

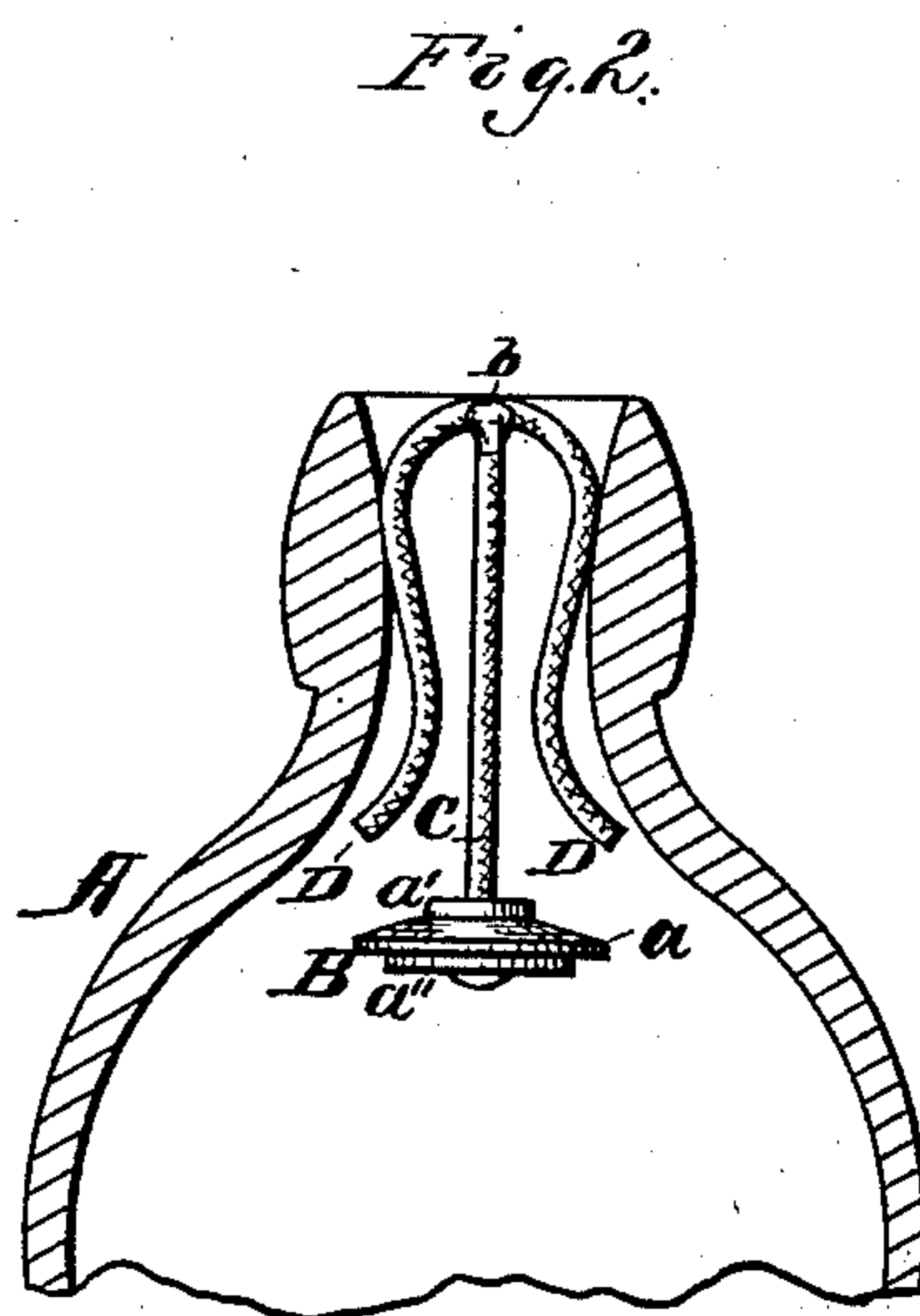
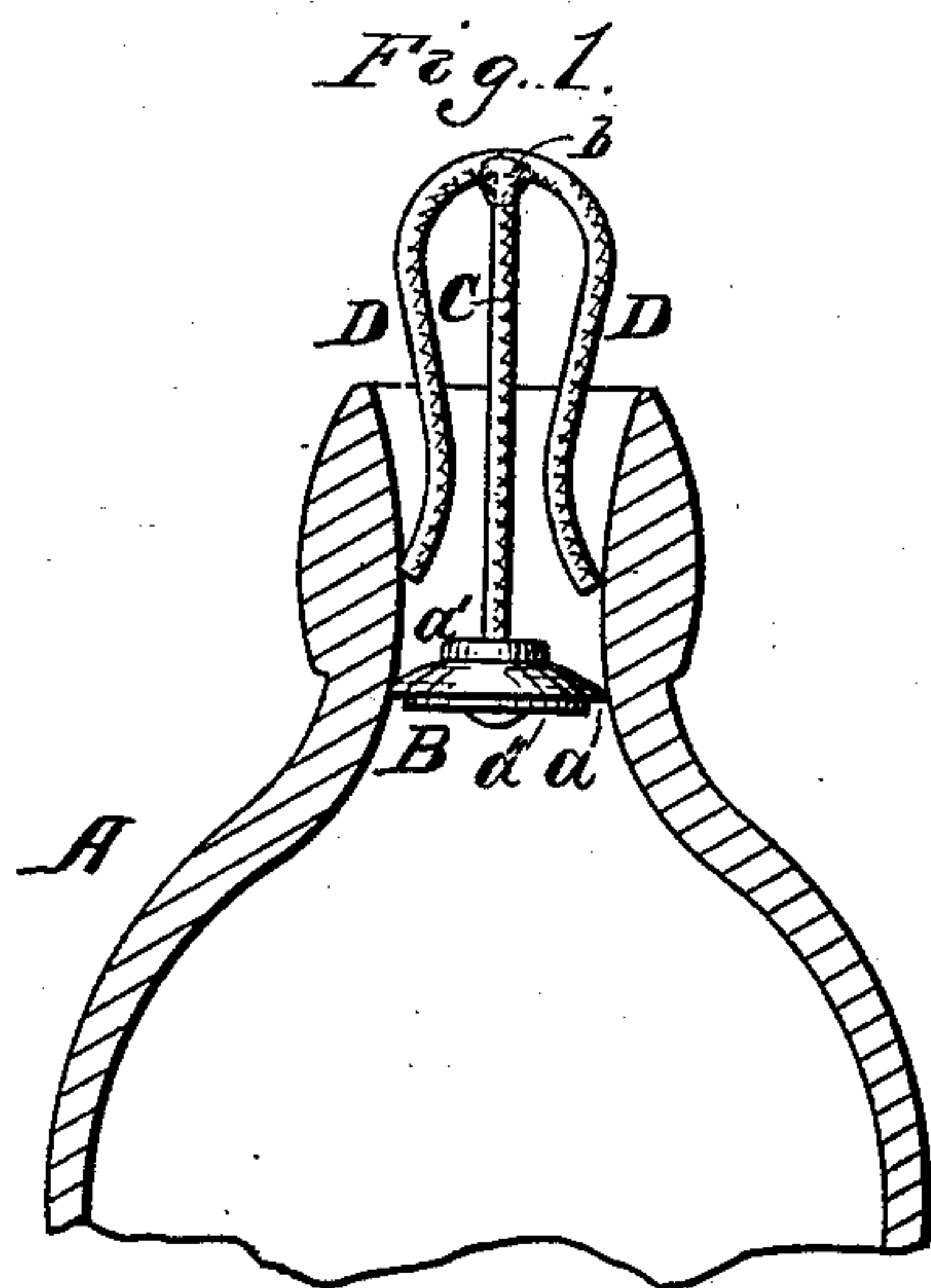
(No Model.)

