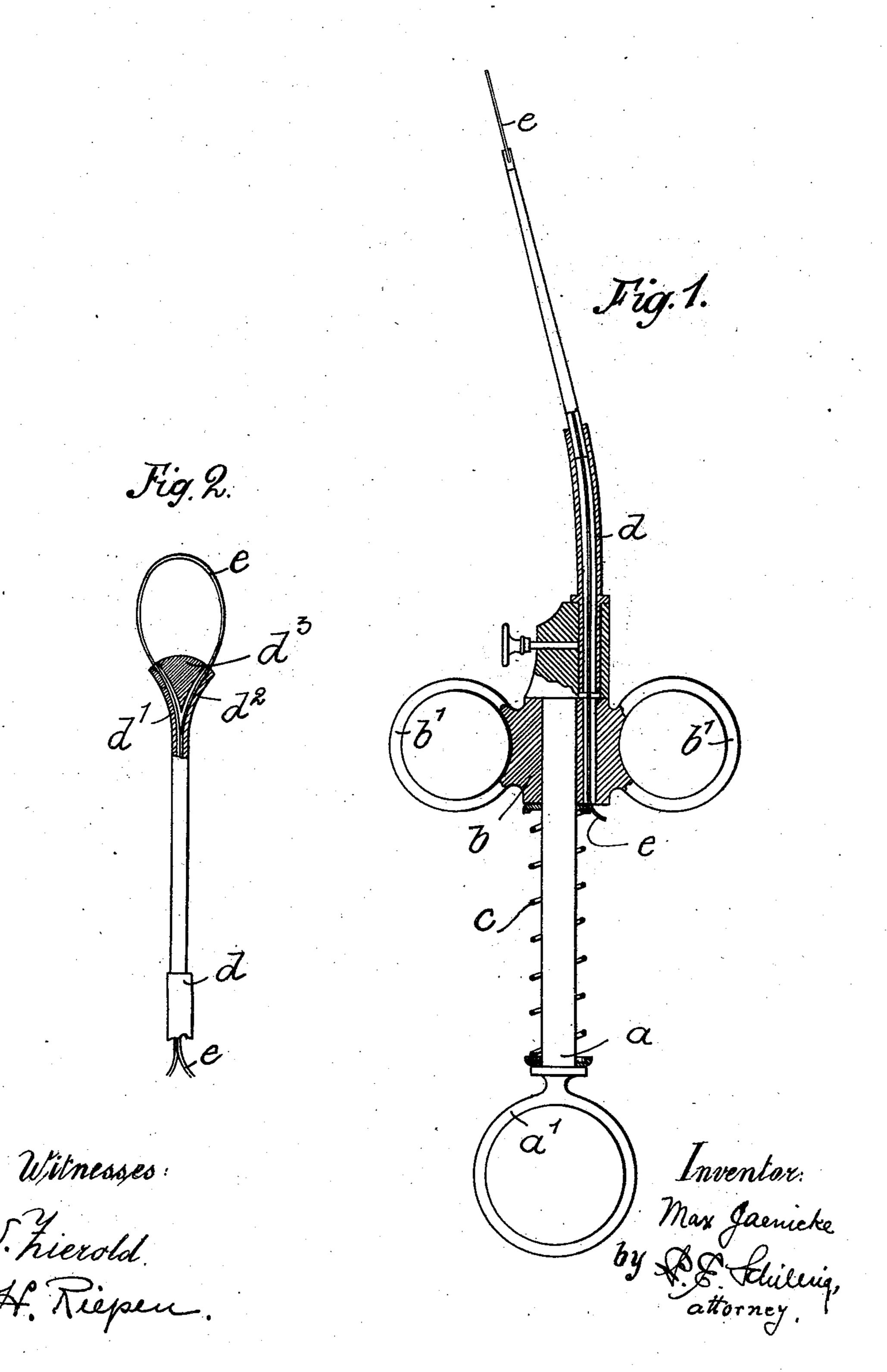
No. 668,647.

