

(No Model.)

L. REENSTIERNA.
SURGICAL SPLINT.

No. 432,899.

Patented July 22, 1890.

Fig. I.

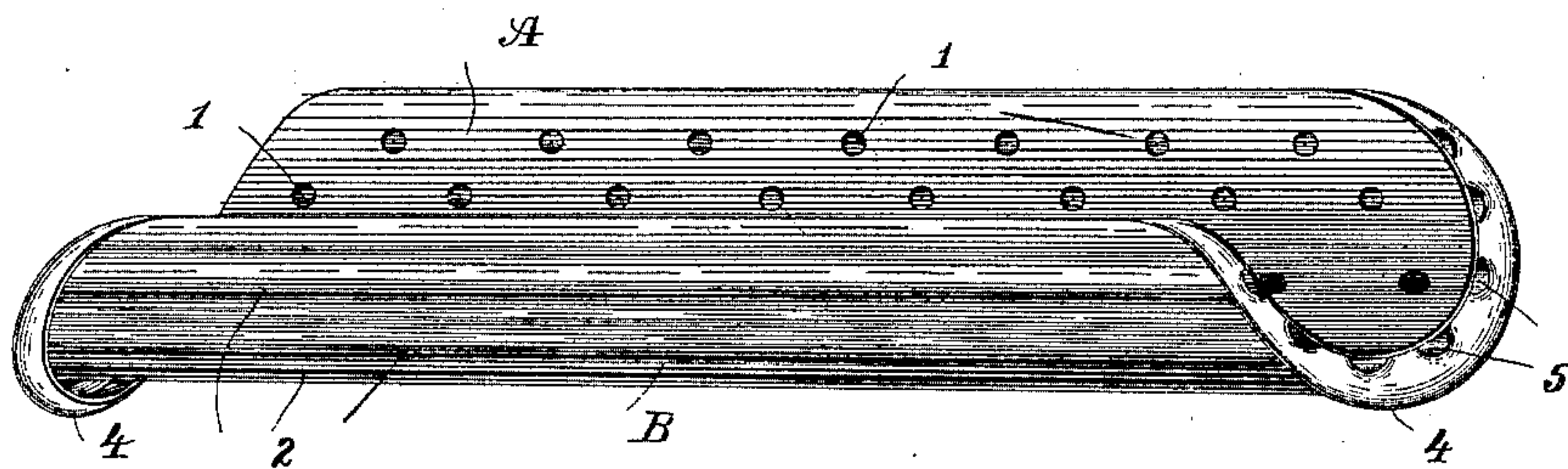


Fig. II.

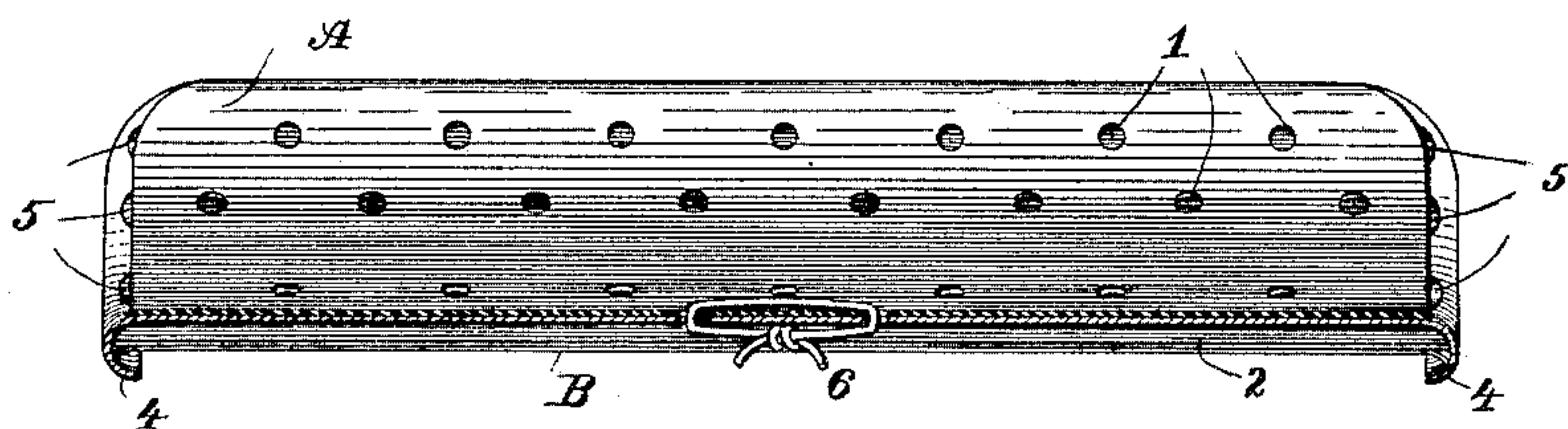


Fig. III.

