

R. H. RICE.
TONSILOTOME.

APPLICATION FILED JULY 6, 1908.

907,090.

Patented Dec. 15, 1908.

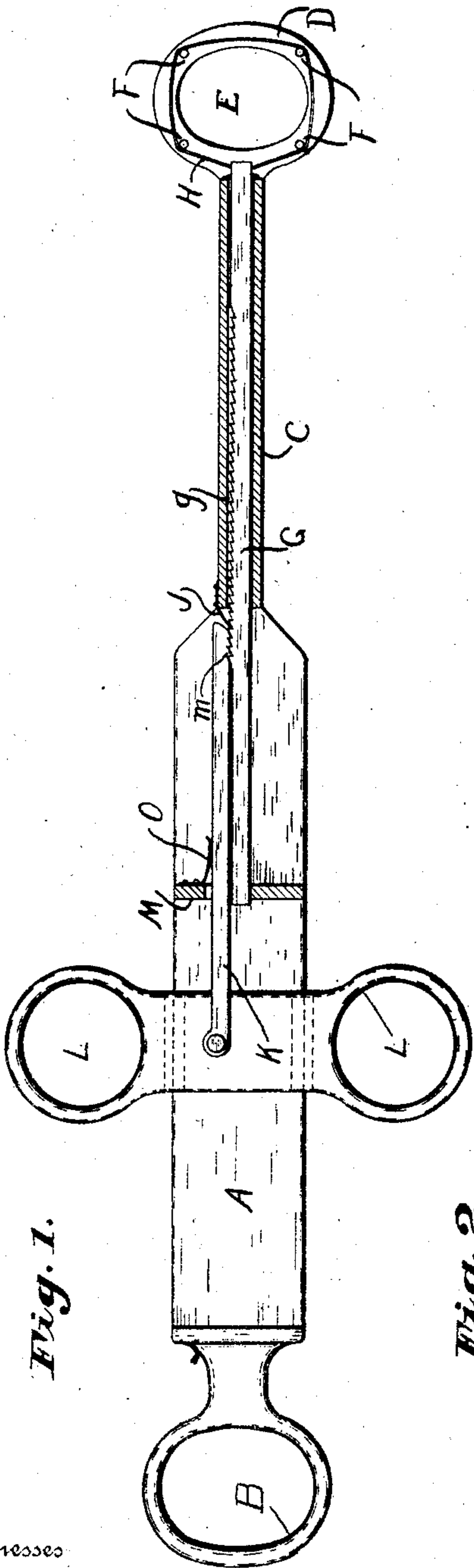


Fig. 1.

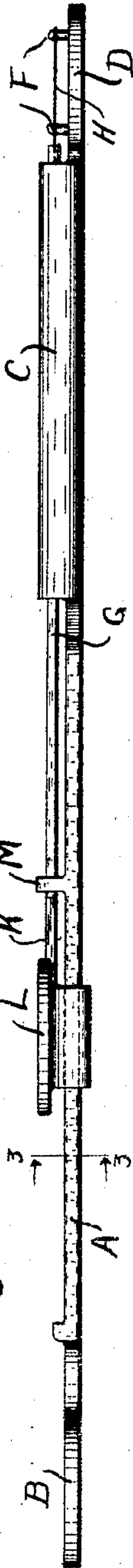


Fig. 2.

