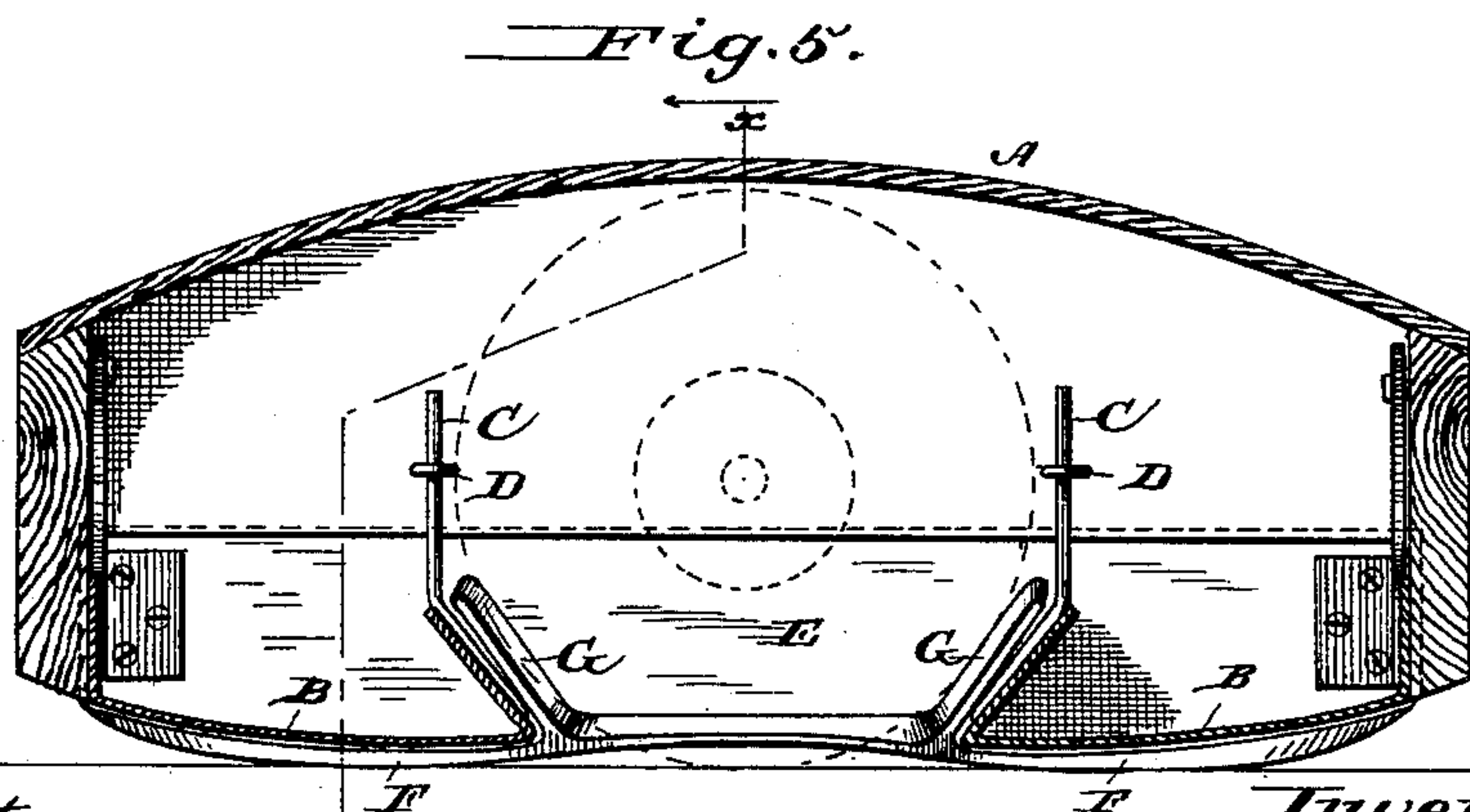
