

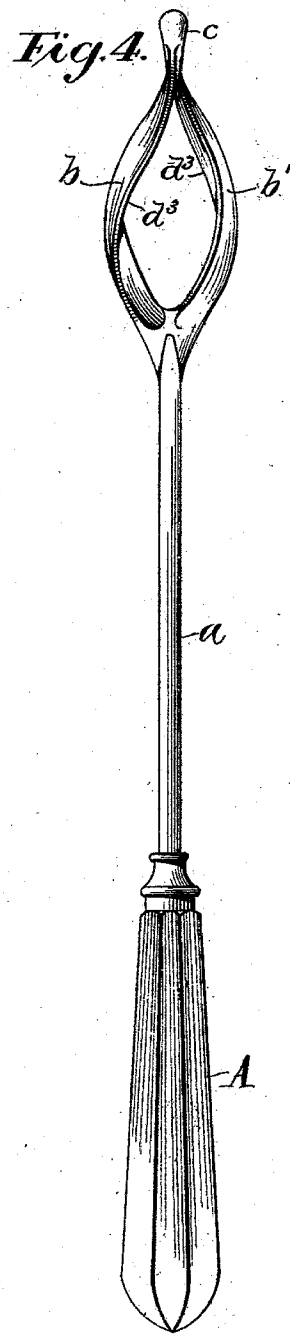
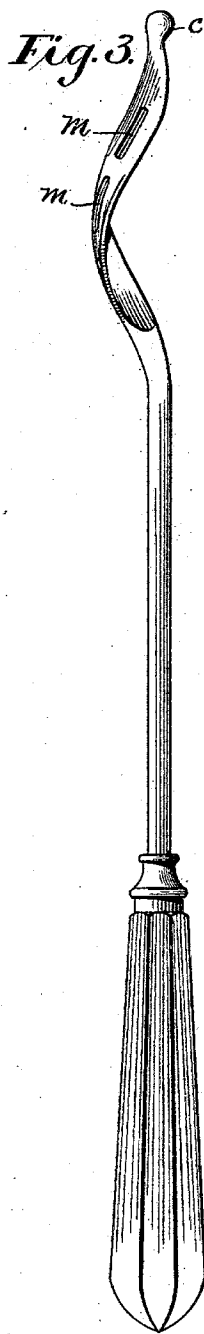
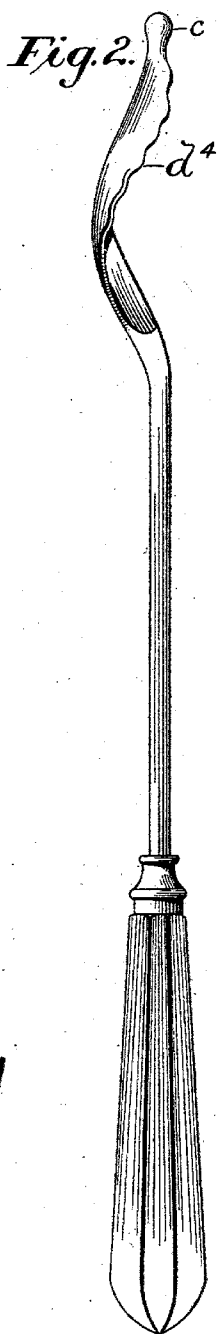
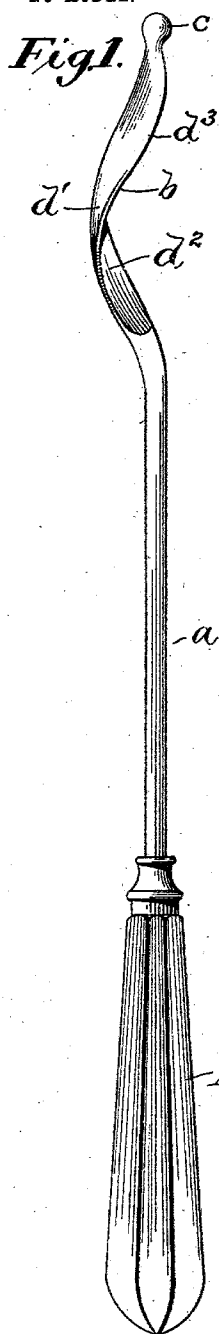
No. 752,356.

PATENTED FEB. 16, 1904.

C. J. PILLING.
CURETTE.

APPLICATION FILED AUG. 14, 1903.

NO MODEL.



WITNESSES:

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CHARLES J. PILLING, OF LANSDOWNE, PENNSYLVANIA.

CURETTE.

SPECIFICATION forming part of Letters Patent No. 752,356, dated February 16, 1904.

Application filed August 14, 1903. Serial No. 169,439. (No model.)

To all whom it may concern:

Be it known that I, CHARLES J. PILLING, a citizen of the United States, residing at Lansdowne, Delaware county, Pennsylvania, have invented certain new and useful Improvements in Curettes, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

My invention relates to surgical instruments in the class of curettes, though the device hereinafter described may be used as an applicator and also as a dilator in addition to its employment for curetting in surgical work.

The primary function of the device is for curetting—that is to say, for scraping—the walls of the womb and removing the placenta, other fetal matter, and foreign substances.

The object of my invention is to provide such an instrument as may be safely inserted without injury to the neck of the womb, which will more effectually and thoroughly remove the matters referred to, dilate the parts when required, and operate to discharge the semifluid matter through the instrument itself and while it is in use.

In the accompanying drawings, illustrating my invention, Figure 1 is an elevation of a curette embodying the basic constructive principles which distinguish my device; and Figs. 2, 3, and 4 are specific forms thereof, containing features hereinafter described additional to that shown in Fig. 1.

