Nov. 29, 1932. G. LEMARINIER 1,889,674

TRUSS

Filed Sept. 4, 1929

Fig. 1

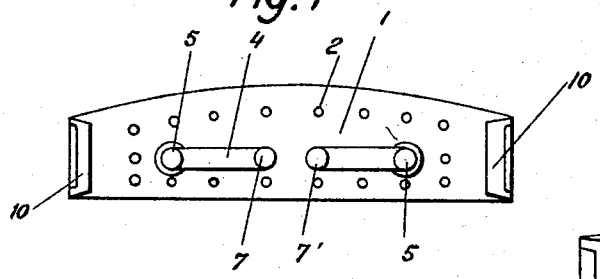


Fig. 3

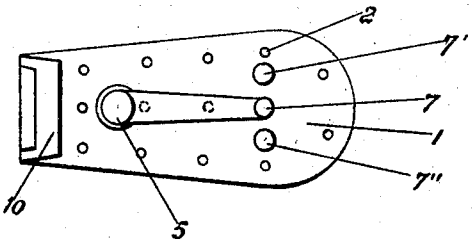


Fig. 2

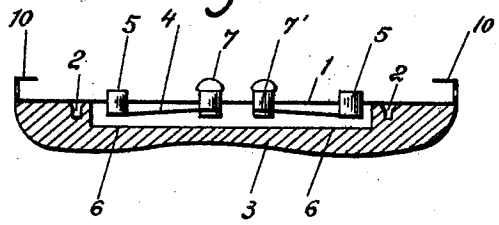


Fig. 4

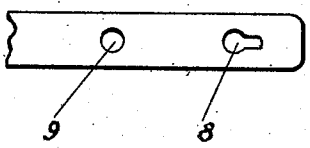


Fig. 5

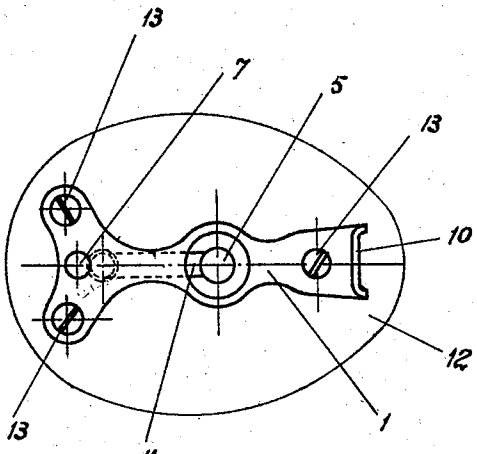
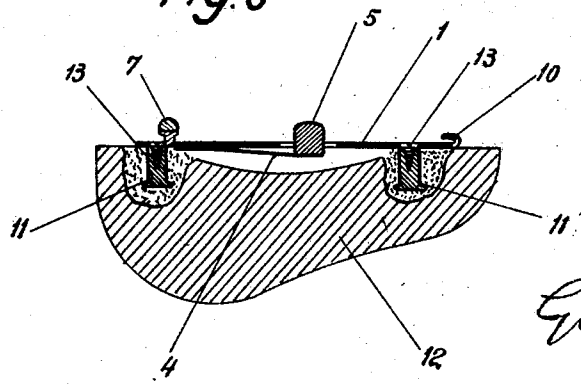


Fig. 6



Georges Lemarinier

Patented Nov. 29, 1932 1,889,674

UNITED STATES PATENT OFFICE

GEORGES LEMARINIER, OF PARIS, FRANCE

TRUSS

Application filed September 4, 1929, Serial No. 391,989, and in France December 1, 1928.

My invention relates to improvements in trusses used in connection with the treatment of hernia and the objects of the invention are, first, to provide an apparatus of the character indicated which is extremely light but at the same time sturdy, second, an apparatus which is non-attackable by the corrosive action of perspiration and consequently without odor on the wearer thereof, and third an apparatus which is easily taken apart either for washing or for replacing worn members.

In general my apparatus is constructed entirely of metal and the pressure surfaces only are preferably covered with agglomerated cork or other material thereby rendering such surfaces particularly comfortable.

My device comprises but five pieces, to wit, a dorsal cushion, two springs of non-oxidizable steel and two cushions at the extremity of said springs.

As before stated, the one or more springs employed are of non-oxidizable metal and preferably of steel allied with other metals which give thereto the property well known in the metallurgical arts, which other metals may consist of nickel, brass chrome or their equivalents or even maillechort metal.

The leaf springs employed in my device are constructed, as usual, to suit the conditions and are preferably made interchangeable which forms one of the particularly convenient features of my device. The cushions employed consist of a non-oxidizable foraminous plate of metal and of the usual shape upon which is moulded agglomerated cork. Said plates are provided with stationary or movable buttons which cooperate with bayonet slots whereby a particularly rapid and easy assembly of the parts is to be had. In some cases, however, I may provide a device in which the cushions are non-demountable, without departing from the spirit of my invention as comprehended within the scope of the appended claims.