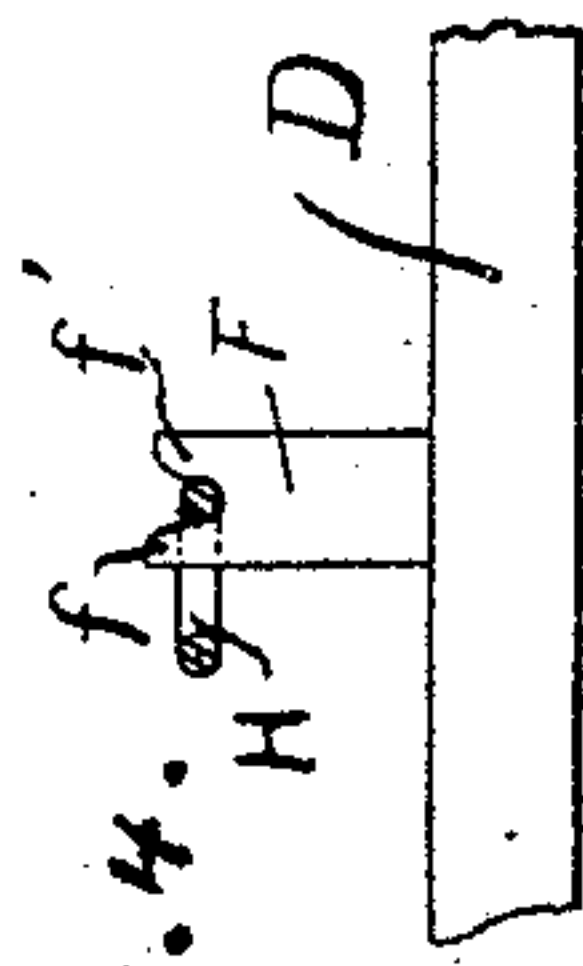


Fig. 4.

