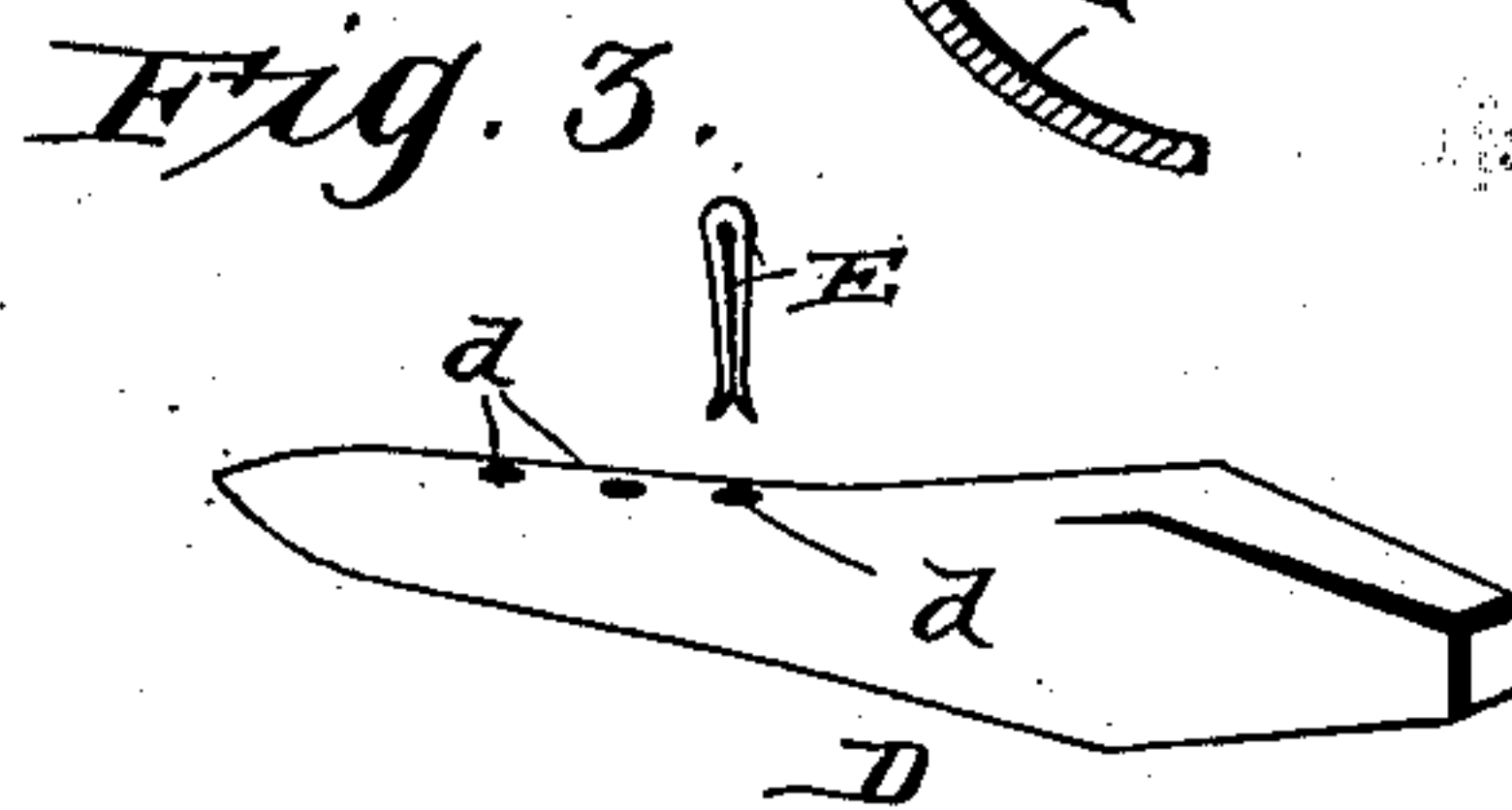
