

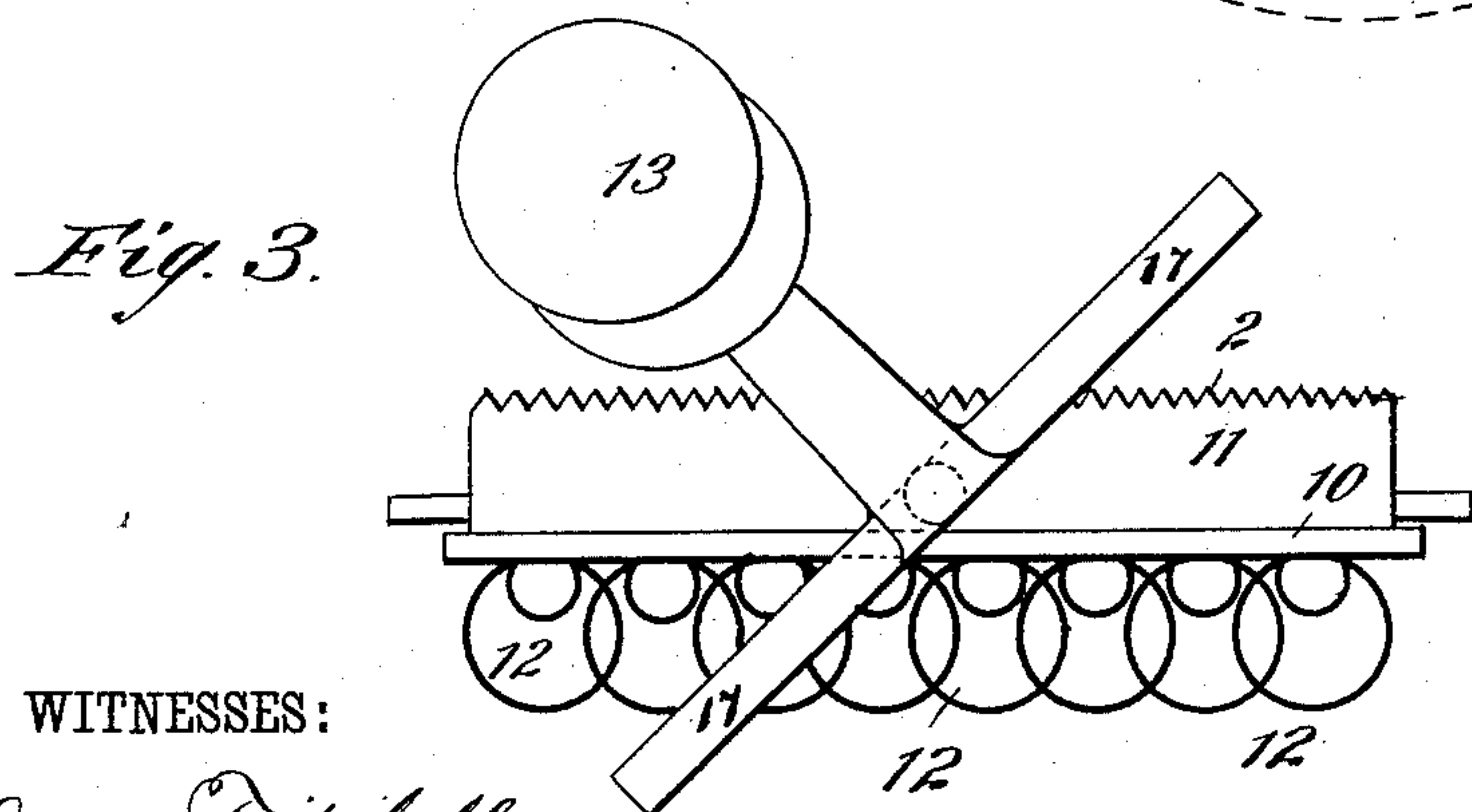
