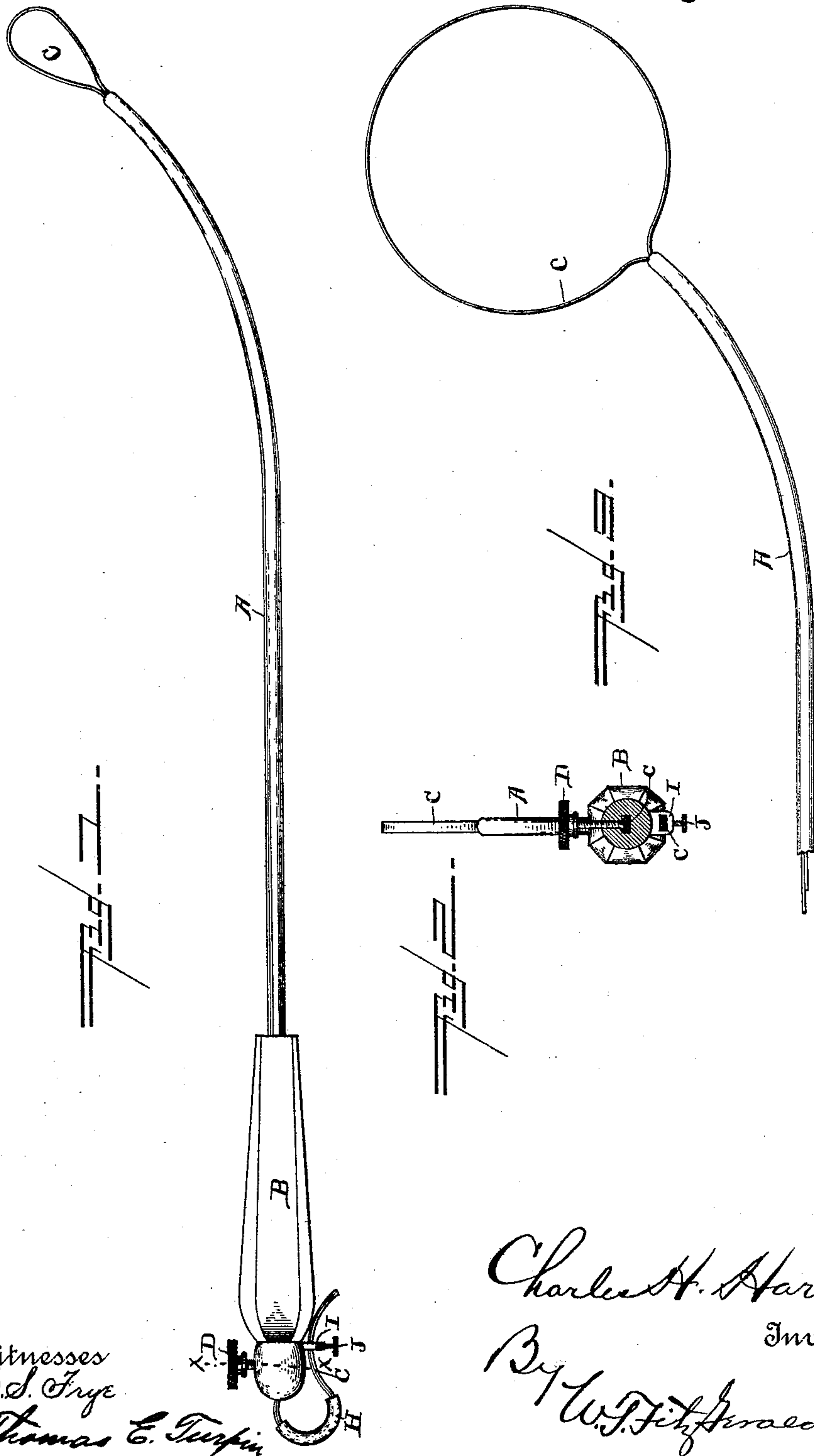


(No Model.)

C. H. HARRIS.
ECRASEUR.

No. 480,870.

Patented Aug. 16, 1892.



Witnesses
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UNITED STATES PATENT OFFICE.

CHARLES HOOKS HARRIS, OF CEDARTOWN, GEORGIA.

ECRASEUR.