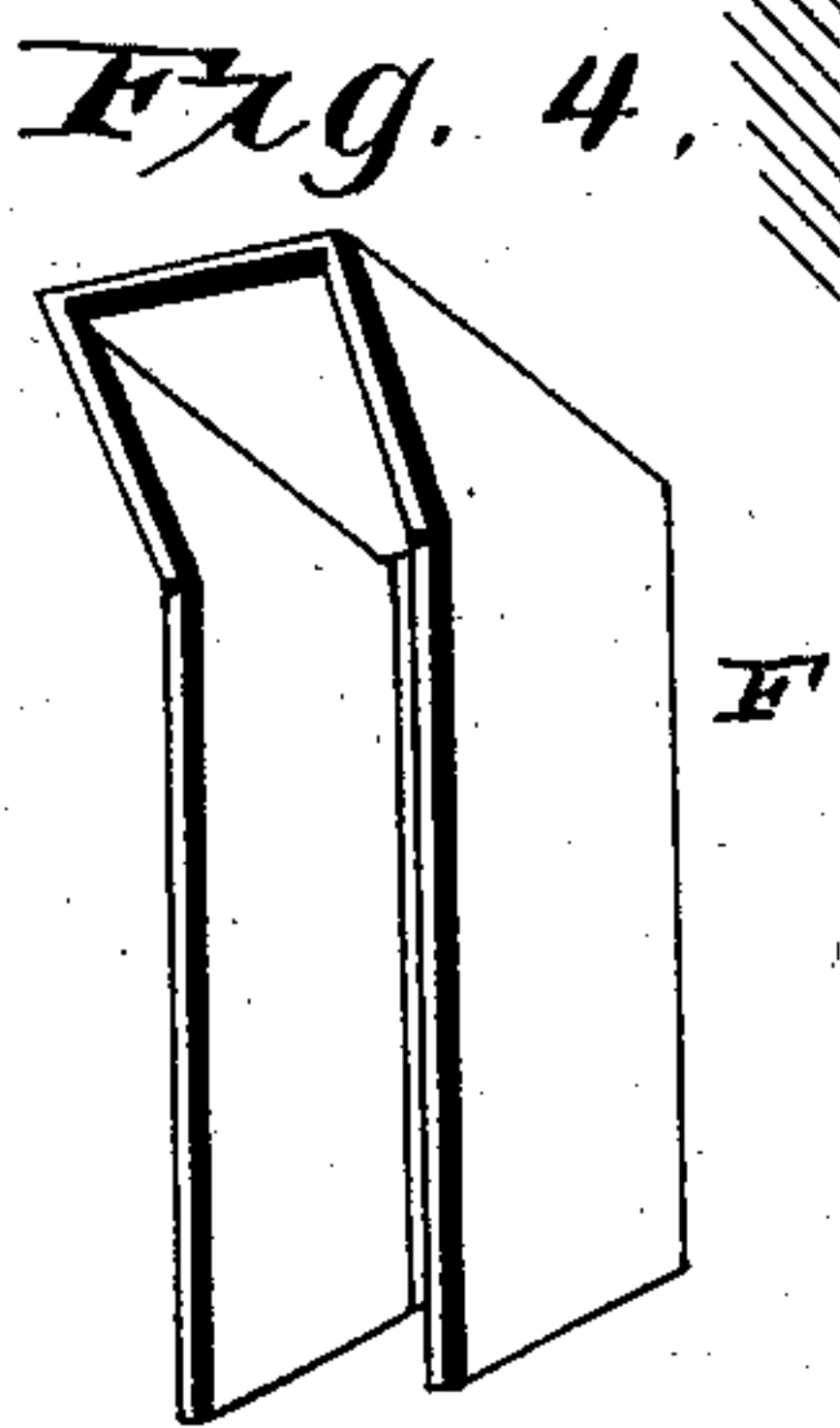