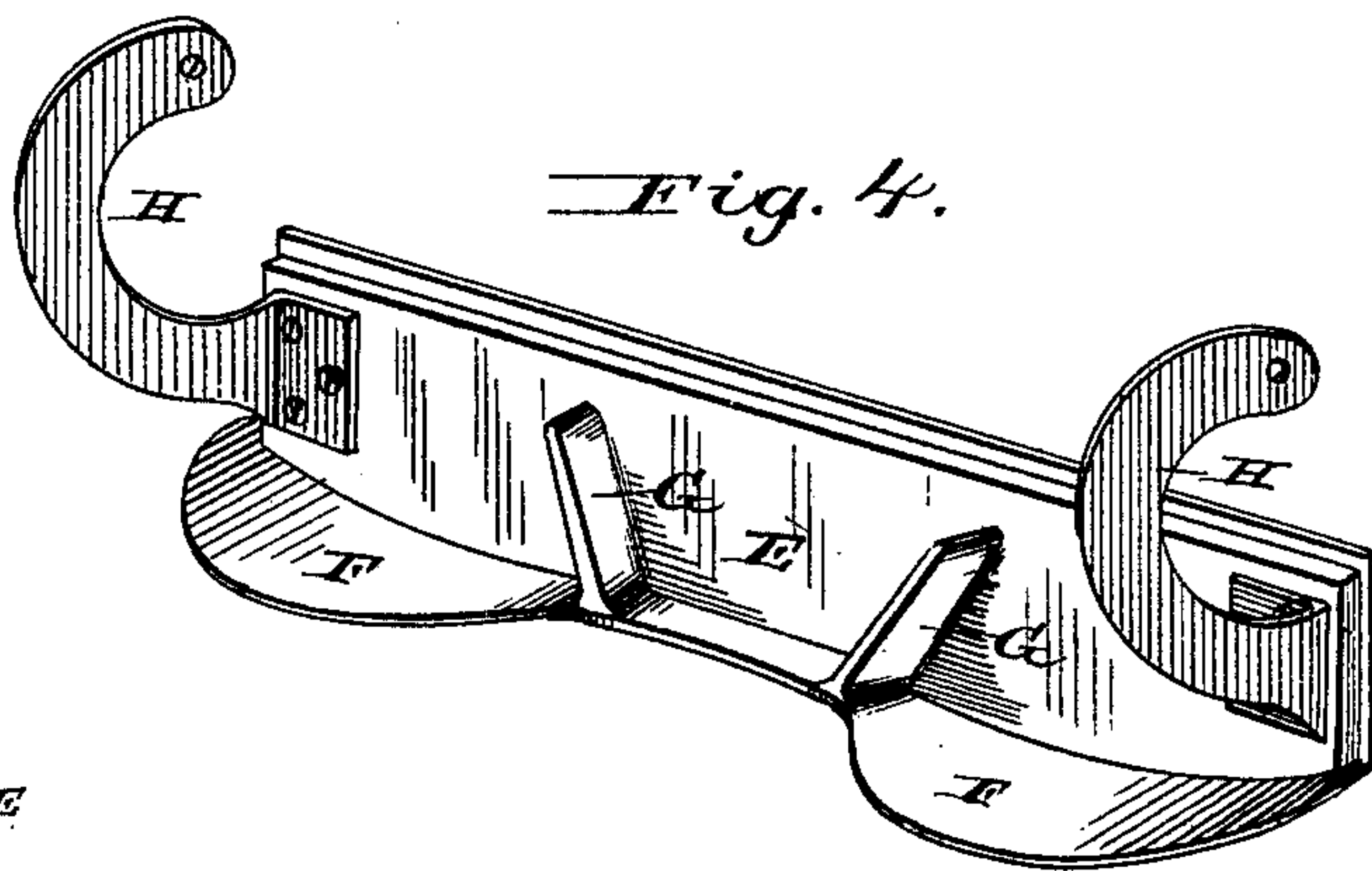
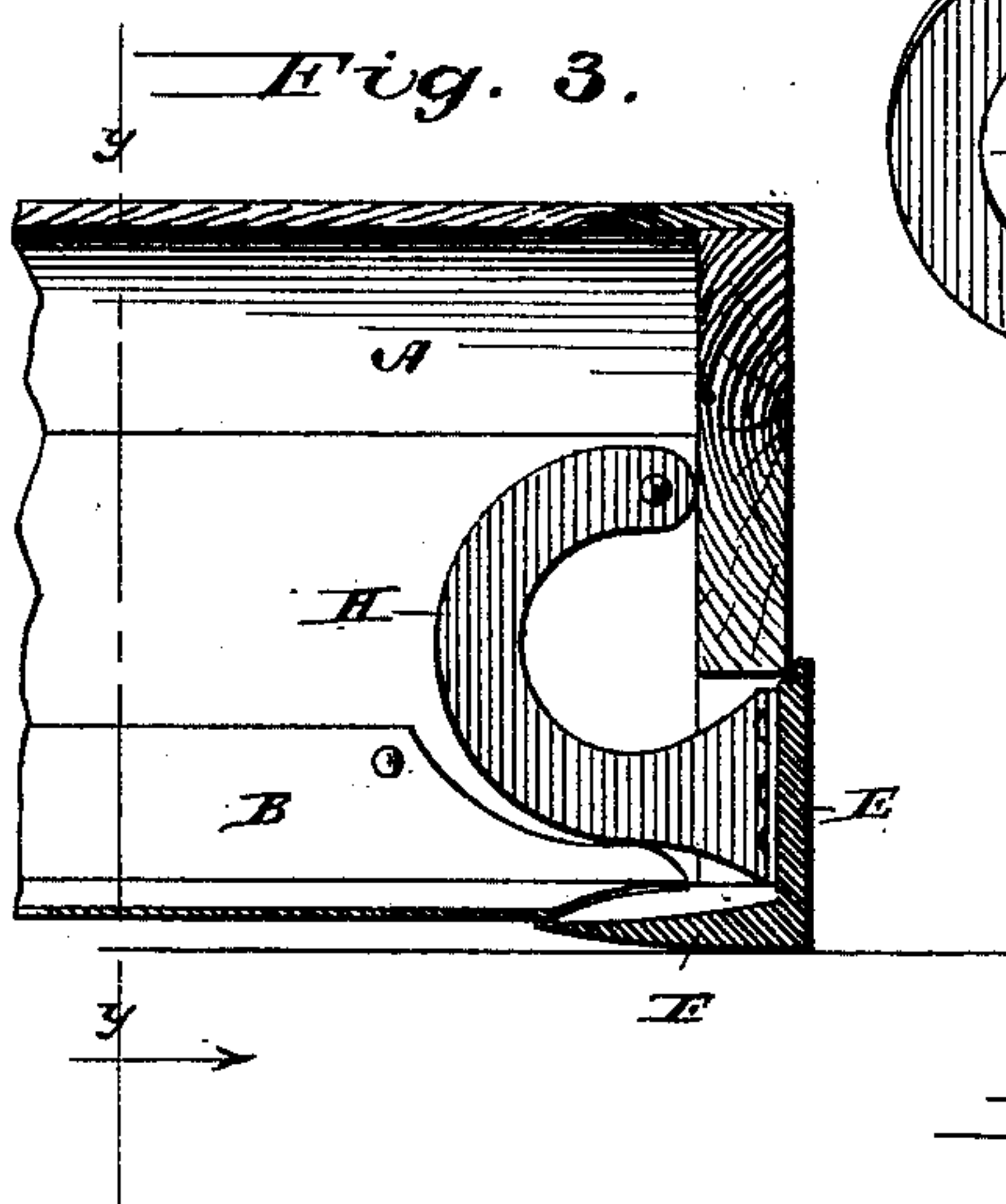
