No. 800,467. PATENTED SEPT. 26, 1905.

H. MYERS.

ELASTIC BANDAGE.

APPLICATION FILED MAY 9, 1905.

Fig. 1

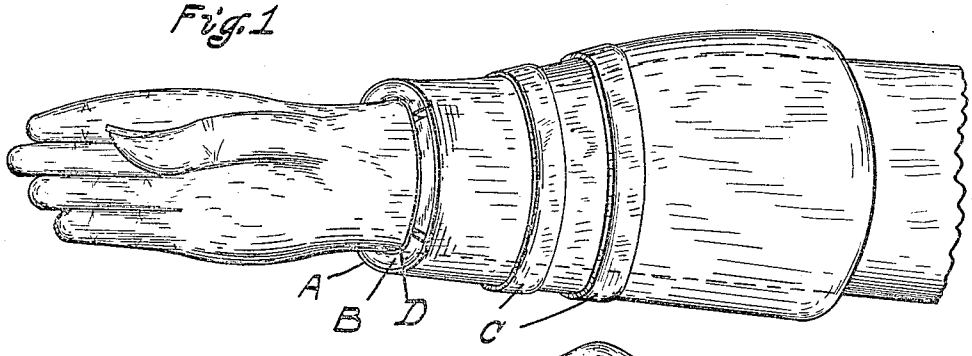


Fig. 2

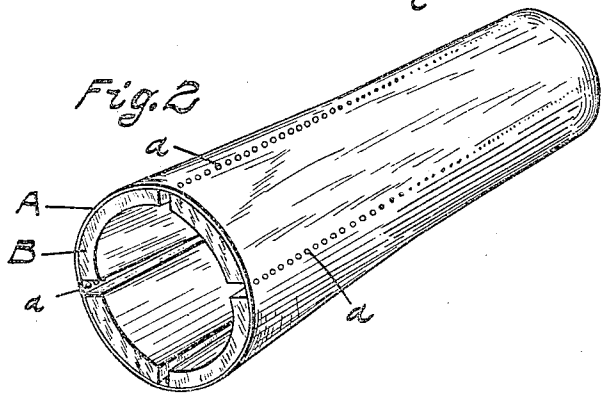


Fig. 3

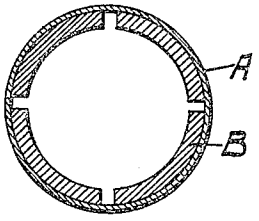


Fig. 4

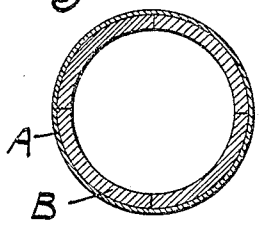
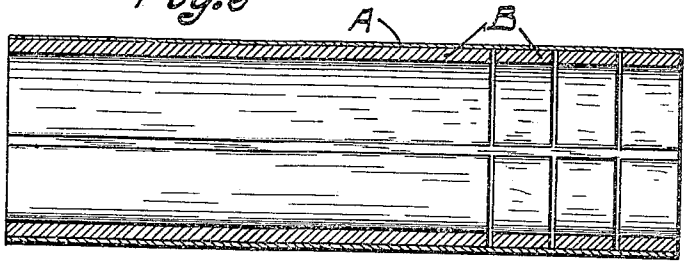


Fig. 5



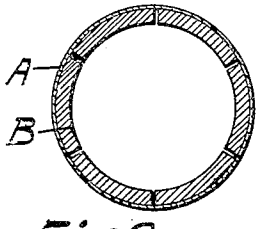


Fig. 6

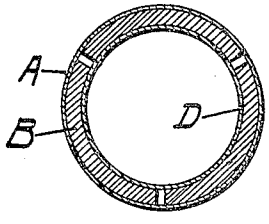


Fig. 7

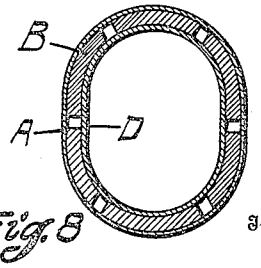


Fig. 8

Witnesses

Louis von Graeve

Robert K. Perkins

Inventor

Henry Myers

UNITED STATES PATENT OFFICE.