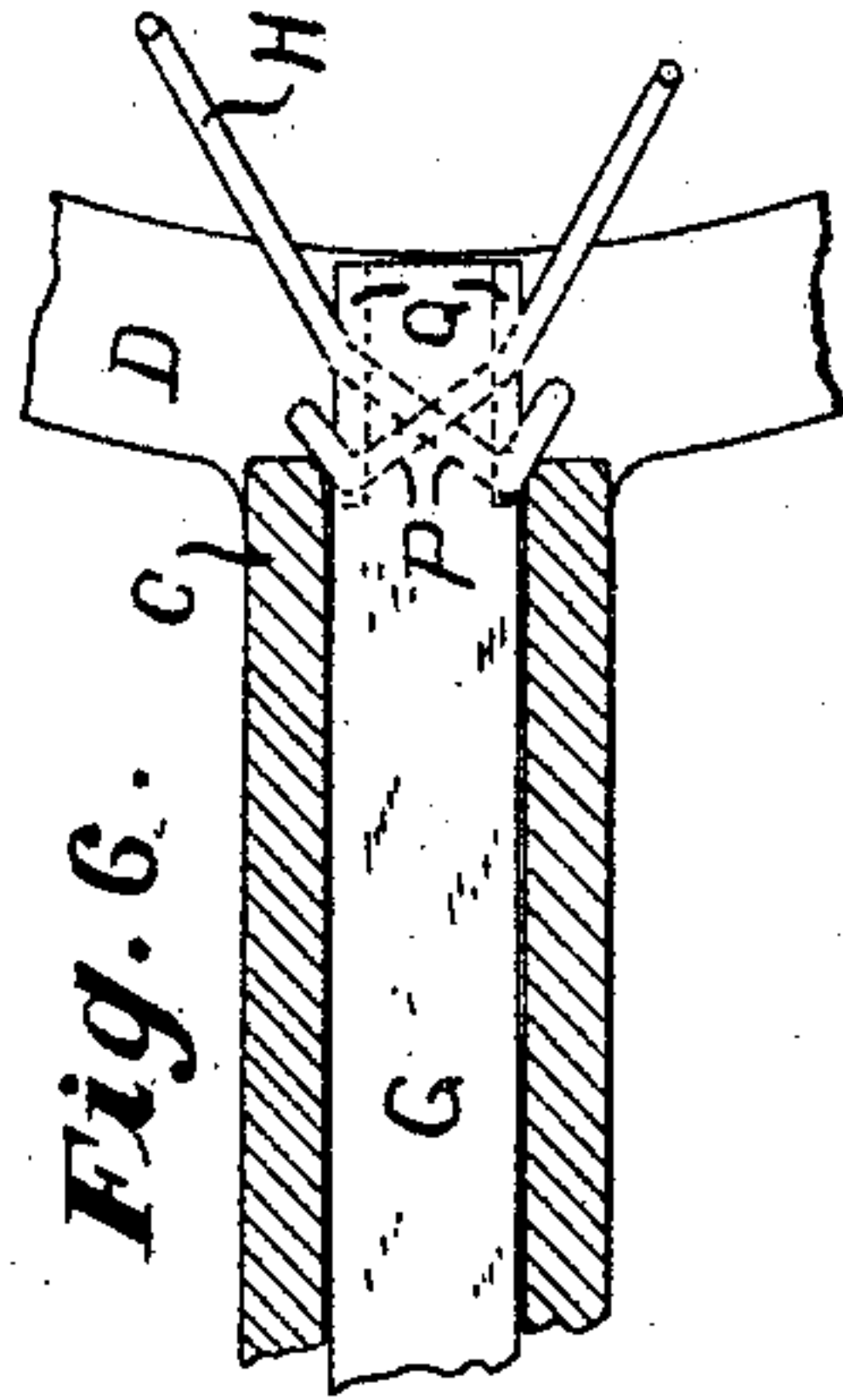


Fig. 6.

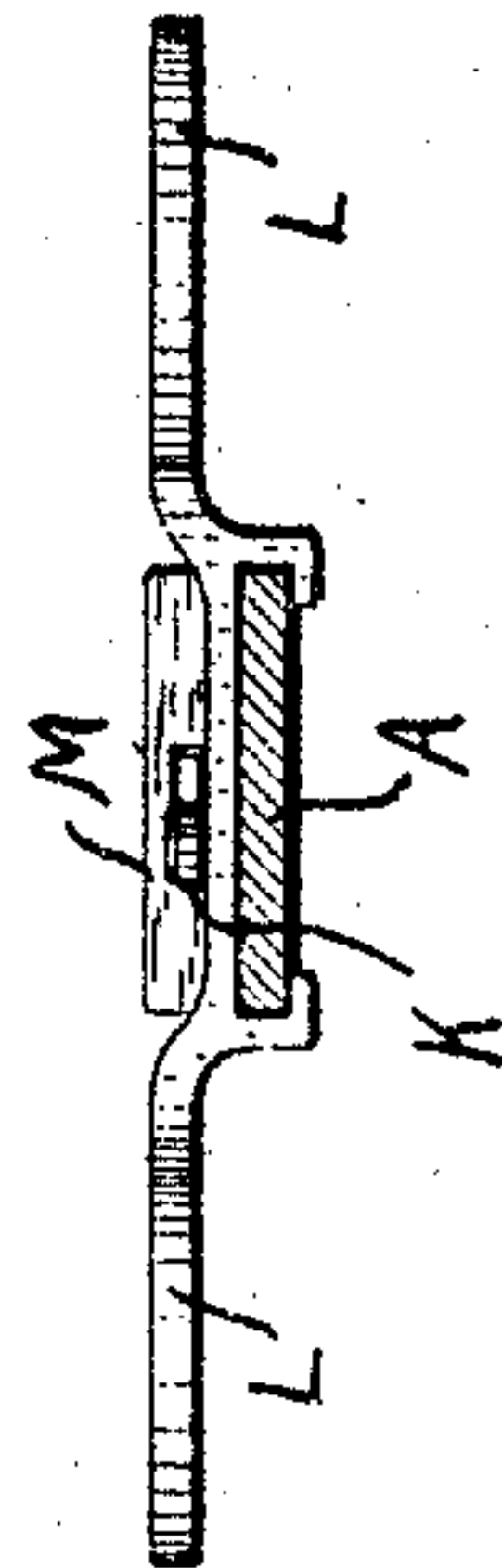


Fig. 3.