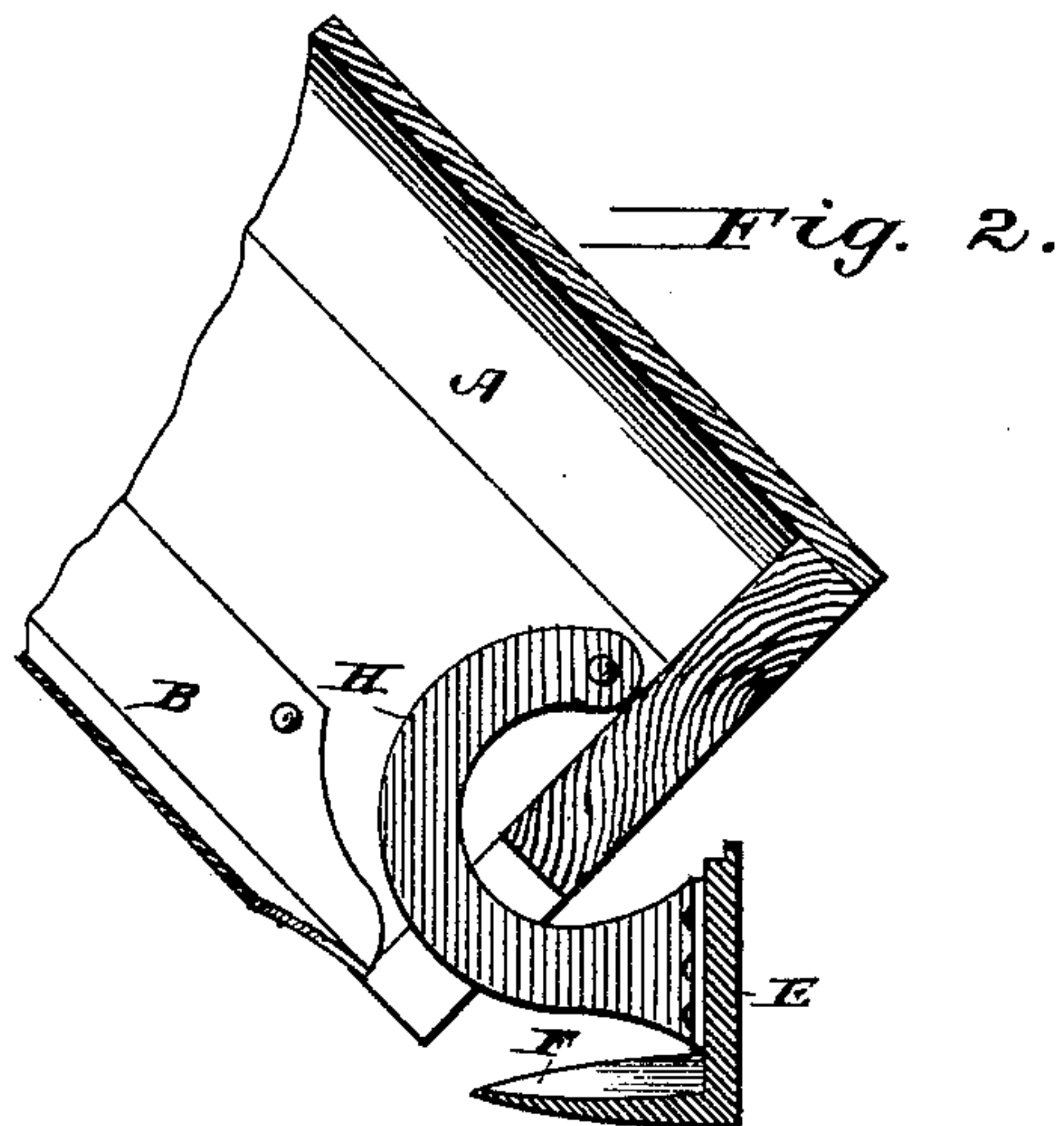