Heretofore spiral curettes have been made, one form such as that described in St. Cyr's patent, No. 584,407, dated June 15, 1897, consisting of an operating-blade in the form of a flat band curved into the shape of an Archimedean screw and with a blunt terminal end, another form being such as described in McDade's patent, No. 667,726, dated February 12, 1901, comprising an operating-blade in the form of a flat band, elongated and curved into a spiral blade which is wholly to one side of the central axis of the stem or handle of the instrument and having a blunt probe-point. My device, however, has not a flat blade, but on the contrary, and to carry out one of the aforesaid purposes for which I

have invented it, the blade is concaved or fluted on the inner face and convexed on its outer face, thereby forming a gutter. It is provided also at its terminal end with a dilating-button, which is more than different in effect from the button end on St. Cyr's curette and wholly different from the blunt probe-point on McDade's curette.

My invention also comprises providing the blade with an undulating scraping edge, also providing the blade with one or more fenestrations in the concaved or guttered portion, and finally my invention comprises an operating-blade which is not spiraled, but given a double curve, the central line of which is concentric with the axis of the handle, the curvature first proceeding outwardly from the line of the handle and then inwardly, the latter bend beginning about midway in the length of the blade.

Finally, my invention comprises making the device double-bladed—that is to say, with two double-curved concaved blades proceeding from and in opposite sides of the handle and joining each other at the apex, which terminates with the dilating-button.

Referring now to the drawings, A is the operating-handle, and *a* the connecting-stem between the handle and the operating-blade proper, which latter is indicated by the reference-letter *b*. The operating-blade is preferably made integral with the stem of the handle, and is so shown in the drawings, in which the round stem *a* is continued to form material out of which the concaved, fluted, or guttered blade *b* is formed. The extreme end thereof terminates in a blunt portion, which when made as a rounded knob or button *c* serves as a dilator of the womb-neck in inserting the instrument. It will be observed that the outer face *d'* of the blade *b* is convexed and the inner face *d''* is concaved, the latter portion thereby forming a gutter, which extends substantially the whole length of the blade, and its function is that of a gutter or drain for the semifluid matter caught therein when the separating edge *d'''* thereof performs its function on the surface of the walls of the womb. By this means the device will automatically discharge such collected matter

while the blade is in operation and without removing it from the part operated on.

An additional feature of importance is the peculiar curvature given to the blade, which, as shown in the drawings, consists of two long curves merging into each other about midway of the length of the blade, the first or lower curve nearest the handle extending outward from the axis of the stem, and the upper curve extending inward from the upper terminus of the lower curve, the objects of this curvature being first to bring the terminus of the upper curve in axial alinement with the stem and handle, or, in other words, to bring the central line of the blade concentric with the axis of the handle, and, secondly, to bring the concave or guttered portion of the blade wholly on the operating side of the instrument, the operating side being the inner side, because the edge d^3 thereof is the scraping or separating edge, the blade being rotated by a manual rotation of the handle toward the right.

Frequently it is desirable to anoint the parts operated on, not only as a curative after the scraping, but to facilitate the operation. Hence an additional feature of great utility is the openings or fenestrations $m m$, Fig. 3, which I provide in the blade. These can be readily filled with salve or other medicament before insertion of the instrument.

The separating or scraping edge d^3 of the blade of course is not and must not be a sharp-cutting edge in such instruments, as is well known, as a cutting effect is to be carefully avoided in most cases, the effect desired being a separating of the placenta and fetal matter from the walls of the womb by a sort of scraping action. This is facilitated by an additional feature of my device, which consists in forming the operating edge d^3 of the blade with a series of longitudinal undulations, (shown at d^4 in Fig. 2,) this undulating edge extending from the upper terminus of the blade down to and but slightly below the junction of the upper bend with the lower bend of the blade curvature.

In womb-curettage it has been frequently found desirable to not only speed the operation, but to distend and support the wall of the womb. With a single blade of any kind this is difficult and well-nigh impossible. By making the curette with duplicate blades ar-

ranged opposite each other to form an oval-shaped instrument, being careful to so unite the blades that the two separating or scraping edges $d^3 d^3$ will be opposite each other, but in different planes, and both act simultaneously and in the same direction on the womb-wall by the manual rotation of the handle toward the right, the functions performed by such mechanical duplication of the blade and the relative arrangement of the duplicated members thereof, as above stated and as shown in Fig. 4 of the drawings, are that both scraping edges $d^3 d^3$ are in action simultaneously, thereby materially reducing the time of the operation, and the womb is kept distended during the operation, each member of the duplicated blade supporting the opposite part of the wall thereof. The upper termini of the blades merge into each other and terminate in the dilating-knob, while the lower termini of the blades merge into each other and into the stem of the handle. This latter form of the device (shown in Fig. 4) is not claimed in this application, as it will form the subject of a separate application for Letters Patent.

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

1. A surgical curetting instrument having an operating-handle and an operating-blade mounted thereon, the blade being concaved on its inner face and having a curvature which is that of a double curve the central line of which is concentric with the axis of the handle.

2. A surgical curetting instrument having an operating-blade, mounted upon a handle, said blade being concaved on its inner face, the wall of the concavity being fenestrated at one or more places in the line of the length.

3. A surgical curetting instrument having an operating-blade, mounted upon a handle, said blade being in the form of a double curve the central line of which is concentric with the axis of the handle, and is concaved on its inner face and provided with an undulating edge.

In testimony whereof I have hereunto affixed my signature this 7th day of August, A. D. 1903.

CHARLES J. PILLING.

Witnesses:

A. FLORENCE YERGER,
H. T. FENTON.