SPECIFICATION forming part of Letters Patent No. 480,870, dated August 16, 1892.

Application filed December 21, 1891. Serial No. 415,723. (No model.)

To all whom it may concern:

Be it known that I, CHARLES HOOKS HARRIS, a citizen of the United States, residing at Cedartown, in the county of Polk and State of Georgia, have invented certain new and useful Improvements in Ecraseurs; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention has relation to improvements in that class of surgical instruments known as "ecraseurs," and it has for its general object to provide an ecraseur embodying a construction whereby the grasping loop at the end thereof may be readily expanded and contracted and adjustably fixed at various degrees of expansion.

To the attainment of the foregoing and other objects the invention consists in the peculiar construction, novel combination, and the adaptation of parts hereinafter described, and particularly pointed out in the claim appended.

In the accompanying drawings, Figure 1 is a side elevation of my improved ecraseur. Fig. 2 is a transverse section of the same, taken in the plane indicated by the line $x x$ on Fig. 1; and Fig. 3 is a detail perspective view.

Referring by letter to the said drawings, A indicates the tubular sheath of my improved instrument, which is preferably curved at one end, as illustrated, and is provided at its opposite end with an enlarged hand-grasp B, which may be formed of the same material as the sheath or of any other suitable material desired. The sheath A, as better illustrated in Fig. 2 of the drawings, is preferably of a general rectangular form in cross-section, which form is best suited for flat and round wires; but, if desirable, it is obvious that the sheath and its bore might be of any suitable form in cross-section.

Taking through the bore of the sheath A is the metallic strip or wire C, which is lapped, as illustrated, to form the protruding grasping-loop at the forward end of the sheath. This strip or wire C, which is formed of spring-steel or other metal of sufficient resiliency to render it self-expansive, has its ends extending from the rear end of the sheath, whereby

it will be seen that the operator may readily manipulate the same to expand or contract the grasping-loop, as desirable.

Taking through a threaded bore extending through the hand-grasp and sheath, at right angles to the plane of the bore, is a binding-screw D, the inner end of which binds against one of the laps of the strip or wire and serves to fix the same with respect to the sheath and retain the grasping-loop in its expanded or contracted position.

Mounted on the lapped strip or wire C, in rear of the handle B, is an elastic sleeve H, of rubber or the like, through the medium of which the operator is enabled to firmly grasp the strip or wire to increase or diminish the size of the protruding loop.

Connected to or formed integral with the handle B, adjacent to the rear end thereof and preferably at a diametrically-opposite point with respect to the binding-screw D, is a loop I to receive the free ends of the resilient strip or wire, whereby it will be seen that not only is the elastic sleeve retained in position upon the lapped strip or wire, but the ends of said strip or wire are held against the handle B, so as not to interfere with the manipulation of the instrument.

Taking through a threaded bore in the top of the loop I is a set-screw J, which binds upon and serves to fix the strip or wire with respect to said loop.

From the foregoing description it will be seen that I have provided an ecraseur embodying a construction whereby the protruding grasping-loop may be expanded to suit the operator and fixed in such position before the same is introduced into a cavity for use.

When it is desirable to employ my improved ecraseur as a dilator, it will be further seen that the same may be introduced into the cavity while the protruding loop is contracted, after which said loop may be expanded and be fixed in such position through the medium of the binding-screw described.

In the practice of my invention it is obvious that a series of wires or loops of various sizes and degrees of resiliency may be employed interchangeably in conjunction with the instrument described.

Having thus described my invention, what

I claim, and desire to secure by Letters Patent, is—

In an ecraseur, substantially as described, the combination, with the sheath, the hand-
5 grasp thereon having a threaded bore at right angles to the bore of the sheath, the strip or wire lapped to form a protruding loop at the forward end of the sheath and passed through the same, and the elastic sleeve mounted on
10 the strip or wire in rear of the hand-grasp, of the binding-screw seated in the threaded bore of the handle and adapted to bind upon the

lapped strip or wire, the loop on the hand-grasp at a diametrically-opposite point to the binding-screw, adapted to receive the free ends 15 of the wire, and a set-screw taking through said loop and fixing the wire or strip with respect thereto, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES HOOKS HARRIS.

Witnesses:

ABRAM JONES,
F. S. BROWN.