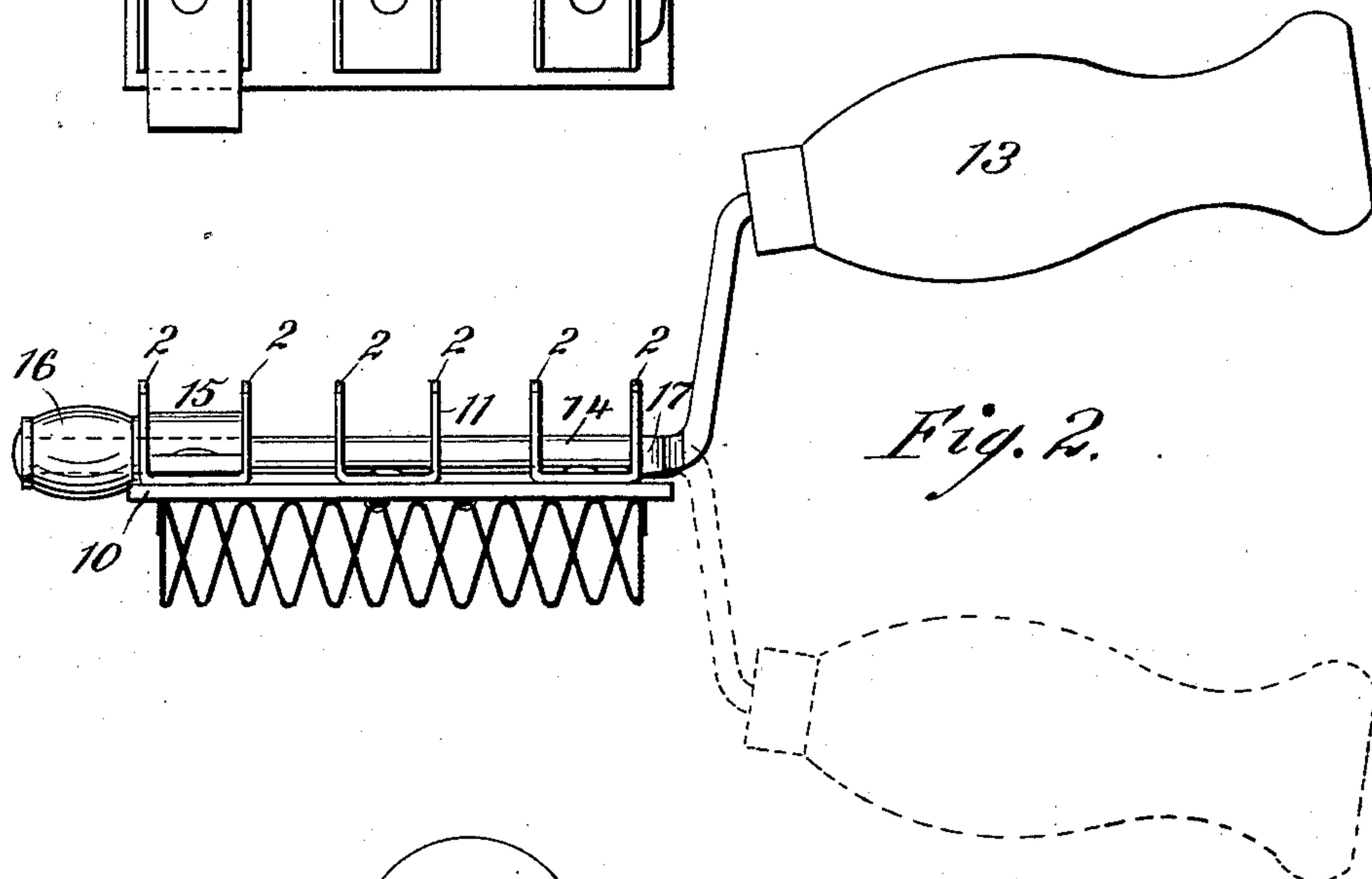