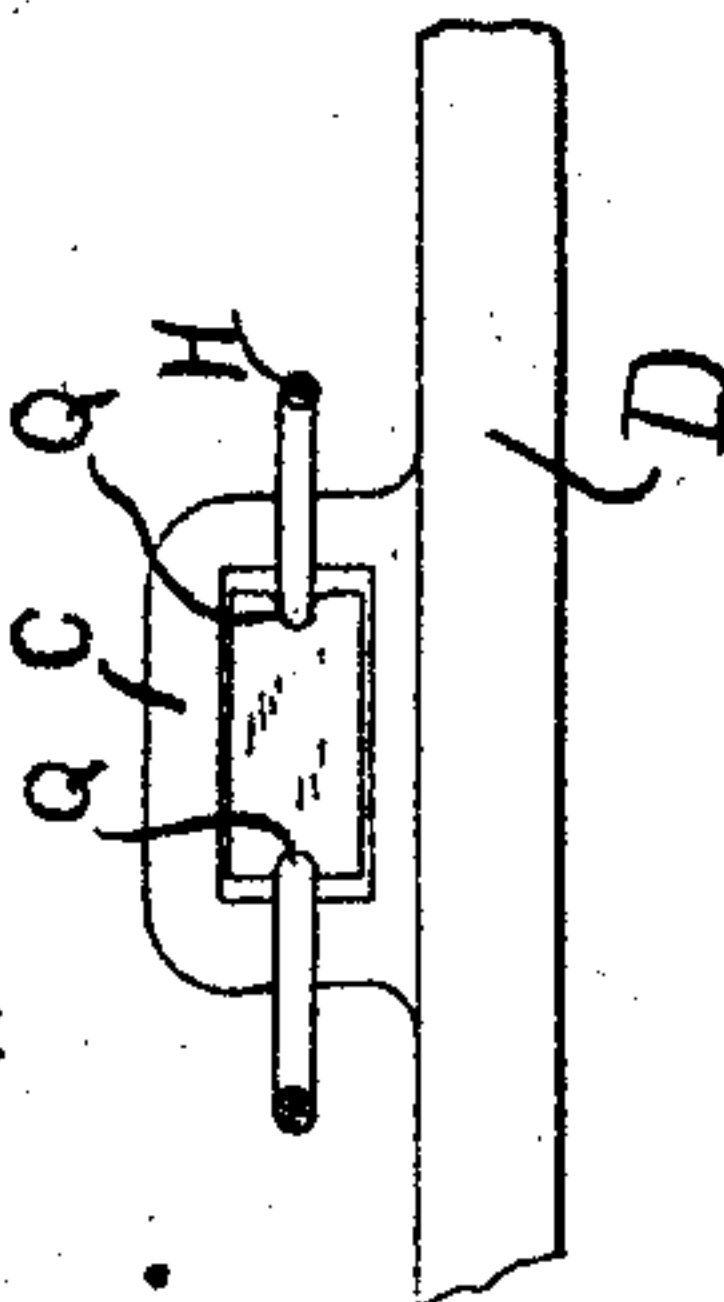


Fig. 5.

Witnesses
Mary Collinge
J. W. Hatz.

Inventor
Rudolphus H. Rice

UNITED STATES PATENT OFFICE.

RHODOLPHUS H. RICE, OF MILWAUKEE, WISCONSIN, ASSIGNOR TO MICHAEL J. RICE, OF KEWAUNEE, WISCONSIN.

TONSILOTOME.

No. 907,090.

Specification of Letters Patent.

Patented Dec. 15, 1908.

Application filed July 6, 1908. Serial No. 442,075.

To all whom it may concern:

Be it known that I, RHODOLPHUS H. RICE, a citizen of the United States, residing at Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented a new and useful Improvement in Tonsilotomes, of which the following is a specification.

My invention relates to improvements in surgical instruments, designed especially for the removal of enlarged or diseased tonsils, adenoids, etc.

The object of my invention is to provide means whereby the part to be removed may be first gripped by an encircling band, such as fine wire, and either cut through by drawing in on the wire, or the diseased growth pulled off, as desired by the surgeon.

In the following description, reference is had to the accompanying drawings in which—

Figure 1 is a plan view, part in section, of a surgical instrument embodying my invention. Fig. 2 is an edge view of the instrument. Fig. 3 is a sectional view (major section) drawn on line 3—3 of Fig. 2. Fig. 4 is a detail view of one of the wire supporting pins. Fig. 5 is an enlarged end view of the draw bar, showing the wire connections in cross section. Fig. 6 is an enlarged detail plan view of the end portion of the draw bar, showing the ends of the wire, with dotted lines indicating their position when partially folded.