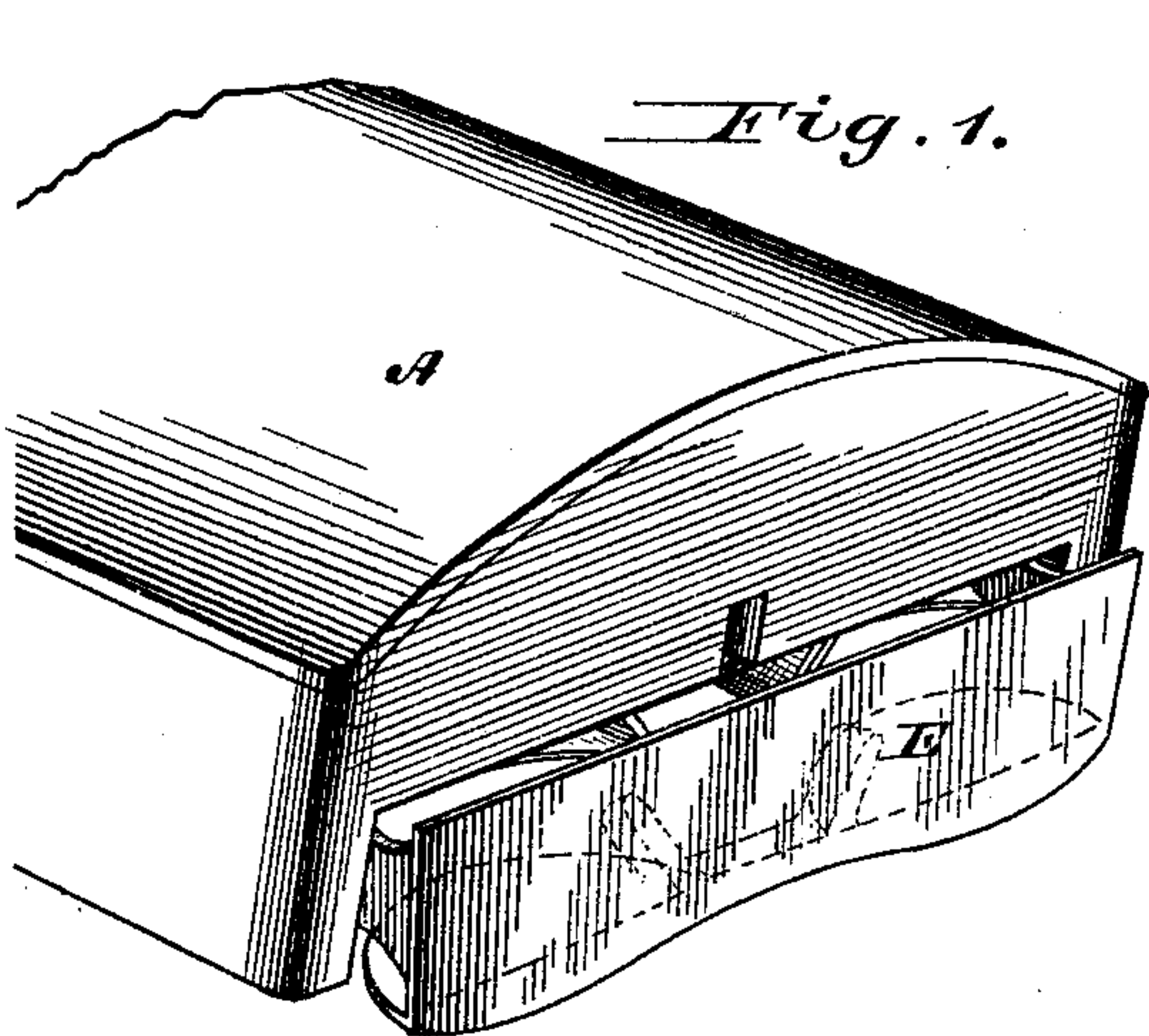