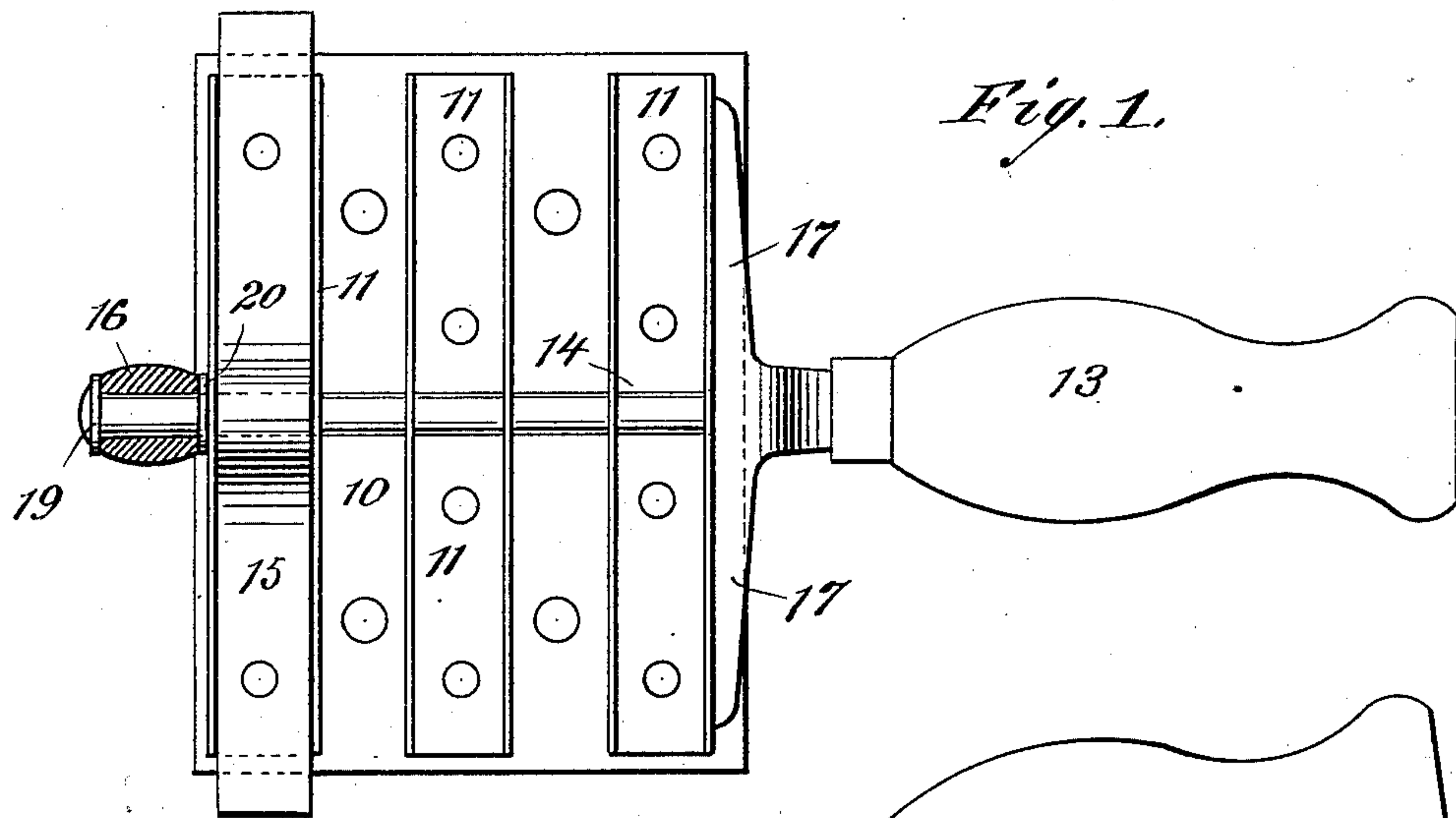
(No Model.)

