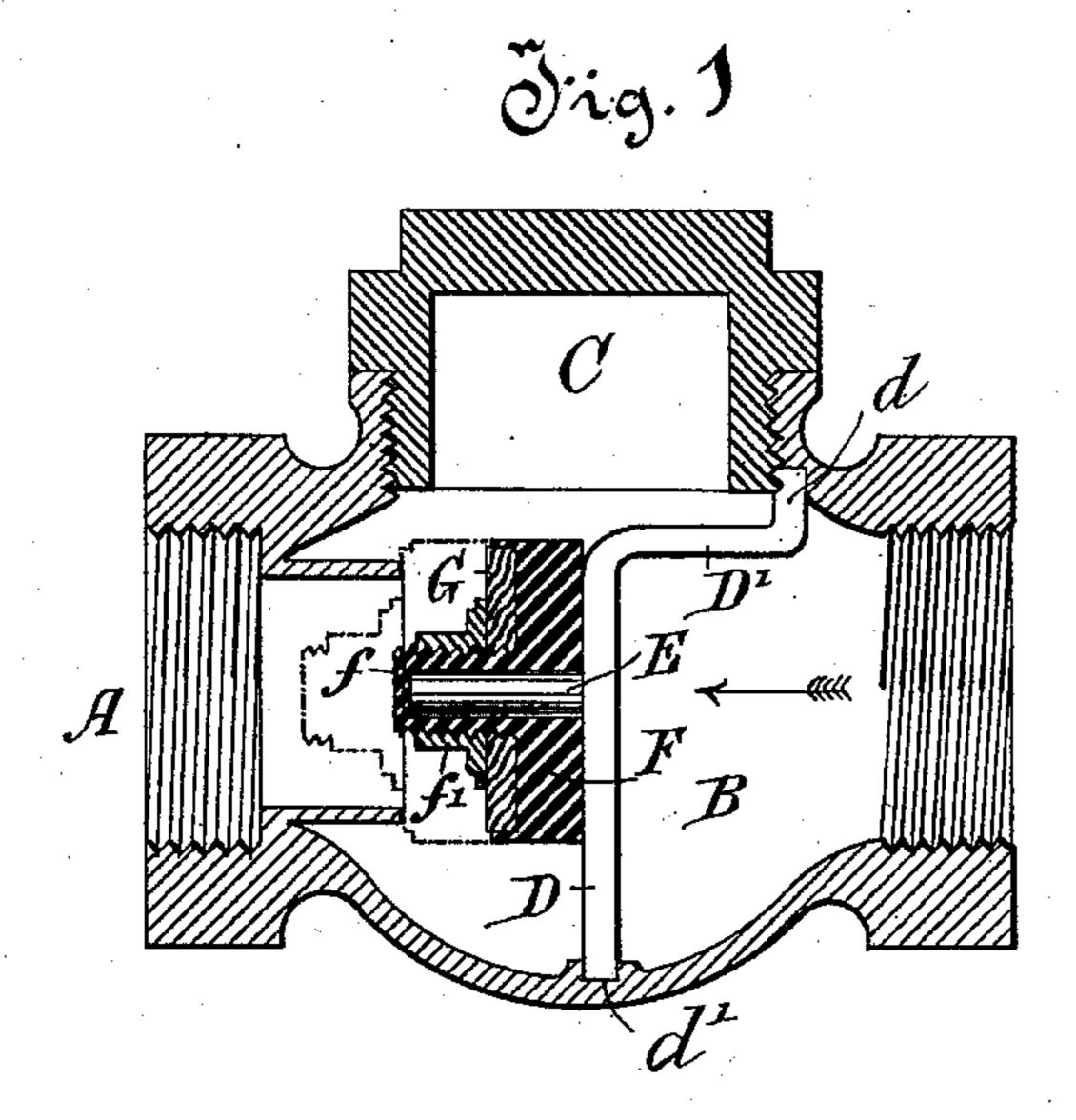
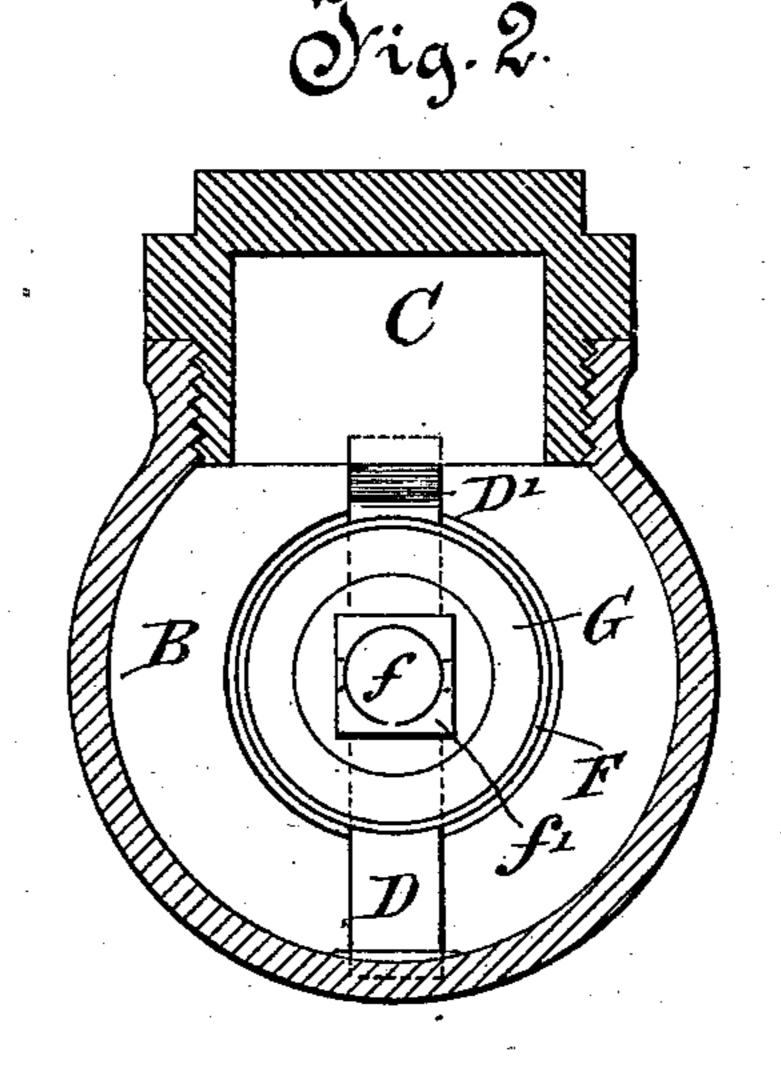
(No Model.)

