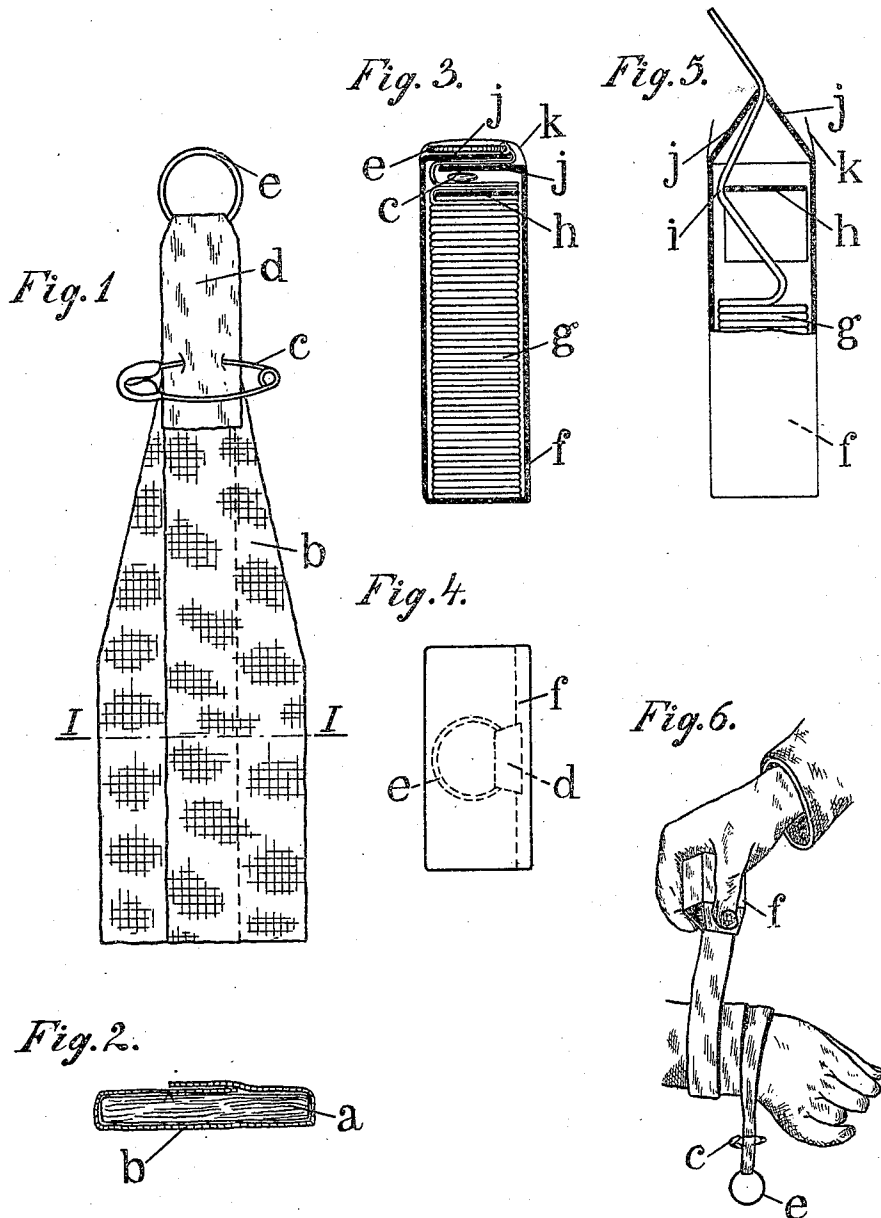


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SURGICAL BANDAGE.
APPLICATION FILED AUG. 13, 1907.

933,916.

Patented Sept. 14, 1909.



Witnesses
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JULIUS NORD, OF UTRECHT, AND NICOLAAS THEODOOR HILLEN, OF ARNHEIM, NETHERLANDS.

SURGICAL BANDAGE.

933,916.

Specification of Letters Patent. Patented Sept. 14, 1909.

Application filed August 13, 1907. Serial No. 388,418.

To all whom it may concern:

Be it known that we, JULIUS NORD and NICOLAAS THEODOOR HILLEN, subjects of the Queen of the Netherlands, residing at Weistraat 81, Utrecht, and Rijnstraat 81, Arnheim, respectively, both in the Kingdom of the Netherlands, have invented certain new and useful Improvements in Surgical Bandages, of which the following is a specification.