C. & J. KNOPP.

CURRY COMB.

No. 360,702.

Patented Apr. 5, 1887.



WITNESSES:

Donn Twitchell
C. Sedgwick

INVENTOR:

C. Knopp
J. Knopp
BY *Munn & Co*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

CHARLES KNOPP AND JOSEPH KNOPP, OF WINONA, MINNESOTA.

CURRY-COMB.

SPECIFICATION forming part of Letters Patent No. 360,702, dated April 5, 1887.

Application filed January 14, 1887. Serial No. 224,350. (No model.)

To all whom it may concern:

Be it known that we, CHARLES KNOPP and JOSEPH KNOPP, of Winona, in the county of Winona and State of Minnesota, have invented
5 a new and Improved Curry-Comb, of which the following is a full, clear, and exact description.

This invention relates to a novel form of curry-comb wherein the comb proper is provided with two operating-faces, either one of
10 which may be brought into play, as will be hereinafter described, and specifically pointed out in the claims.

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

Figure 1 is a view of the curry-comb when adjusted so as to bring the coil-wire face of the comb to a position for use, the spring arranged
20 upon the handle-shank being shown in section. Fig. 2 is a side view of the comb, the parts being represented in full lines when adjusted as represented in Fig. 1, while the handle is shown
25 in dotted lines in the position it assumes when the serrated face of the comb is adjusted for use; and Fig. 3 is a view of the comb with the handle in the foreground, the parts being represented as they appear when the comb proper
30 is being moved from one position to the other upon the handle.

In the drawings, 10 represents the back or body of the comb proper, to one face of which there are secured U-shaped plates 11, the edges
35 2 of which are serrated or toothed in the ordinary manner. To the other face of the back 10 there is secured a series of coils of wires that are arranged side by side and intercoiled. These series of coils, which are shown at 12, are attached to the back in any suitable manner.

40 The handle of the comb is shown at 13, and this handle is provided with a shank, 14, that passes through registering apertures that are formed in the U-shaped plates 11, a proper rigidity being imparted to the outer U-shaped plate, 11, by a heavy metallic strip, 15, that is
45 riveted to place, as indicated, this strip being bent upward at its center, in order that it may overlap the shank 14.

The shank 14 extends somewhat beyond the outer edge of the back 10, and upon this extending end there is arranged a spring, 16,
50 which is preferably made of rubber, but which might be made of coiled wire, or in any other way desired. The spring abuts against a flange or collar, 19, that is held against displacement by riveting the end of the shank,
55 while a second collar or flange, 20, is arranged between the spring and the outer face of the upturned flange of the outer plate, 11.

Side arms, 17, branch outward from the shank, as shown, and these arms are normally held against the outer face of one of the upturned flanges of the inner plate, 11, the back plate, 10, projecting somewhat beyond said upturned flange, the arrangement being such that
60 by pulling the comb proper forward against the tension of the spring 16 the comb may be turned upon the shank 14, as is clearly indicated in Fig. 3.

In operation the intercoiled wires are used
70 upon the limbs of the animal, while the toothed flanges of the plate 11 are used upon the body, the change necessary to bring one side or the other of the curry-comb to a position for use being effected in an instant.

75 Having thus fully described our invention, we claim as new and desire to secure by Letters Patent—

1. The combination, with a double curry-comb, of a handle provided with side arms and
80 a forwardly-extending shank, and a spring arranged in connection with the shank, substantially as described.

2. The combination, with a curry-comb having two operating-faces, of a handle provided
85 with a shank, 14, side arms, 17, and a spring, 16, arranged in connection with the shank, substantially as described.

CHARLES KNOPP.
JOSEPH KNOPP.

Witnesses:

H. L. BUCK,
D. A. LINDSEY.