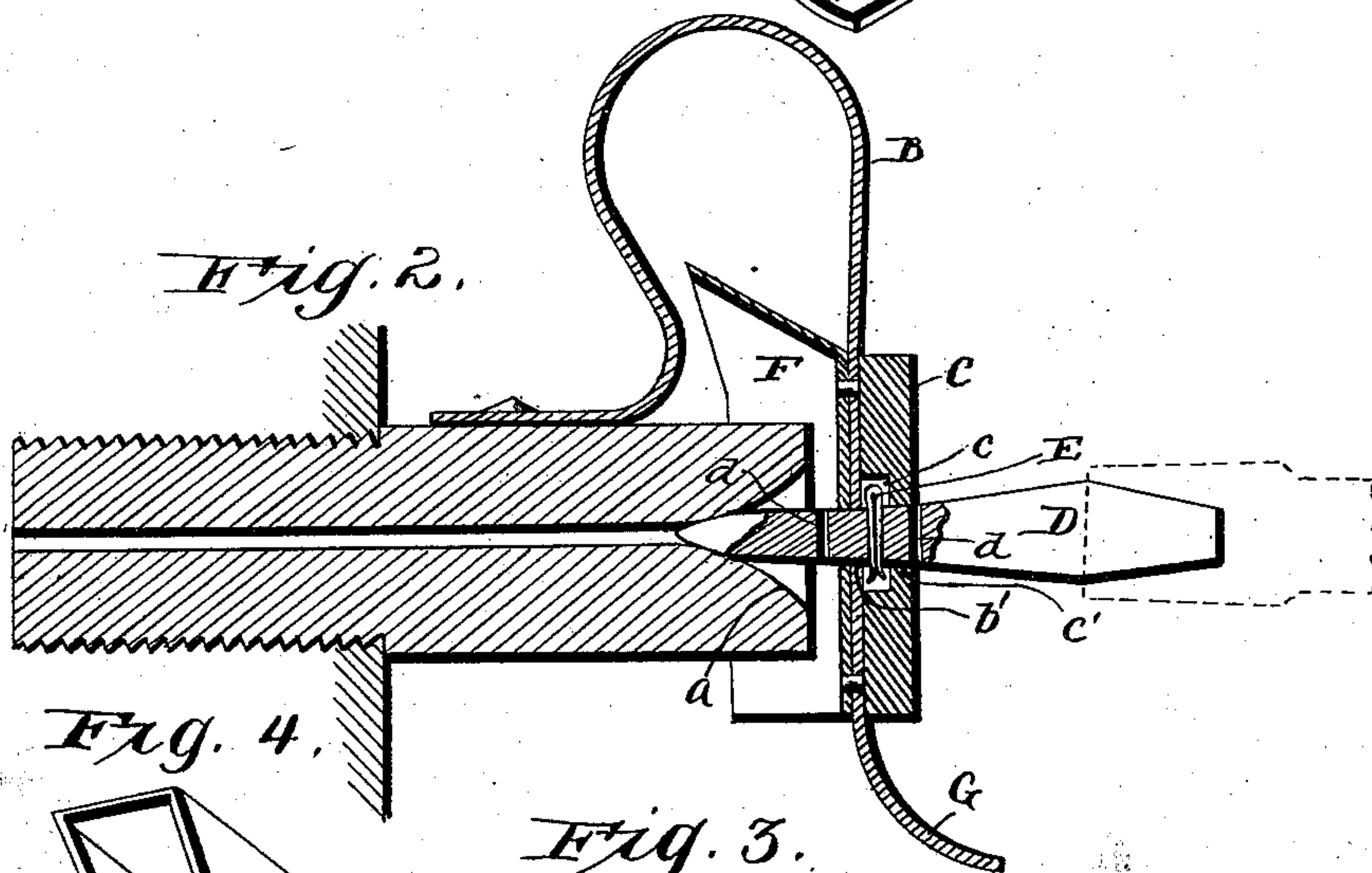