C. G. HUTCHINSON.

BOTTLE STOPPER.

No. 285,488.

Patented Sept. 25, 1883.



Witnesses,
Henry Frankfurter.
J. W. Nichols

Inventor,
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UNITED STATES PATENT OFFICE.

CHARLES G. HUTCHINSON, OF CHICAGO, ILLINOIS.

BOTTLE-STOPPER.

SPECIFICATION forming part of Letters Patent No. 285,488, dated September 25, 1883.

Application filed March 8, 1881. (No model.)

To all whom it may concern:

Be it known that I, CHARLES G. HUTCHINSON, of Chicago, in the county of Cook and State of Illinois, have invented certain new
5 and useful Improvements in Bottle-Stoppers, of which the following, in connection with the accompanying drawings, is a specification.

In the drawings, Figure 1 is a vertical central section of the upper part of a bottle containing a stopper embodying my invention,
10 showing the stopper in position for closing the neck; and Fig. 2 is a like representation, showing the bottle opened.

Like letters of reference indicate like parts.

15 A represents the bottle. B is the valve or stopper proper. The valve in the example shown consists of a rubber disk, *a*, arranged between two metallic disks, *a'* and *a''*, the latter or lower one of which is larger than the
20 disk *a'*, but not so large as the disk *a*. The diameter of the disk *a''* should be such as to permit the stopper to be pushed down through the neck, and such as to cause the edge of the disk *a* to be pinched by the neck sufficiently
25 to prevent the valve from being drawn out by raising the stopper, it being understood that the diameter of the disk *a* is great enough for that purpose. The disk *a'*, by having a diameter much less than that of the disk *a*, permits the edge of the latter to be raised so that
30 the valve may be thrust below its seat.

I am aware that the bottle and valve herein shown and described have heretofore been combined so as to operate together in the manner now set forth; but the essential features
35 of my present invention are those which relate to the means employed for controlling the position of the valve, and which I now proceed to describe.

40 C is a stem projecting vertically from the

valve B, and D D are laterally-yielding arms applied to the said stem. It will be perceived by referring to the drawings that in structure and arrangement the arms D D are such as to hold the valve up against its seat, or in its
45 closed position; that they will suspend it in its open position, or prevent it from falling to the bottom of the bottle, and also that they will prevent the valve from being carried to its seat by the outpouring of the contents. It
50 is also obvious that the stopper may be drawn to its closed position with facility by means of a small hook, and that it may be easily opened by pushing it downward sufficiently for that purpose.

55 The disk *a* may be applied by being punched out at its center for being passed down upon the stem C, and, after being pushed down to the disk *a'*, the disk *a* may be stretched over the upper metallic disk, it being understood
60 that the arms D D are to be applied afterward.

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

An internal bottle-stopper in which the valve is provided with a central vertical stem extending above it and made in two parts, one consisting of the central wire or stem, C, and the other of a bow-shaped wire attached
70 at the concavity of its bow-shaped part to the upper end of the part C, and forming laterally-yielding depending arms D D, having free or loose lower ends, substantially as shown and described, and for the purposes set forth.

CHARLES G. HUTCHINSON.

Witnesses:

F. F. WARNER,
GEORGE F. BORMAN.