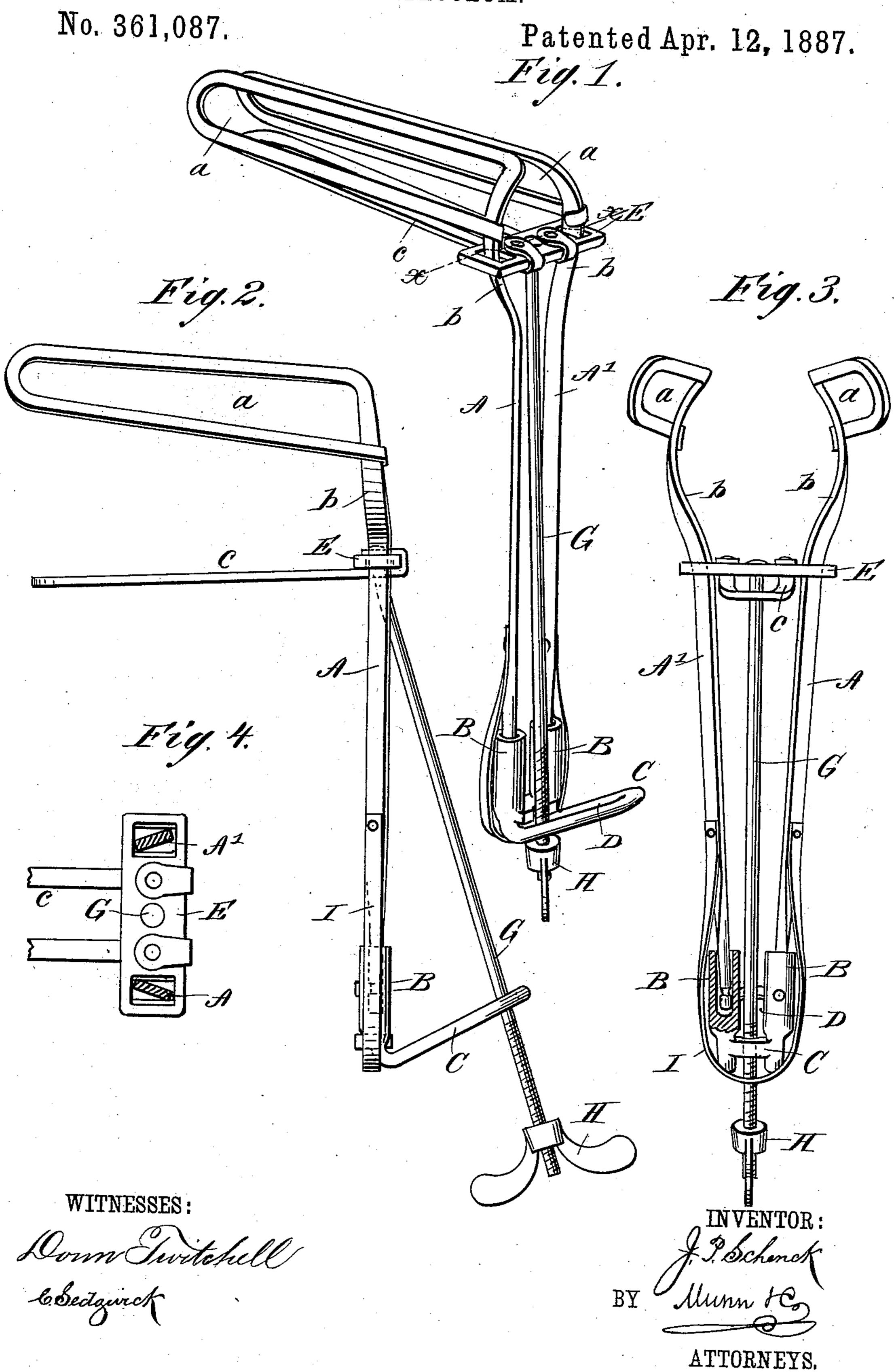
J. P. SCHENCK.

SPECULUM.



United States Patent Office.

JOHN P. SCHENCK, OF MATTEAWAN, NEW YORK.

SPECULUM

SPECIFICATION forming part of Letters Patent No. 361,087, dated April 12, 1887.

Application filed November 17, 1886. Serial No. 219,156. (No model.)

To all whom it may concern:

Be it known that I, John P. Schenck, of Matteawan, in the county of Dutchess and State of New York, have invented a new and 5 Improved Speculum, of which the following is a full, clear, and exact description.