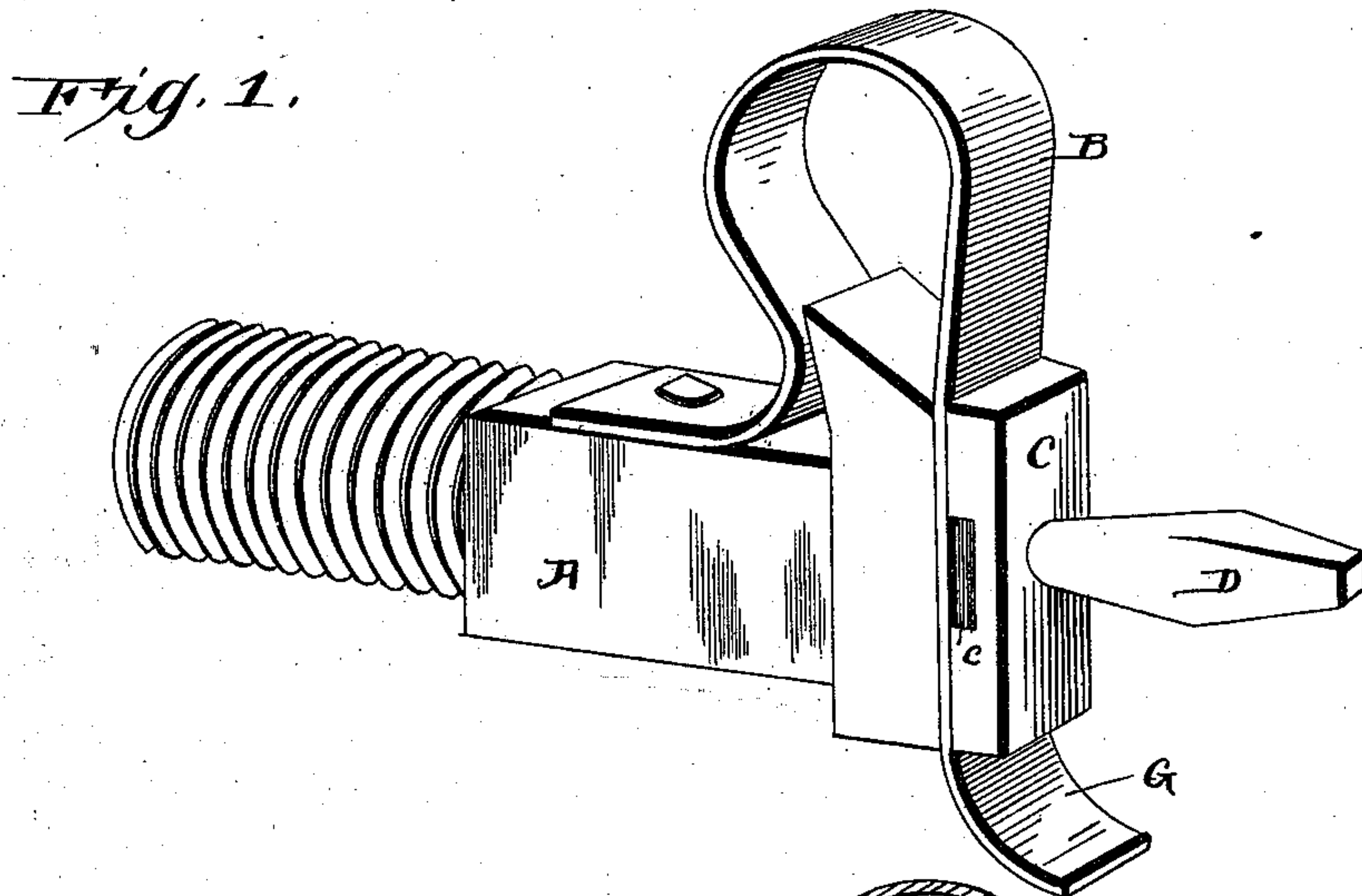