HENRY MYERS, OF PHILADELPHIA, PENNSYLVANIA.

ELASTIC BANDAGE.

No. 800,467. Specification of Letters Patent. Patented Sept. 26, 1905.

Application filed May 9, 1905. Serial No. 259,507.

To all whom it may concern:

Be it known that I, HENRY MYERS, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and useful Elastic Bandage, of which the following is a specification.

My invention relates to surgical appliances and to that particular class designated as "elastic bandages." Its objects are, first, to provide bandages adapted for immediate application and retention without winding, binding, sewing, or other extraneous means for securing the same in position; second, to provide in such bandages any desired degree of elasticity and flexibility; third, to provide in such bandages inner and outer covering normally impervious to the air and moisture, but capable of being readily perforated for ventilation or cut for removal; fourth, to provide in such bandages interior members which may have sufficient rigidity to act as supports or splints where required to convey medicaments and retain the same where desired or act as absorbents.

Other minor objects are also attained in the novel combination of parts hereinafter fully described, and shown in the accompanying drawings, in which—

Figure 1 is a general view of my invention, showing its application. Fig. 2 is a perspective view of the bandage, one end being distended and a portion perforated. Fig. 3 is a transverse section thereof expanded. Fig. 4 is a similar view of the same, but showing the bandage contracted or collapsed. Fig. 5 is a longitudinal section. Fig. 6 is an end view of the modification in internal structure, and Fig. 7 is a similar view of another modification. Fig. 8 is a view showing the shape which the bandage may assume.

Similar characters refer to similar parts throughout the several views.

The thin tubular shell or casing A, which comprises the continuous exterior wall of the bandage, is made of a suitable material, as pure rubber, possessing a high degree of elasticity and of such thickness as may be necessary to provide adequate strength. To prevent effusion of blood or other fluids or semi-fluid matter, as well as applied medications, I prefer to make the outer covering whole, and hence impervious to such moist matter. It is also possible to effectually provide for ventilating the interior of the bandage by puncturing the covering, as at *a*, either in its construction at the time of its application or even after it has been in use.

United to the interior covering in such a manner as not to interfere with its distention are the strips B of any approved material whatever, longitudinally disposed. These may be so arranged as to present an almost unbroken surface or distributed irregularly, as preferred. In some cases, as in the treatment of a broken limb, these strips are made stiff and rigid to properly support the fracture, or I make a portion of them in this manner and others of a softer material to act in the manner of an opposing cushion. In other cases I make use of material for the strips possessing the property of absorption and which may be charged with medicaments, antiseptics, and the like or used to simply absorb the matter discharged from the limb or part to which the bandage is applied.

Under unusual circumstances where compression is required I make use of the auxiliary band C, applied on the exterior of the covering and forming a part thereof.

As an alternative form of construction I may make use of an interior wall or membrane D, made of similar flexible material as the covering and attached likewise to the strips.

From the foregoing it will be understood that when the tubular bandage has been expanded and positioned it will exert an even and uniform pressure on the part inclosed without additional wrappings. It is also evident that the strips may be cut transversely to more effectually conform to the limbs, particularly to the joint thereof.

As an illustration to make clear the application of the bandage when required to a limb, the elastic material of the covering is expanded to pass over and upon the limb, whereupon it will rest, readily adapting itself to the limb without difficulty or pain to the patient.

As a protection to arms or limbs of athletes, particularly in foot-ball games, an appliance such as described may be adjusted underneath the tights or hose of the men engaged in the game, adding greatly to their appearance, while affording or according satisfactory protection through the thick rubber covering to the bones of the said athletes.

Having thus described my invention, what

I claim, and desire to secure by Letters Patent, is—

1. In a bandage of the class described, the combination with a distensible tubular covering, of a plurality of relatively stiff members or splints secured laterally within the said covering, substantially as specified.

2. In a bandage of the class described, an outer flexible imperforate tubular casing, and laterally-disposed separable members combined therewith, and within the said casing, substantially as specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HENRY MYERS.

Witnesses:

LOUIS VON GRAEVE,

ROBERT K. PERKINS.