

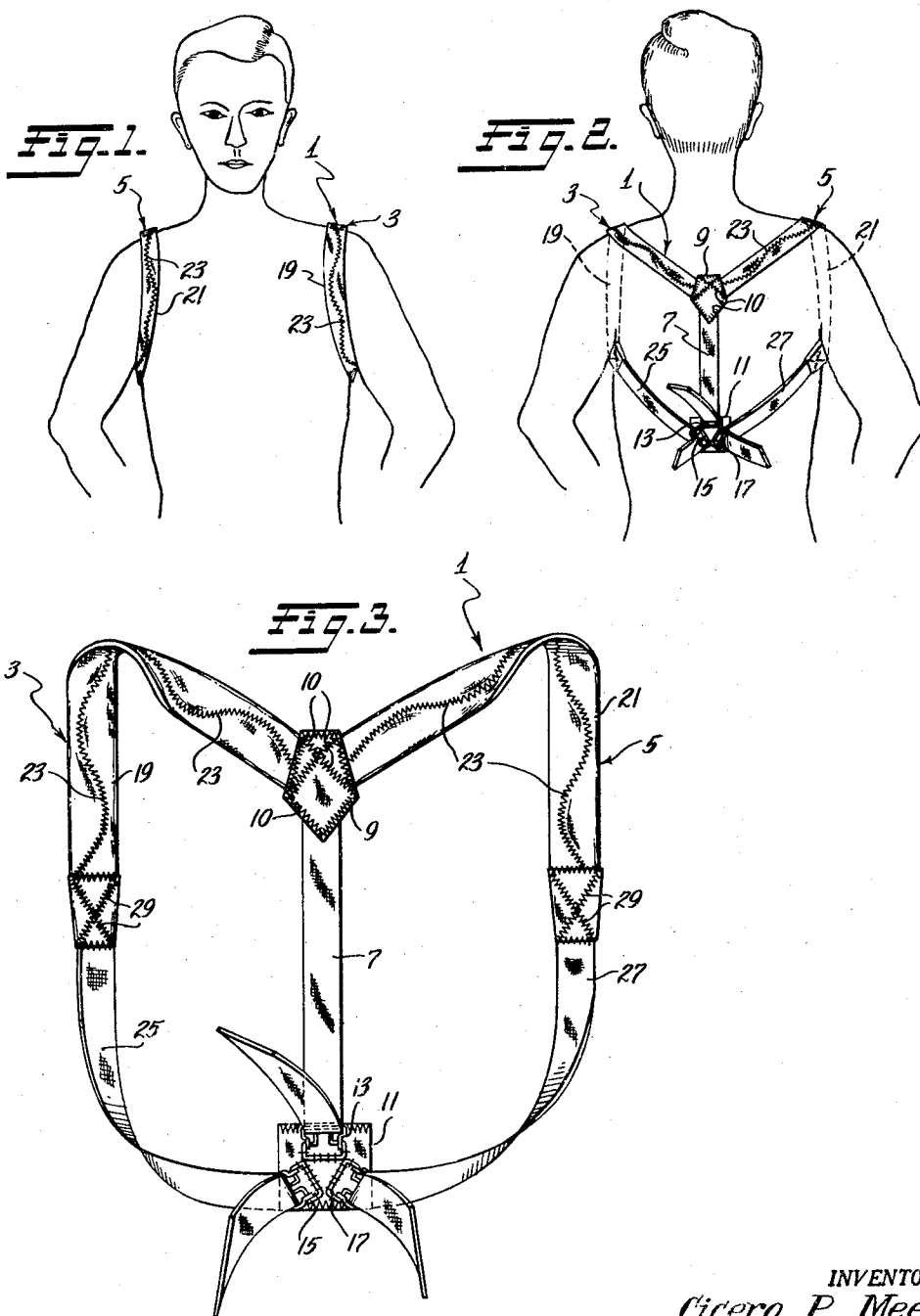
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CLAVICLE SPLINT

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CLAVICLE SPLINT

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3 Claims. (Cl. 128—87)

This invention relates generally to a clavicle splint, and more particularly to a splint designed to partially immobilize the shoulders during the healing or knitting of a broken collar bone.

It is a specific objective of this invention to provide a clavicle splint wherein the basic elements are formed entirely of flexible material and contain no rigid braces of a type which would lead to discomfort on the part of the wearer or would project outwardly from the body.

Another object is to provide a clavicle splint wherein portions of the straps which would normally be drawn tightly against the body are formed of a soft, flexible material which will not dig into the wearer's body.

Another object is to provide a clavicle splint wherein the strap elements can be conveniently adjusted to set the tension when the splint is put on, or to adjust the tension while it is being worn.

Another object is to provide a clavicle splint which is not heavy or bulky, and which may be conveniently worn under normal street clothes, or folded up for packaging or storage.