(No Model.)

D. B. WHITEHILL.
GAGE COCK.

No. 402,373.

Patented Apr. 30, 1889.



Witnesses,
Frank A. Allen
A. E. May Jr.

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UNITED STATES PATENT OFFICE.

DAVID BROWN WHITEHILL, OF NORTH CLARENDON, PENNSYLVANIA.

GAGE-COCK.

SPECIFICATION forming part of Letters Patent No. 402,373, dated April 30, 1889.

Application filed January 30, 1889. Serial No. 298,134. (No model.)

To all whom it may concern:

Be it known that I, DAVID BROWN WHITEHILL, a citizen of the United States, residing at North Clarendon, in the county of Warren and State of Pennsylvania, have invented new and useful Improvements in Gage-Cocks, of which the following is a specification.

The invention relates to improvements in gage-cocks; and it consists in a certain novel construction and combination of devices, fully described hereinafter in connection with the accompanying drawings, and specifically pointed out in the appended claims.

In the drawings, Figure 1 is a perspective view of a gage-cock embodying my improvements. Fig. 2 is a longitudinal central sectional view of the same. Fig. 3 is a detail view of the plug. Fig. 4 is a similar view of the cap.

Referring by letter to the drawings, A designates a short tube, which is adapted to be screwed in the boiler or other vessel, the outer end of its bore being flared, as shown at *a*; and B designates a curved spring which is attached to the said tube and passes down at its free end in front of the free end of the tube. A metallic block, C, is affixed to the outer side of the said spring opposite the end of the tube, and is provided at its inner side adjacent to the spring with a recess, *c*, and in transverse perforations *c'* and *b'* in the said block and spring (which intersect the recess) is mounted the plug D. This plug is provided with a series of transverse perforations, *d d*, in one of which the transverse adjusting-pin E is engaged, whereby the inner tapered end of the plug may be adjusted to fit snugly in the flared outer end of the bore of the tube. The end of the said plug is normally held by the spring in the outer end of the said bore, and when the latter becomes worn and rough, so that the cock leaks, a wrench or a brace, as shown in dotted lines in Fig. 2, is fitted on the outer squared end of the plug and the latter is turned until the outer end of the bore is ground smooth. Then the plug is adjusted inward by moving the pin E. The pin is arranged in the recess *c* in the inner side of the block C, as shown in the drawings, and thereby holds the plug from longitudinal movement.

A protecting-cap, F, is attached to the in-

ner side of the free end of the spring and incloses the outer end of the tube on its sides and top, leaving the bottom free, whereby, when steam or water is blown out, it is prevented from spreading and is allowed to drop. This cap covers the outer end of the tube at all times.

The lower end of the spring is extended below the lower end of the block C to form a handle, G, as shown.

Having thus described the invention, I claim—

1. In a gage-cock, the combination, with the tube, of the spring B, attached thereto and extending in front of the end thereof, and the adjustable plug attached to the spring and fitting in the outer end of the bore of the tube, substantially as specified.

2. In a gage-cock, the combination, with the tube and the spring attached thereto, of the block provided with a recess, *c*, the plug mounted in registering perforations in the block and spring and provided with a series of perforations, and the transverse adjusting-pin fitting in the said perforations and operating in the recess *c*, substantially as specified.

3. In a gage-cock, the combination, with the tube, of the spring attached thereto and carrying a plug which fits in the bore of the tube, and the cap attached to the spring and fitting over the outer end of the tube, substantially as and for the purpose specified.

4. In a gage, the combination, with the tube and the spring attached thereto, of the revoluble plug D, mounted in the spring, fitting in its inner end in the bore of the tube and provided with a squared outer end, substantially as specified.

5. In a gage-cock, the combination, with a tube having the outer end of its bore flared and the spring attached to the tube, of the revoluble plug mounted in the free end of the spring and provided with a tapered inner end fitting in the flared bore of the tube, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

DAVID BROWN WHITEHILL.

Witnesses:

MARGE E. WHITEHILL,
A. H. SIMPSON.