The object of my invention is to provide a new and improved speculum which is simple and durable in construction, and very effective

10 when used.

The invention consists in the construction and arrangement of parts and details and combination of the same, as hereinafter more fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of my im-20 provement in a closed position. Fig. 2 is a similar view of the same, showing it open. Fig. 3 is a front elevation of the same, parts being broken away; and Fig. 4 is a sectional plan view of part of the same on the line x x

25 of Fig. 1.

The speculum is provided with the two upright bars A and A', each pivoted on its lower end in a socket, B, formed on the ends of the arm C, extending angularly from the said sock-30 ets B, and bent so as to form a slot, D. The upper part of each side bar, A or A', is formed into the finger a, which extends nearly at right angles from the respective side bar, is bent back again at a suitable distance from the side 35 bar, and fastened with its end by rivet or solder to the respective bar A or A'. Each of the latter is provided below the finger a with the inclined part b, which is slightly twisted, and on which slides the cross-arm E, having near 40 each end an aperture through which passes the respective side arm, A or A'. The lower finger, c, consists of a bent piece of wire fastened with its ends to the cross-arm E, and extending in line with the upper fingers, a.

In the middle of the cross-plate E is secured the downwardly-extending rod G, which passes with its lower screw-threaded end through the slot D of the arm C, and a thumb or wing nut, H, screws on the said lower end of the rod G

50 and against the arm C.

the side bars, A and A', has the tendency to press the side bars, A and A', toward each other, thus holding the fingers a of the side bars in a closed position until forced apart.

The operation is as follows: The fingers a of the speculum are introduced into certain cavities of the human body when the instrument is in the closed position as shown in Fig. 1. The operator can then open the fingers a of the 50 side bars, A and A', by moving the rod G downwardly, either by pulling or screwing the nut H up onto the arm C. This downward motion of the rod G causes its cross-arm E to act on the inclined part of the side bars, A A', 65 and forces the latter apart, and at the same time moves the finger c downwardly. The outer part of the fingers a are moved a greater distance apart on account of the cross-pieces acting on the twisted parts b, causing a tilting 70 motion of the arms A and A' in the sockets B. The operator can then open the outer end of the finger c still farther by moving the lower end of the rod G outwardly, as shown in Fig. 2, so that the cross-arm E is tilted on the side 75 bars, A and A', and thereby causes a downward movement of the finger c. The fingers a and c can be held in any desired position by screwing the nut up against the arm C. The lower part of the rod G is guided in the slot 80 D, formed by the arm C.

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

Patent, is—

1. In a speculum, the side bars, A and A', 85 and the finger a, formed on each of the said side arms, in combination with the finger c, placed below the said fingers a, and the crossarm E, sliding on the side bars, A and A', and adapted to tilt on the same, substantially as 90 shown and described.

2. In a speculum, the side bars, A and A', the bent arm C, supporting in sockets the said side arms, A and A', and the finger a, formed on each of the said side bars, in combination with 95 the cross-arm E, adapted to slide and tilt on the said side bars, A and A', the finger c, extending from the said cross-arm, and a rod attached to the said cross-arm for imparting a sliding and tilting motion to the said cross-arm, and a 100 sliding and swinging motion to the said cross-A bent spring, I, fastened with its ends on | piece, substantially as shown and described.

side bars, A and A', and the finger a, formed on each of the said side bars, A and A', in 5 combination with the cross-arm E, adapted to slide and tilt on an outwardly-flaring portion of the said arms A and A', the finger c, extending from the said cross-arm E, the rod G, fastened to the said cross-arm, and the nut H, ro screwing on the lower threaded end of the rod G, substantially as shown and described.

 ${f 4.}$ In a speculum, the side bars, ${f A}$ and ${f A}'$, the bent arm C, supporting in sockets the Theo. G. Hoster, side arms, A and A', the finger a, formed on C. Sedgwick.

3. In a speculum, the side bars, A and A', | each of the said side bars, A and A', and the 15 the bent arms C, supporting in sockets the | bent spring I, pressing on the said side bars. in combination with the cross-arm E, adapted to slide and tilt on the said side arms, A and A', the finger c, extending from the said crossarm E, the rod G, fastened on the said cross- 20 arm E, and the nut H, screwing on the lower threaded end of the said rod G, substantially as shown and described.

JOHN P. SCHENCK.

 $\operatorname{witnesses}$: $\operatorname{witnesses}$:

THEO. G. HOSTER,