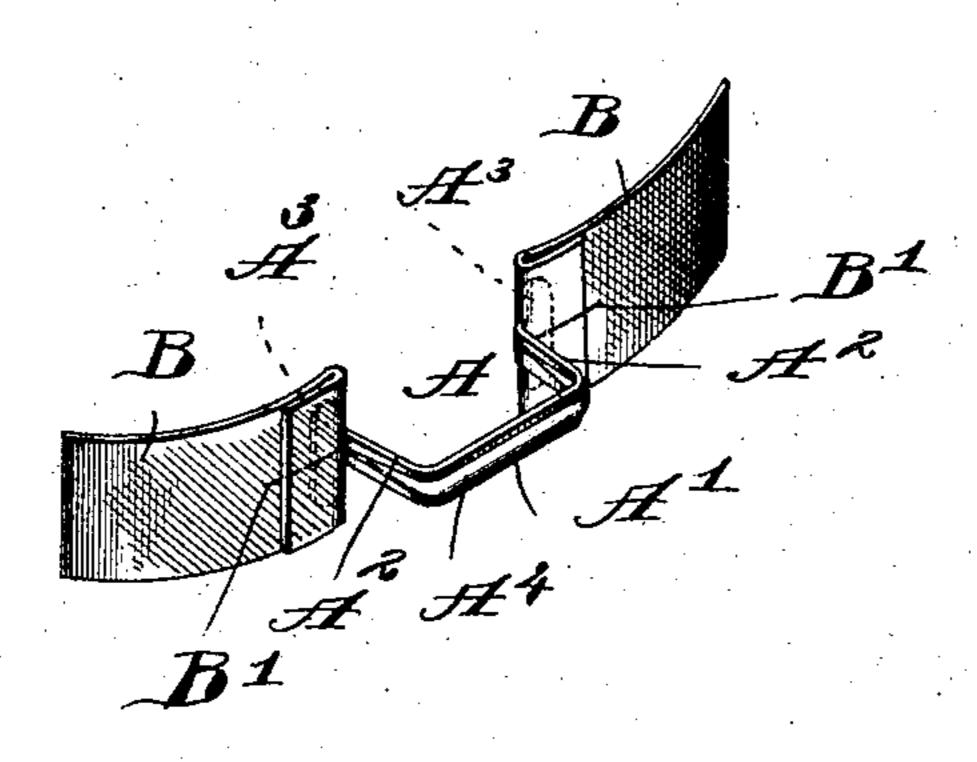
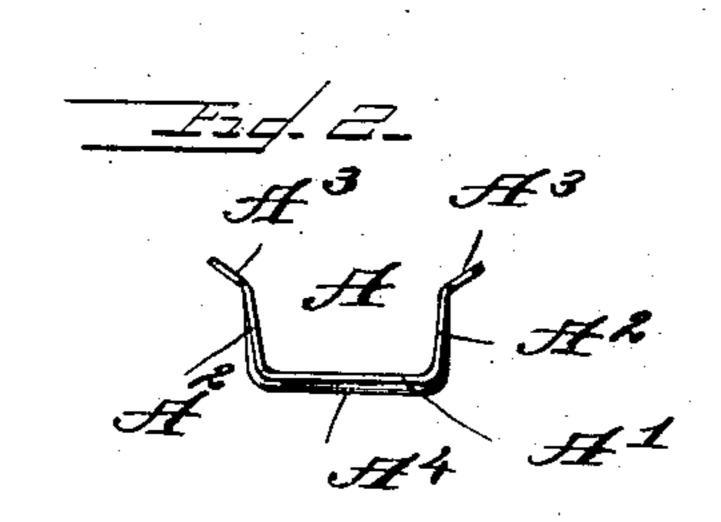
## J. F. RUCKEL.