My invention will be more readily understood by those skilled in the art to which my invention relates in the following description when taken in connection with the accompanying drawing forming part of this specification and in which—

Fig. 1 is a front elevational view of a rear cushion;

Fig. 2 is a longitudinal sectional view thereof;

Fig. 3 is a front elevational view of a front cushion;

Fig. 4 is a partial view of a spring showing the assembling eyes;

Fig. 5 is a front elevational view of a pad with my improved demountable plate attached thereto; and

Fig. 6 is a longitudinal sectional view thereof.

Referring to the drawing more in detail, the pads constitute a plate 1 (Figs. 1 to 3) of non-oxidizable metal. Said plate is preferably foraminated as shown at 2 and such apertures are preferably punched out in a way to leave a burr on the inner side of the plate.

The holes thus formed taken with their burrs are destined to assure efficient adherence of the agglomerated cork layer 3 which is applied thereto.

Let it be here said that the application of agglomerated cork to metallic plates in this manner may find numerous applications in the art other than the specification and subsequent claims point out and the applicant does not wish to be limited to the specific embodiment herein disclosed by way of example.

On the inner surface of the plate 1 are fixed leaf springs 4 of suitable shape each carrying a button 5 slidably engaging in the plate 1. Said springs are disposed in a recess 6 provided in the agglomerated cork coat and the springs are fixed respectively by means of studs 7 and 7′ riveted near the center of the plate as shown. In the case of the front pad the studs 7′ and 7″ (Fig. 3) are disposed on opposite sides of the stud 7. The spring band (Fig. 4) is of non-oxidizable metal and is adapted to be assembled on the rear pad by fitting the studs 5, 7 or 7′ in eyes 9 and 8 respectively of a circular character, one of said eyes forming a bayonet slot.

The leaf spring 4 may be given various shapes and its connection to the body upon

which it is carried may be strengthened by means of wires embedded in the agglomerated cork.

In some cases I may mount the movable buttons 5 on coiled springs or their equivalent disposed in tubes engaged in the agglomerated cork and I may also render them stationary but only projecting slightly beyond the plate.

In any event the pads are assembled by hooking the bayonet slot 8 over the button 7 and subsequently snapping the button 5 into the orifice 9 after having passed the band through an opening formed in the flange 10 at the edge of the pad.

While I have illustrated an embodiment which employs spring bands (Fig. 4) I may in some cases employ round wires whose extremities are forced into tubes embedded in the cork of the pads.

From the foregoing it will be obvious that the device is readily dismounted for facilitating washing or for replacing a worn pad. The life of the apparatus is therefore increased and its upkeep reduced to a minimum cost.

In the event that dismounting is not desired, I may secure the springs and the pads by screws, rivets, or soldering.

I may substitute for the agglomerated cork a block of cork of suitable shape provided with a recess for receiving the plate 1 and the button 5 when displaced. In other cases I may construct the pad entirely of wood or suitable plastic material and even of stamped metal which would be provided with tapped holes necessary for receiving the assembling screws of plate 1.

Referring to Figs. 5 and 6, the pad 12 is provided with dowels 11 cemented therein and to which is secured the plate 1 by means of screws 13. The said plate is provided with the usual fixed button 7, flange with opening 10 for receiving the spring band and button 5 mounted on the leaf spring 4 secured on the inner side of the plate. The operation and purpose is as before the only change from the first embodiment being the manner of fastening the plate 1 to the pad.

Having described my invention what I claim as new and desire to secure by Letters Patent is:

1. A connecting device for attaching truss pads and the like to a flexible pad supporting band, comprising a plate on which said pad is adapted to be mounted, said plate having a laterally projecting flange provided with an aperture for receiving said supporting band, a headed pin fixed to said plate, and a further pin resiliently mounted on said plate in spaced relation to said first mentioned pin, said resiliently mounted pin being movable to depressed and projected position, said band being provided with spaced apertures, one of said apertures being in the form of a bayonet slot for engaging said fixed headed pin on the plate when said band is passed through the aperture in said lateral flange on the plate, and the other of the said apertures in the band being adapted to engage said resiliently mounted pin to lock said fixed pin in said bayonet slot.

2. A connecting device for attaching truss pads and the like to a flexible pad supporting band, comprising a plate on which said pad is adapted to be mounted, said plate having a laterally projecting flange provided with an aperture for receiving said supporting band, a headed pin fixed to said plate, a leaf spring having one extremity fixed to said plate, and a further pin carried by the free extremity of said leaf spring, said plate being provided with an aperture through which said last mentioned pin is adapted to be projected by said spring, said band being provided with spaced apertures, one of said apertures being in the form of a bayonet slot for engaging said fixed headed pin on the plate when said band is passed through the aperture in said latter flange on the plate, and the other of said apertures in the band being adapted to engage said resiliently mounted pin to lock said fixed pin in said bayonet slot.

In testimony whereof I hereunto affix my signature.

GEORGES LEMARINIER.