke-stack, L, or above 60 the damper with the smoke-stack F.

Having thus described all that is necessary to a full understanding of my invention, what I claim as new, and desire to protect by Letters Patent, is— 65

The combination, with a brick-shell median fire-place and smoke-stack, of two feed-barrels, one on each side of fire-place and extending both above and below it, a space between shell and barrels forming a flue, *f*, 70 leading to the smoke-stack, as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

TORGER TVEDLER.

Witnesses:

AUFEN ERSLAND,  
A. A. RICHARDSON.