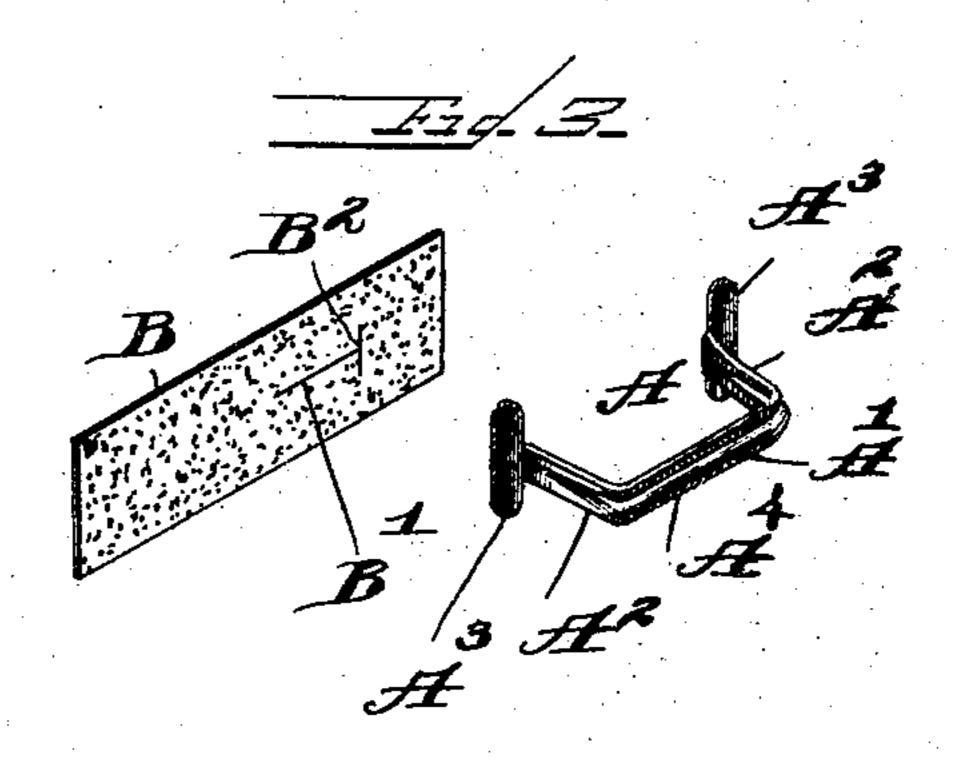
## SURGICAL BRIDGE.

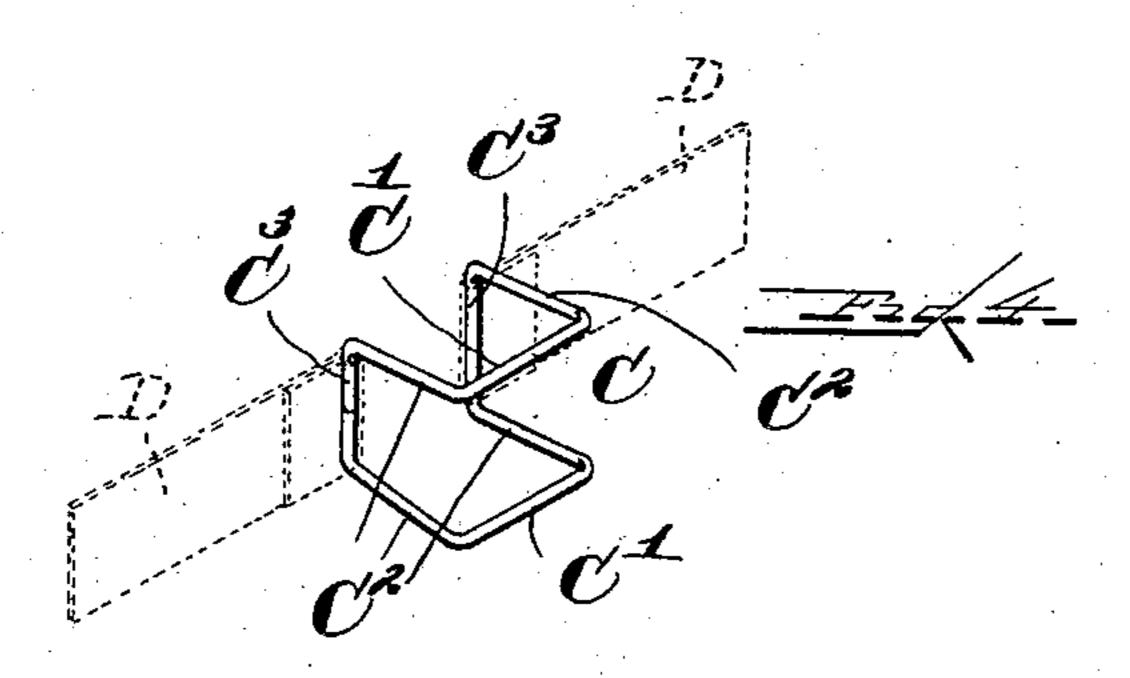
APPLICATION FILED SEPT. 16, 1903.

NO MODEL.









Glorge L'Chindahl

## United States Patent Office.

JOHN F. RUCKEL, OF CHICAGO, ILLINOIS.