(No Model.)

G. W. GATES.
Carpet Sweeper.

No. 234,021.

Patented Nov. 2, 1880.



Attest:
H. L. Pinnie,
A. M. Long.

Inventor:
Geo. W. Gates.

By. *H. J. Abbott,*
Atty!

UNITED STATES PATENT OFFICE.

GEORGE W. GATES, OF GRAND RAPIDS, MICHIGAN, ASSIGNOR OF ONE-HALF
TO CHARLES B. JUDD AND ONE-FOURTH TO BENJAMIN F. POTTER, BOTH
OF SAME PLACE.

CARPET-SWEEPER.

SPECIFICATION forming part of Letters Patent No. 234,021, dated November 2, 1880.

Application filed March 18, 1880. (No model.)

To all whom it may concern:

Be it known that I, GEO. W. GATES, a citizen of the United States, residing at Grand Rapids, in the county of Kent and State of Michigan, have invented certain new and useful Improvements in Carpet-Sweepers; and I do hereby 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 letters or figures of reference marked thereon, which form a part of this specification, in which—

Figure 1 is a perspective of sweeper, looking from the hinged end and a part broken away; Fig. 2, a longitudinal section through Fig. 1, one end of the sweeper being tilted, and the hinged end being opened thereby. Fig. 3 is a section through *xx* of Fig. 5, looking in the direction of the arrow. Fig. 4 is a detached perspective of the end flap; and Fig. 5, a section through *yy* of Fig. 3.