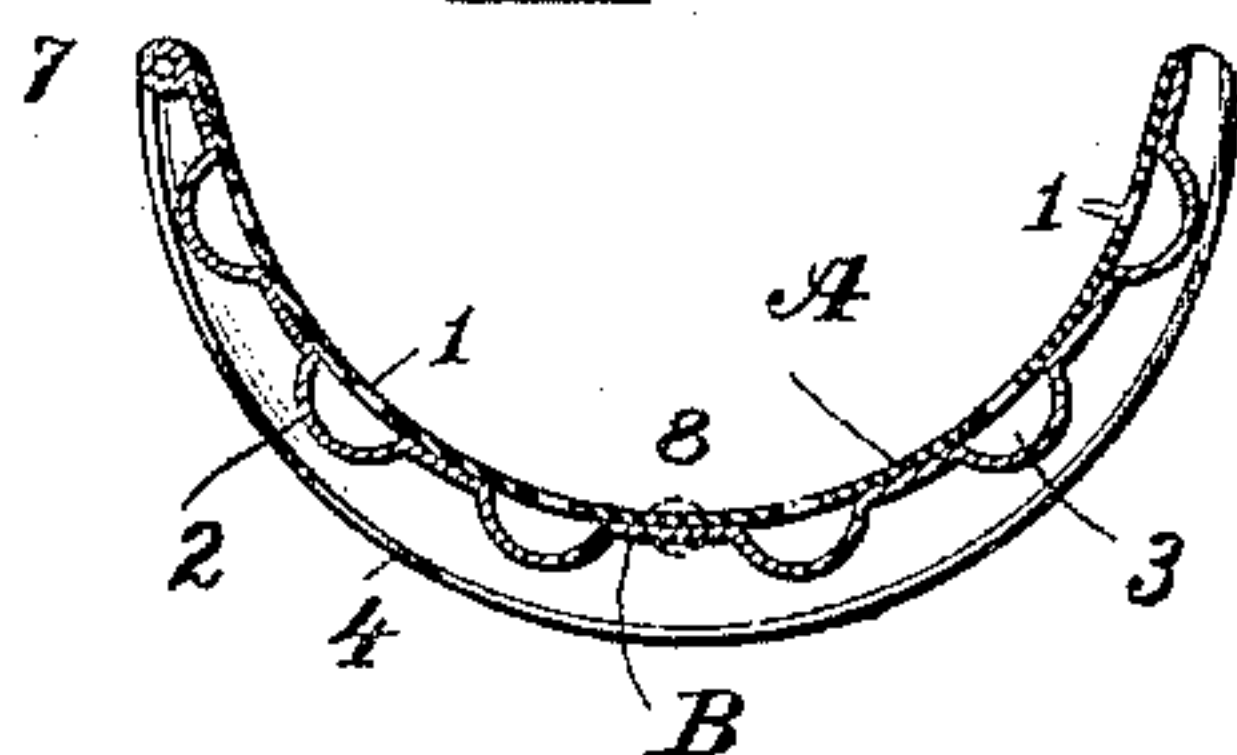
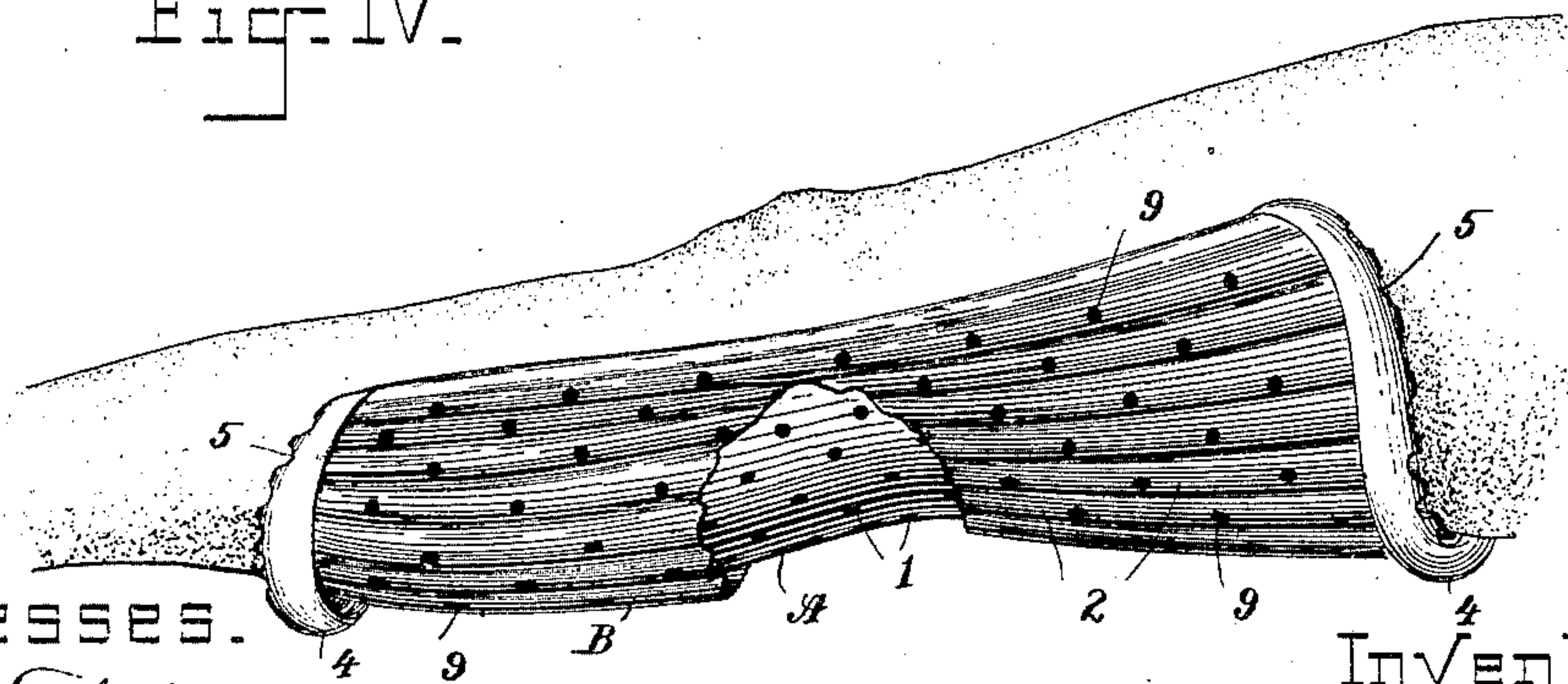