This invention relates to a sterilized surgical bandage consisting of a long strip of sterilized wadding incased in sterilized gauze and so packed in a sterilized case that the bandage can easily be withdrawn therefrom without coming in contact with the hands. By a special construction of the case the bandage is held firmly as it passes through the opening of the case, so that it can be wrapped around the wounded part without being touched by the hands, and therefore without being infected. For this purpose the case contains two flaps, between which the bandage passes, and by applying more or less pressure to these flaps the bandage can be clamped between them. A paraffined paper covering closely applied to the case makes the package water tight and keeps the bandage sterile.

In the accompanying drawings one form of the invention is illustrated.

Figure 1 is an elevation of part of the bandage. Fig. 2 is a horizontal section on line I—I of Fig. 1. Fig. 3 is a vertical section and Fig. 4 is a plan of a case containing the bandage before use. Fig. 5 is a part vertical section of the opened case with the bandage partly withdrawn. Fig. 6 is a perspective view illustrating the application of the bandage to a wounded arm.

The bandage consists of a strip of sterilized wadding *a* enveloped in a broad strip of sterilized gauze *b* in such a manner that the edges of the gauze overlap (Fig. 2). The end of the strip is narrowed and is attached by a safety pin *c* to a tape *d* folded to form a loop in which the ring *e* is engaged.

As shown in Fig. 3 the bandage is packed in a case *f* in superimposed layers *g* firmly pressed together but easily separated. The case is made of card or like material and has a rectangular cross section; in it is a transverse partition *h* having at one side a slot *i* through which the bandage passes (Fig. 5).

The end of the case has two flaps *j*, one overlapping the other (Fig. 3). When ready for use the bandage is packed in the case beneath the partition *h*, the narrowed end of the bandage and the safety pin *c* lying upon this partition while the ring *e* lies upon one of the flaps *j* under the paper wrapping *k* which protects the case and its contents from moisture, air and microbes (Fig. 4). After the wrapping has been closed it is made quite impermeable by paraffin or the like.

The bandage is applied as follows:—The case is held in the right hand, the wrapping *k* is opened with the nail of the left forefinger and the ring *e* is gripped. By pulling the ring the tape *d* is withdrawn, followed by the bandage. The two flaps *j* open and form a guide for the freely passing bandage. By now pressing the two outwardly directed flaps *j* by the thumb and forefinger the speed with which the bandage is withdrawn can be controlled and when the bandage has been laid upon the wounded part, by pulling at the ring *e* and pressing on the flaps the bandage can be applied as tightly as may be desired. The partition *h* and the slot *i* insure that each layer of the bandage is separately withdrawn. In applying the bandage the end to which the ring is attached is not wound around the wounded part, being used after the wound has been covered, when it is fixed to the duly applied bandage by means of the safety pin. Should the injured person have to bandage himself, he withdraws the bandage by means of the ring far enough to allow of his winding some of it around the wounded part and then by pressing on the flaps *j* he clamps the bandage and draws it tight, as shown in Fig. 6.

It is evident that by applying the bandage by means of the case *f*, the former is protected from contact with unclean hands and the wound from infection. Owing to the simple handling the new bandage can be used by a layman properly and easily without particular care. The paraffined paper wrapping insures a sterile closure under all conditions.

A further advantage is that when, during the bandaging operation, one drops the case, it simply hangs upon the bandage so that the latter does not become unwound upon the floor, as is the case with known forms of bandages.

Having thus described the nature of said invention and in what manner the same is to be performed and carried into practical effect, what we claim is:—

5 In combination, a case containing a strip of gauze, a tape, a pin securing the tape to the end of the gauze, and a ring in the end of the tape, a transverse partition in said case near the top thereof leaving a space be-
10 tween one wall of the case and its adjacent end for the passage of the gauze, a pair of flaps forming the top of the case and overlapping when closed, said flaps converging upwardly when raised by the passage of the

gauze and being adapted to be pressed to- 15
gether by the operator so as to act as a brake on the gauze, said pin lying on the partition and the ring lying outside of said flaps when the case is closed.

In testimony whereof we have hereunto 20
set our hands in presence of two subscribing witnesses.

JULIUS NORD.

NICOLAAS THEODOOR HILLEN.

Witnesses:

ANTOINE ELBRÜS DRYER,

AUGUST SIEGFRIED DOCEN.