My invention relates to carpet-sweepers, and has particular reference to the construction of the end flap, whereby the sweepings are allowed to be discharged from the sweeper; and it consists in constructing the sweeper with a flap next to the dust-pans, whereby by tilting the sweeper the pans will open so as to allow the sweepings to fall therefrom, and by placing the sweeper in a horizontal position the pans will be closed, the device being self-acting.

In the accompanying drawings, the letter A refers to the casing of the sweeper, within which is secured the two dust-pans B, by means of any suitable fastening device passed therethrough and into the casing, and by wires C and staples D, passed therearound and into the casing, or in any other suitable way. These pans are open at one end, as represented in the drawings, and the open ends are preferably, but not of necessity, cut crescent-shaped, as shown.

The lower part of the end of the casing next to the open ends of the pans consists of a flap, E, which is formed, by preference, with crescent-shaped flanges F, adapted to fit under

the pans and form a part thereof, taking the place of the portion of the pans cut away to form the crescent-shaped openings therein. On the inside of the flap E, next to the inner ends of the crescent-shaped flanges F, there are formed flanges G, which are usually inclined, as shown, so as to form a continuation of the front flange of the dust-pans, and thereby prevent the sweepings from working their way out at the ends of the pans while the sweeper is being operated. A space for the brush to fit in is left between the flanges F of the end flap. The flap E and its several parts may be made of metal and cast in one piece, or it may be made of other suitable material.

The construction described is considered the best; but it may be varied without departing from the spirit of my invention, any equivalent construction admitting of substantially the same operation being sufficient.

The end flap is further provided with two arms, H, one end of which is bolted or otherwise secured to the inside of the flap, and the other end pivoted to the inside of the casing, as shown in the drawings. These arms are curved in the form of a segment of a circle, or otherwise made, so that when pivoted to the casing and the sweeper held in a horizontal position the flap will swing to and remain closed, and when the sweeper is tilted will swing open and allow the sweepings to fall out. The flap is thus rendered self-acting, and the necessity of unfastening any catch to allow the dust-pans to be opened is avoided.

By cutting a portion of the pans and causing the flanges F to form a part thereof a portion of the bottom of the pans may be removed and the sweeping caused to be dumped from the bottom of the pans, which may be considered an improvement over dumping them by necessity from the ends thereof. The flanges F, fitting under the pans, also form a protection to the ends of the pans, and also serve as a shoe for the sweeper to run on.

The casing is provided with a revolving brush, which extends from end to end of the casing, and may be secured therein in any suitable manner. As my invention does not

relate thereto any particular description thereof is unnecessary. The same is true of the other usual parts of a carpet-sweeper.

If desired, a spring-catch may be applied to the casing and end flap to keep the flap closed. The flap can be attached to any sweeper by a few slight changes in the sweeper.

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

1. In a carpet-sweeper, a dust-pan having an opening in the bottom for the discharge of the contents of the pan, substantially as shown and described.

2. A carpet-sweeper provided with a flap hinged to the casing by an arm, which allows the flap to swing away from the casing when tilted and back again when lowered to a horizontal position, substantially as described.

3. A carpet-sweeper provided with a hinged flap formed with a flange, which constitutes a

portion of the bottom of the dust-pans, substantially as set forth.

4. A carpet-sweeper provided with dust-pans having open ends and an opening in the bottom, in combination with a hinged flap, closing the ends of the pans and the openings therein, substantially as set forth.

5. In a carpet-sweeper, the casing A, provided with flap E, formed with flanges F, and hinged to the casing by means of arms H, substantially as set forth.

6. In a carpet-sweeper, the casing A, provided with pans B, having openings in their ends and bottoms and combined with a flap, E, provided with flanges F, and hinged to the casing by arms H, substantially as set forth.

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

Witnesses: GEORGE W. GATES.

CHAS. J. POTTER,

GEO. W. LOCKE.