Fig. IV.



Witnesses.

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SURGICAL SPLINT.

SPECIFICATION forming part of Letters Patent No. 432,899, dated July 22, 1890.

Application filed November 12, 1889. Serial No. 330,026. (No model.)

To all whom it may concern:

Be it known that I, LIBERT REENSTIERNA, a citizen of the United States, residing at Boston, in the county of Suffolk, and State of Massachusetts, have invented a new and useful Improvement in Surgical Splints, of which the following is a specification.

My invention relates to a construction of self-ventilating splint for supporting parts of the human or animal frame which have been subjected to a surgical operation, or whose diseased or injured condition requires a more or less rigid support.

Referring to the accompanying drawings, which form part of the specification, Figures I, II, III are respectively a perspective view, a longitudinal section, and a transverse section of a semi-cylindrical splint embodying my invention. Fig. IV represents a splint embodying my invention applied to a human limb, a portion of the fluted sheath or re-enforce being broken away.

A represents an interior sheet or lining-strip, of wood or other suitable material, which is formed to fit the part or limb to be supported, and which has numerous orifices or perforations 1.

B represents my sheath or re-enforce, of any suitable light and rigid material, such as celluloid, vulcanite, or sheet metal. Such sheath, while having such general contour as to adapt it to be applied intimately to the exterior of the said lining-strip, has a number of longitudinal flutings or corrugations 2, whose inner surfaces combine with the outer surface of the lining-strip to form ducts, conduits, or channels 3, for moisture, &c., which may escape through the orifices. Beside enabling the escape of surplus moisture, &c., said channels permit the circulation of air to cool and ventilate the part. The said corrugations are also of great utility in stiffening the re-enforce

in direction of its length and in increasing the surface for radiation of heat. The said sheath terminates at each end in a recurved lip or flange 4, which has ports or openings 5, which correspond to the channels. The said lips serve to retain the bandages and to prevent their slipping off the ends of the splint, and are also useful in preserving the transverse contour of the splint at its ends. The rounded form given to the said lips prevents the galling of the patient's skin at the ends of the splint.

The lining may be fastened to the sheath by any suitable means—as, for example, by a tape, as at 6, by a hinge, as at 7, or by rivets, as indicated by dotted lines 8, or by screws or solder.

Self-ventilation may be further aided by providing orifices 9 in the sheath, or by constructing it or the lining (either in whole or part) of wire-gauze.

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

1. A surgical splint composed of a perforated lining-strip and of an inclosing longitudinally-fluted conformable sheath or re-enforce, substantially as set forth.

2. A re-enforce or inclosing sheath for surgical splints, fluted or corrugated lengthwise, substantially as set forth.

3. The combination, with a splint-strip or sheet having ventilating-orifices 1, of a conformable envelope or sheath having longitudinal corrugations 3, and having recurved terminal lips 4, which have openings 5 in line with said corrugations.

LIBERT REENSTIERNA.

Witnesses:

ALBERT BJORCK,
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