J. H. BERRY.

No. 378,917.

Patented Mar. 6, 1888.





Wiknesses: Horn Hoaus. Hey. W. Dow.

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## United States Patent Office.

JOHN HOLKER BERRY, OF MONTREAL, QUEBEC, CANADA.

## CHECK-VALVE.

SPECIFICATION forming part of Letters Patent No. 378,917, dated March 6, 1888.

Application filed February 3, 1886. Serial No. 190,688. (No model.)

To all whom it may concern:

Be it known that I, John Holker Berry, of the city of Montreal, in the District of Montreal and Province of Quebec, Canada, have invented a certain new and useful Improved Check-Valve; and I do hereby declare that the following is a full, clear, and exact description of the same.

My invention has reference to the devices used to prevent the return of feed-water from the boiler, and provides for that purpose an apparatus at once cheap, certain in operation, and easily put in place.

It may be described as consisting of a bent or cranked bar having its lower end set about centrally in the bottom of the valve seat and its upper let into a recess in the screwed seat for the cap, which, when in place, will hold this bar in position. Projecting horizontally from this bar at a point corresponding with the center of the pipe is a stem or spindle. Upon this spindle slides back and forth the valve proper, being a disk formed, preferably, of metal and faced with packing, operating by back-pressure to close the feed-pipe.

For full comprehension of the invention reference must be had to the annexed drawings, forming part of this specification, in which—

Figure 1 is a longitudinal section through 30 the valve, and Fig. 2 a transverse sectional elevation.

Similar letters of reference indicate like parts.

A A are the screwed ends of the valve-body B, and C is the cap.

D is the bar, cranked or bent, as shown at D', and having its lower end set into a socket, d, formed about centrally in the bottom of B,

and its upper end into the recess d', formed in the screwed seat of the cap C.

E is the spindle, cast or otherwise formed in one with D, and, when in place, in the line of the center of the feed-pipe.

F is the sliding disk or valve proper, which may be formed, as shown, with a threaded  $_{45}$  stopped sleeve, f, and faced with rubber or other packing, G, kept in place by a cap, f', screwed on the sleeve.

It will of course be seen that any back-pressure in the direction of the arrow will at once 50 force the disk F into the position shown by the dotted lines and close the feed-pipe. On the back-pressure being removed the valvedisk F resumes its former position.

The details of construction of the valve F 55 form no part of my invention, as it may be made in any approved way.

What I claim is as follows:

The combination, with the valve-chamber having a side opening closed by a removable 60 cap, C, and recesses d and d', a standard, D, having one end supported by the recess d' at about the middle of one side of the chamber, and having a bent arm connected to the recess d, adjacent to the side opening, and secured 65 therein by removable cap C, a spindle, E, projecting at right angles from said standard, a valve-seat in the chamber, and a sliding valve, F, on said spindle, substantially as and for the purposes specified.

Montreal, the 30th day of January, A. D. 1886.

JOHN HOLKER BERRY.

Witnesses:
OWEN W. EVANS,
ALEX. W. Dow.