Patented Feb. 26, 1901.

## M. JAENICKE. ECRASEUR.

(Application filed Mar. 16, 1900.)

(No Model.)



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## United States Patent Office.

MAX JAENICKE, OF GÖRLITZ, GERMANY.

## ÉCRASEUR.

SPECIFICATION forming part of Letters Patent No. 668,647, dated February 26, 1901.

Application filed March 16, 1900. Serial No. 8,900. (No model.)

To all whom it may concern:

Be it known that I, MAX JAENICKE, doctor of medicine, a subject of the Emperor of Germany, residing at 32° Jakobstrasse, Görlitz, Germany, have invented certain new and useful Improvements in Écraseurs, of which the following is a specification.

The present invention has reference to certain new and useful improvements in écraseurs, and relates more especially to such as are employed in nasal operations for the removal of polypi and like malignant growths.

Hitherto écraseurs have been so constructed that the chain saw or wire loop for embracing and removing the polypus has to be formed by hand. This has proved to be a matter of much inconvenience, more particularly on account of the time lost on each occasion in adjusting the loop, which, moreover, by reason of its being handled, must also be disinfected every time and soon wears out. In order to overcome these drawbacks, I employ a special form of guide or mouthpiece for the loop and a spring device whereby the loop is formed automatically.

In order to make my invention more readily understood, I have illustrated it on the

accompanying sheet of drawings.

Figure 1 represents a longitudinal section of an écraseur according to my invention. Fig. 2 is a detail view, to a larger scale, showing the mouthpiece with the wire loop.

a is the stem of the instrument, which may be of any suitable cross-section and form and which is provided with a cross-bar or ring a'.

b is a slide working on the stem a and provided with finger-rings b' b' or the like.

c is a spiral spring secured between the

slide b and the bottom of the stem a.

tached to the stem a. This tube is provided with a splayed mouthpiece, which I prefer to form in two branching tubes d'  $d^2$ , connected by a bridge  $d^3$ , as is clearly shown in Fig. 2.

In operation the wire e of suitable length having been inserted into the tubular guide  $d d' d^2$  its ends are secured to the slide b by means of set-screws or in any other suitable manner. Owing to the influence of the spring c the slide will be kept pushed forward, and

the looped end of the wire will consequently be held protruding from the mouthpiece and will be given the correct shape by reason of the splayed form of the mouthpiece. The instrument is inserted into the nasal or other 55 organ in the usual manner, and the loop having been adjusted over the malignant growth to be removed the slide b is pulled back, whereby the growth is strangled between the loop and the bridge  $d^3$ . The arched form of the 60 latter insures a certain and clean operation.

The great advantage of my new écraseur is that it may be inserted into the nose or other cavity to be operated upon with the wire loop in the retracted position and that then 65 when the instrument is exactly at the place to be operated a loop of any desired size may be formed automatically.

What I claim as my invention, and desire

to secure by Letters Patent, is-

1. An écraseur comprising a stem having a tube extending longitudinally from one end and branching in Y shape at the other, a slide on said stem, a wire secured to the slide and passing singly through the branches and 75 doubly through the body of the tube, and means for reciprocating the slide, substantially as described.

2. An écraseur comprising a tubular body provided with a finger-ring at one end and 80 having its opening branched in Y shape at its opposite end, a slide mounted on said stem a spring around the stem normally pressing the slide outward, and a wire loop secured at one end to the slide passed through the stem 85 out of one branch of the tube and back through the other branch, substantially as described.

3. In écraseurs a mouthpiece for guiding the operating-loop, comprising a tubular bi- 90 furcated channel terminating in an arched bridge, substantially as described.

In witness whereof I have hereunto signed my name, this 17th day of February, 1900, in the presence of two subscribing witnesses.

MAX JAENICKE.

Witnesses:

EDUARD HERMANN NOEBEL, IDA NOEBEL.