Like parts are identified by the same reference characters throughout the several views.

A supporting member A is preferably provided with a handle B at one end, and at the other end with a tubular or channeled portion C constituting a narrow extension of the holding member, terminating in a flat, round or oval shaped member D, which is provided with an opening E through which the tonsil, or part to be removed, is caused to project. A series of pins F extend outwardly from one surface of the member D, and a draw bar G, slidably mounted in the channeled portion C, extends over said surface, and is connected with a band of fine wire H, which is primarily passed around the pins and is thus held in a position to encircle a tonsil projecting through the aperture. The outer surfaces of the pins may be beveled or incined inwardly, as shown in Fig. 2, or forked and provided with a tapering inner arm *f* as shown in Fig. 4, the arm *f'* of the fork preventing the wire from moving

downwardly to the base of the pin. In either case, the construction is such that by drawing forcibly upon the bar G, the wire may be withdrawn from the pins. The bar G is provided with a series of teeth *g* along one side, and a resilient catch J engages these teeth and holds the bar from moving toward the outer end of the tool. An actuating bar K, provided with a handle L, extends through a guide bearing M on the supporting member, and is provided with teeth *m* adapted to engage the teeth *g* on the draw bar. O is a spring to facilitate holding the bars together, while permitting them to separate when securing new adjustments.

In operation, the wire is first passed around the pins and the ends inserted through diagonal holes at P in the draw bar. The apertured member D is then adjusted over the tonsil and the latter arranged in a position projecting through the aperture. The handle L is then drawn backwardly until the wire slips from the pins, the ends of the wire being bent backwardly during the initial movement by contact with the portion C, and doubled into channels Q in the sides of the draw bar, thus locking the wire to the bar. The tonsil having been gripped by the wire, the handle L is moved outwardly along the support until the outer end of the actuating bar K approaches the part C, where it re-engages the teeth on the draw bar G, when by drawing backwardly upon the handle L, the wire cuts through the tonsil. Where an adenoid is to be removed, it may be engaged by the wire and by pulling backwardly upon the support, it can be wholly torn away.

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

1. In a device of the described class, the combination of a supporting member, an apertured member connected with one end thereof, a guide on the supporting member, a draw bar extending through the guide to the apertured member and retaining devices on the apertured member arranged to hold a piece of wire in a position encircling the aperture, the ends of said wire being connected with the draw bar,—together with a movable handle and an actuating bar connected therewith and adapted to engage the draw bar in various positions of adjustment.

2. In a device of the described class, the combination of a holding member provided

with a narrow extension, having a guide way
extending longitudinally thereof, a flat mem-
ber provided with an aperture therein and
connected with the outer end of said exten-
5 sion, a set of pins projecting from said aper-
tured member and having inwardly inclined
faces, a draw bar mounted in said guide way,
a wire connected with said draw bar at both
ends and extended around said pins in a man-
10 ner to encircle said aperture, means for actu-
ating said draw bar, and a catch to prevent
retractive movements thereof.

3. In a device of the described class, the
combination of an apertured member, means
15 for retaining a wire in a position encircling
the aperture in said member, a support for
said apertured member and a device movably
connected with the support and adapted to
engage and draw the wire from said retain-
20 ing means across said aperture, said retaining
means comprising a set of pins, each pro-
vided with a forked extremity, adapted to
receive the wire, the inner arm of the fork
being provided with an angular face adapted

to release the wire when the latter is sub- 25
jected to the desired tension.

4. In a device of the described class, the
combination of an apertured member, wire
retaining devices mounted thereon, a wire
supported by said devices in a position en- 30
circling said aperture, a supporting member,
and a draw bar mounted on said supporting
member provided with perforations in one
extremity, through which the ends of the
wire pass, said draw bar being provided with 35
channels in its side margin at the perforated
end and said supporting member being pro-
vided with guides for the draw bar, adapted
to engage the wire and bend it into said chan- 40
nels, when the draw bar is retracted,—the re-
taining devices being adapted to release the
wire during the retractive movement.

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

RHODOLPHUS H. RICE.

Witnesses:

F. A. OTTO,

MARY COLLINGE.