Still another object is to provide a clavicle splint which is inexpensive in construction, durable in use, and one which may be readily cleaned when required.

Other objectives and advantages will be apparent from the following description when taken in conjunction with the accompanying drawings, in which:

FIG. 1 is a front view illustrating the clavicle splint of the present invention in use;

FIG. 2 is a similar view taken from the rear; and

FIG. 3 is an enlarged view taken from the rear and showing the splint when not in use.

Referring now more specifically to the drawings, the splint generally indicated by the numeral 1 comprises two shoulder straps 3 and 5 and a back strap 7. All three straps are secured together at their inner ends by means of a connector 9 and extend in generally radial directions therefrom at angles of approximately 120 degrees apart. The connector 9 may be formed of laminated cloth sections, pentagonal in shape, and is preferably a relatively soft, flexible body to prevent any digging or abrasion characteristics when disposed against the patient's back between the shoulder blades. The inner ends of straps 3, 5 and 7 are received between the outer layers of soft cloth which form part of the connector 9 and are securely retained in position by stitching 10.

Strap 7 extends vertically downward from connector 9 for disposition along the spinal column, while straps 3 and 5 extend upwardly and outwardly to either side and are in turn passed over the shoulders, under the arm pits, and inwardly to the center of the patient's back.

A second connector means comprises a pad 11 provided with radially directed buckles 13, 15 and 17, stitched or otherwise secured on its outer surfaces. The buckles may be arranged in the manner illustrated in FIGS. 2 and 3 with buckle 13 directed upwardly to receive the outer end of strap 7 while the outer ends of straps 3 and 5 are received by buckles 15 and 17, respectively. The pad 11 is of sufficient thickness to provide a cushion

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between the buckles and the wearer's back. While the strap 7 may be formed of conventional woven strap material, the inner end portions 19 and 21 of straps 3 and 5, respectively, are formed of laminated knitted fabric to provide a maximum amount of comfort along the wearer's back and shoulders. These strap portions will not chafe the skin and the edges thereof are soft and flexible to prevent them from gouging the patient's shoulders. The material forming sections 19 and 21 should be quilted, as indicated, by undulating stitching 23 so that it will have sufficient strength and be relatively resistant to stretching. The outer end portions 25 and 27 of straps 3 and 5 may be formed of the same woven strap material as described above with respect to strap 7. The adjacent extremities of portions 19 and 25 and of portions 21 and 27 are secured together, as by stitching 29.

To install the splint in position the connector 9 is merely positioned between the shoulder blades with straps 3 and 5 passing around the shoulders in the manner illustrated, and the ends of straps 3, 5 and 7 are passed through the buckles 15, 17 and 13, respectively, and tightened until the desired amount of tension has been achieved. Thus the shoulders are given the proper degree of support during healing and the relative movement of the two shoulders is limited. The main points at which tension is applied to the body are at the shoulders where it is cushioned by the knitted material of strap portions 19 and 21.

It will readily be understood that numerous changes can be made in the construction described without departing from the spirit of the invention or the scope of the annexed claims.

I claim:

1. A clavicle splint, comprising:

- (a) a first connector means adapted to be disposed against the upper portion of a patient's back;
- (b) a second connector means adapted to be disposed at a point directly below said first connector means at a level below that of the patient's shoulder blades, said second connector means being free and unattached except with respect to other portions of said clavicle splint;
- (c) a substantially inextensible, non-elastic back strap member and extending between the respective connector means for interconnecting the same in assembled relation;
- (d) means at one end of said back strap for adjusting the length thereof and for detachably securing said one end with respect to the adjacent one of said connector means;
- (e) means at the other end of said back strap for securing said other end to the other one of said connector means;
- (f) plural buckle means securely connected to said second connector means and directed generally outwardly in either side direction with respect thereto; and
- (g) substantially inextensible, non-elastic shoulder straps secured at their inner ends to said first connector means and adjustably secured at their outer ends to individual ones of said buckle means, said shoulder straps extending upwardly and outwardly from said first connector means and being free and unattached between their respective inner and outer ends to enable said shoulder straps to pass tightly around the patient's shoulders, closely under the arm

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pits and directly inwardly therefrom to be drawn tightly and held firmly by said buckle means, the inner and outer end portions of the respective shoulder straps being disposed in generally parallel relation along the patient's back.

2. A clavicle splint as defined in claim 1 wherein said inner portions of said shoulder straps are each formed of laminated knit material which is relatively soft and flexible and of sufficient length to pass around the shoulders and under the arm pits and wherein the remainder of each shoulder strap is formed of woven strap material, said laminated knit material being quilted to render the same substantially inextensible.

3. A clavicle splint as defined in claim 2 wherein said second connector means comprises a pad adapted to be

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disposed at said point, said buckle member and said buckle means being disposed and secured entirely on the outer surface of said pad and secured thereto.

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