## SURGICAL BRIDGE.

SPECIFICATION forming part of Letters Patent No. 765,793, dated July 26, 1904.

Application filed September 16, 1903. Serial No. 173,431. (No model.)

To all whom it may concern:

Be it known that I, John F. Ruckel, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Surgical Bridges, of which the following is a specification.

The object of this invention is the production of a surgical appliance for holding closed a flesh wound or incision during the healing thereof. It has been customary in surgery to use either stitches or an adhesive plaster for this purpose; but stitches are painful to the patient and frequently slough out during healing, while a plaster retards the healing process by covering the wound and confining the puss. In the application of this invention the wound remains uncovered save that lint or other dressing may be placed over it, if that is desirable.

In the accompanying drawings, Figure 1 is a perspective view of one of my improved surgical bridges ready for application. Fig. 2 is a side elevation of the bridge proper. 25 Fig. 3 is a perspective view of the bridge, together with a strip of tape properly slitted for attachment to one side of the bridge. Fig. 4 illustrates a modified form of the bridge, showing in dotted lines two pieces of the attaching-tape.

In the construction of a surgical bridge embodying the features of this invention I provide a standing loop A, in this instance formed from sheet metal, the loop being "blanked" 35 out of a sheet and bent as illustrated. When thus formed, the loop comprises a top portion A', two legs A<sup>2</sup>, extending from said top portion A', one at each end thereof, and two transversely-extending feet A<sup>3</sup>, one at the extrem-4° ity of each of said legs. To give the loop additional strength, the top portion A' and the two legs A<sup>2</sup> have been provided with an embossed rib A<sup>4</sup>. Two strips B of flexible material—as, for instance, adhesive tape—are 45 provided, and in each of said strips a longitudinal slit B' is cut to permit the passage of one of the feet A<sup>3</sup> through said strip. At one end of said longitudinal slit a transverse

slit B' is provided for receiving the leg A'

when the strip B is in position upon the loop 50 A. Two strips B are attached to each loop, the foot  $A^3$  of leg  $A^2$  being inserted through the longitudinal slit in one of said strips. The short end of each strip is folded backward over its adjacent foot A<sup>3</sup>, and when ad- 55 hesive tape is used for these strips the strips B are placed upon the loop A, so that the gummed surfaces of said strips are underneath with reference to the loop A. If desirable, the short end of the strips B may be turned 60 downward under the foot A<sup>3</sup> and doubled back upon itself, said end being secured to the main portion of the strip by any suitable means. The angle of the feet  $A^3$  with reference to the remaining portion of the loop A 65 may easily be changed by bending.

In Fig. 4 a modified form of this bridge is illustrated, said bridge being made from wire bent into the form of a double standing loop C. In this figure, C' indicates the top portion of each loop, C² the legs, and C³ the feet. D designates the strips of flexible material. The ends of the strips D are looped around the feet C³ and, as in Fig. 1, are folded outward against the upper side of the remaining portion of the strip. In this modified form the strips D need not be slitted.

In use one side of the bridge is secured to a portion of the skin of the patient adjacent to the wound by means of the flexible strip B. The wound is then held closed by the surgeon, and with the bridge A spanning the wound the flexible strip at the other side of the bridge is attached to the skin of the patient. The wound being thus spanned by the bridge is held closed during the healing process. Antiseptics or remedies may be applied to the wound by means of lint or other dressing placed loosely upon the wound under the bridge A. If the wound or incision is of considerable length, two or more of the bridges may be placed side by side.

It is clear that the embodiments herein shown of this invention are subject to various modifications and changes without a departure 95 from the spirit and scope of the invention, wherefore I desire not to limit myself to the precise details herein set forth.

I claim as my invention—

1. In a surgical appliance, in combination, a rigid standing loop for spanning a wound; and a piece of flexible tape at each side of said loop for connecting said loop with the surface of the skin at opposite sides of said wound, said pieces of tape extending in the direction of the length of said loop.

2. In a surgical appliance, in combination, a rigid standing loop for spanning a wound, said loop having a foot portion at each of its

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ends; and a strip of flexible tape for each of

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said feet, said strip being slitted to receive said foot.

3. In a surgical appliance, in combination, 15 a rigid standing loop for spanning a wound, said loop being formed of sheet metal and having a strengthening-rib; and means for adhesively connecting said loop with the surface of the skin upon opposite sides of the wound. 20 JOHN F. RUCKEL.

Witnesses:

L. L. MILLER, GEORGE L. CHINDAHL.

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