No. 744,477. PATENTED NOV. 17, 1903.

G. F. BUSH.

WEIGHT SUPPORTING DEVICE.

APPLICATION FILED JULY 1, 1903.

NO MODEL.

Fig. 1

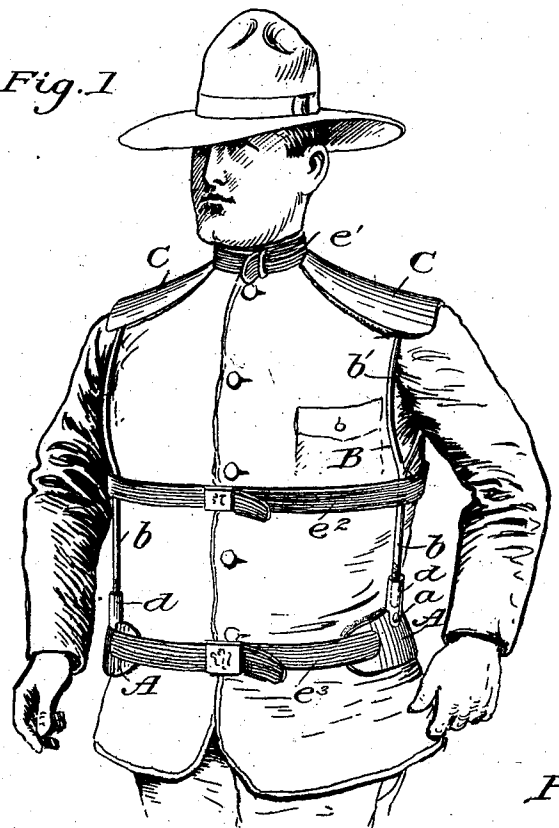


Fig. 2.

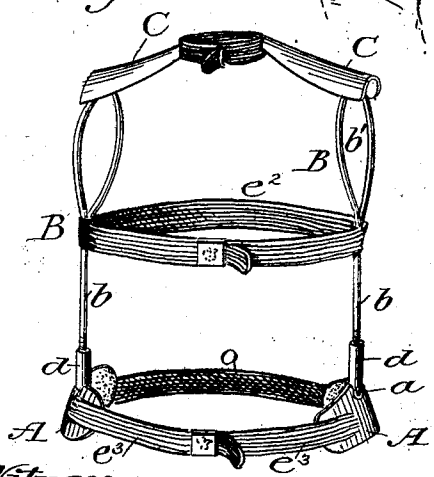


Fig. 4.

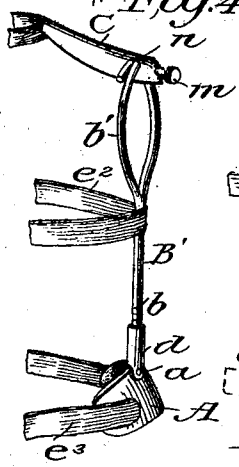
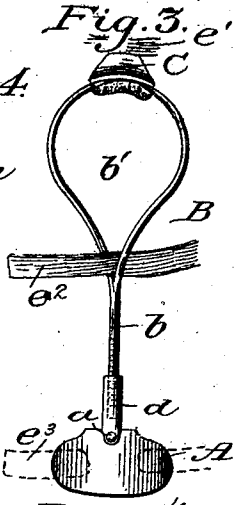


Fig. 3.



Witnesses

Joseph Matthews

Inventor:

George F. Bush

By John S. Rodgers

Atty

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

No. 744,477. Patented November 17, 1903.

UNITED STATES PATENT OFFICE.

GEORGE F. BUSH, OF PRICEDALE, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO FRANK E. COMSTOCK, OF ROCKBRIDGE, OHIO.

WEIGHT-SUPPORTING DEVICE.

SPECIFICATION forming part of Letters Patent No. 744,477, dated November 17, 1903.

Application filed July 1, 1903. Serial No. 163,914. (No model.)

To all whom it may concern:

Be it known that I, GEORGE F. BUSH, a citizen of the United States, residing at Pricedale, in the county of Westmoreland and State of Pennsylvania, have invented a new and useful Improvement in Weight-Supporting Devices, of which improvement the following is a specification.

My invention relates to improvements in body-braces in which the weight of the load of the laborer or soldier is supported principally from the hips instead of the shoulders.

The objects of my invention are, first, to provide means for relieving in a measure the vital organs of the body from the super-induced strain of shoulder-carrying; second, to afford facilities for the proper adjustment of distance between the shoulder-plate and hip-pad, and, third, appliances for easing the bearing of the same on the body. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of the device in use with both shoulders protected. Fig. 2 is a perspective view of the device detached from the body. Fig. 3 is a perspective view showing one brace in use. Fig. 4 is a modification.

Similar letters refer to similar parts throughout the several views.

The pads A, braces B, consisting of rigid stays *b*, and shoulder-plates C, constitute the frame parts. The pads A and plates C each have a stiff and rigid back, which is faced with soft material to avoid bruising parts of the body affected when used on both hips and shoulders. The pads are united by a flexible connection *o* to give freedom and pliability in walking. The stays may be secured to the pad in any manner known to the art, in the present instance by a pivot-bolt *a*, located in the upper edge of the pad, upon which the lower ends of the stays *b b* are mounted in order that the same may hinge and afford the other parts of the body a freer movement. The upper parts of the stays, as shown by *b'*, are divided to encircle the shoulder. The upper end of the brace is securely fastened to the shoulder-plate by welding or riveting or, as shown in the modification, by the upper parts of the stays being let through openings of the shoulder-plates and secured by set-screws to make the same adjustable. In order to adjust the braces to bodies of different sizes, a vertical adjustment is made at *d*. The said adjustment may be made in any manner known to the art. In the present instance threads are cut on the lower end of part *b*, and internal threads are cut in the socket *d* to receive the threaded part, thus making the shoulder-plate and hip-pad adjustable to bodies of different sizes. The shoulder-plates are also faced with a soft material to protect the shoulders from being bruised by contact and are provided in the modification with openings *n* to receive the upper ends of the stays. At *m* in the modification is a set-screw for adjustably clamping the said stays in the shoulder-plates.

e' e² e³ are belt-straps encircling the body and holding the brace in place. The said brace is constructed by mounting the stays on the pivot-bolt in the hip-pad, adjusting the same at *d* and in the modified form in the opening in the shoulder-plates, and securing the same by set-screws.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. A weight-supporting device for the human body, comprising a hip-pad, a shoulder-plate, a rigid stay connected to the said shoulder-plate, and belt-straps, said stay being pivoted to the hip-pad so that the said shoulder-plate may be supported by the said hip-pad.

2. A weight-supporting device, consisting of shoulder-plates and hip-pads, rigid stays connecting said plates and pads, belt-straps and a flexible connection between the said hip-pads.

3. A weight-supporting device, comprising a shoulder-plate, rigid stays, hip-pad and belt-straps, the said hip-pad being provided with a pivot-bolt upon which the said stays are mounted and supported.

4. A weight-supporting device, comprising the combination of a shoulder-plate, rigid stays, hip-pad and belt-straps, the shoulder-plate being provided with an opening for the said stays and a set-screw for the purposes set forth.

5. In a weight-supporting device for the hu-

man body, consisting of a pair of shoulder-plates, and a pair of rigid braces, provided with belt-straps, a pair of hip-pads, the said braces being connected to the said shoulder-plates and pivoted to the hip-pads so that both members of the shoulder-plates be supported by the hip-pads.

6. In a weight-supporting device, the combination of a shoulder-plate, a set-screw operating therein, hip-pads and curved rigid stays, the said stays being provided with belt-straps, and pivoted on a bolt in the hip-pads and secured in the openings in the shoulder-plate, the said hip-pads being provided with a flexible connection.

7. In a weight-supporting device for the human body comprising a shoulder-plate, a hip-pad, and a rigid stay provided with belt-straps, the said stay connecting the said shoulder-plates to the said hip-pad, the said stay being provided with a vertical adjustment.

8. In a weight-supporting device for the human body, comprising a shoulder-plate, a hip-pad and a rigid stay provided with belt-straps; the said stay being provided with a vertical thread and screw adjustment and connecting the said shoulder-plate to the said hip-pad.

9. In a weight-supporting device for the human body consisting of a pair of shoulder-plates, a pair of hip-pads, a pair of rigid stays, and belt-straps, the said stays being provided with vertical thread and screw adjustments and connecting the said shoulder-plates to the said hip-pads.

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

GEORGE F. BUSH.

In presence of—
B. A. ZOLLNER,
JOSEPH MATTHEWS.