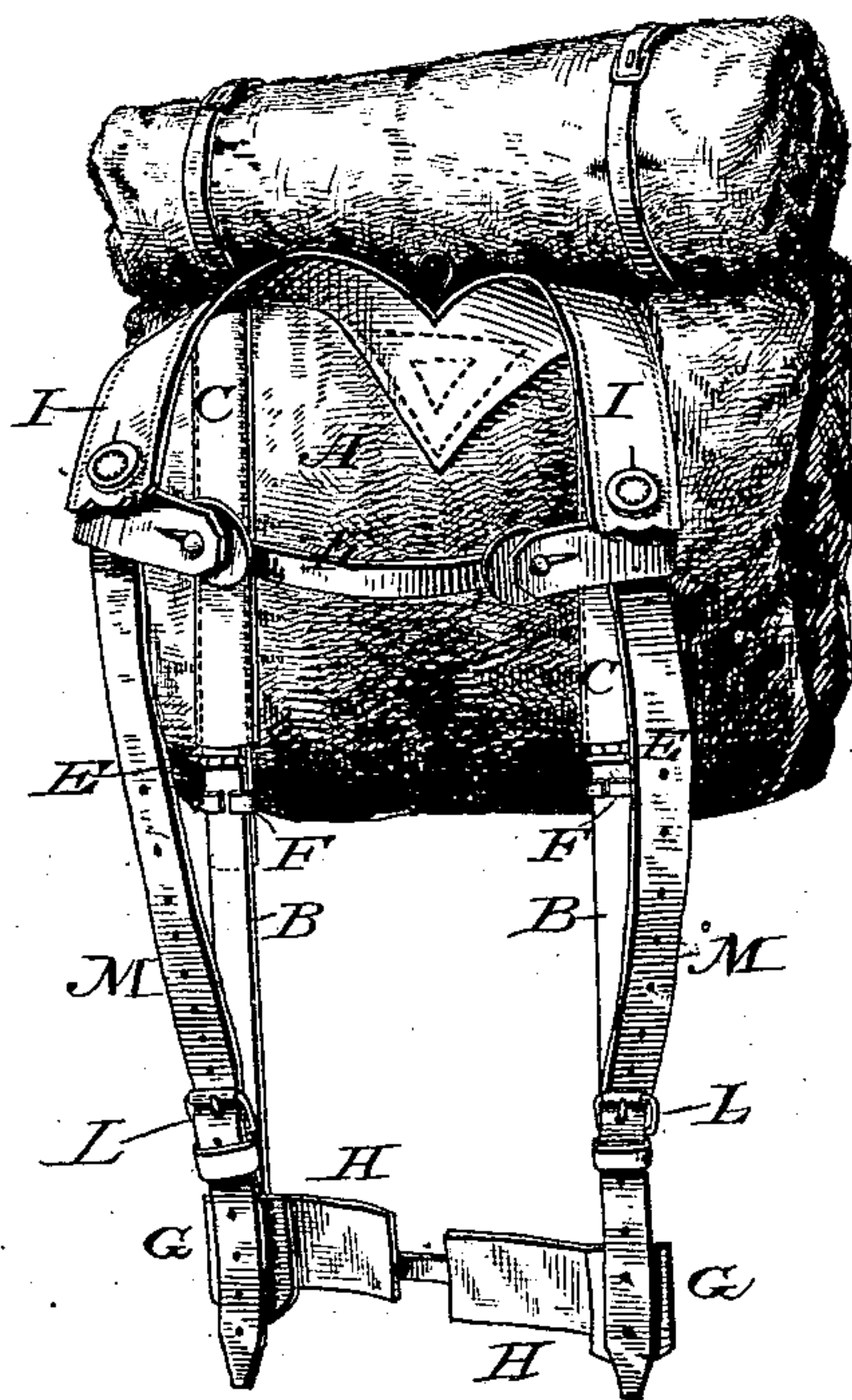


W. HOFFMAN.
Knapsack Attachments.

No. 227,166.

Patented May 4, 1880.



William Hoffman

Witnesses:

Wm Sanford
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Inventor:

UNITED STATES PATENT OFFICE.

WILLIAM HOFFMAN, OF UNITED STATES ARMY.

KNAPSACK ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 227,166, dated May 4, 1880.

Application filed January 7, 1880.

To all whom it may concern:

Be it known that I, WILLIAM HOFFMAN, of the United States Army, have invented a new and useful Improvement in the Mode of Sling-
5 ing Knapsacks, of which the following is a specification.

The invention relates to the appliances by which a knapsack is slung. Heretofore knapsacks have been slung by means of two straps
10 from the top of the knapsack passing over the wearer's shoulders and under the arms, where they are buckled to the bottom of the knapsack, the two straps being connected over the breast by a breast-strap. This method is ob-
15 jectionable, because the knapsack sags down in the hollow of the back, where much of the weight is supported, the two straps cut uncomfortably in the hollow of the arm, and the breast-strap presses heavily on and contracts
20 the chest, all to the great discomfort of the wearer.

The object of my invention is to provide a means by which the knapsack may be slung upon the parts of the person where the weight
25 can be carried with the least possible fatigue and discomfort.

The invention consists in attaching, by sheaths about eight inches apart, two elastic supports to the face of the knapsack next to
30 the wearer's back, which extend some ten inches below the bottom of the knapsack, where they rest in or are supported by sockets of leather or other material having buckles, into which the shoulder-straps are buckled, the
35 sockets being connected by a band.

In the accompanying drawing, the figure is a perspective of a device embodying my invention.

The sheaths C, eight inches apart, are formed
40 by two strips of leather, about one and a half inch broad, strongly sewed to the face of the knapsack next to the wearer's back, and extend from the top to the bottom of the knapsack. The two elastic steel supports, B, about
45 twenty-two inches long, one and one-eighth

inch broad, and one-eighth of an inch thick, are inserted in the sheaths C, where they may be secured by rivets or otherwise. They have a joint at the bottom of the knapsack, which
50 allows them to turn over against the sheaths C, so as to be out of the way when not in use.

To make the joint E rigid when the knapsack is worn, there is a plate attached on one side of the joint E, and extending one inch
55 beyond it, which is held fast by a slide, F, embracing it and the part of the support next to the joint, the slide having only play enough to cover and uncover the extension.

The two sockets G, to receive the lower ends of the supports, are made of leather, and have
60 buckles L on the inside—that is, next the wearer—into which are buckled the straps M, passing to the front from the top of the knapsack over the shoulders.

The sockets G are connected by a band, H, 65 with a strap and buckle on the outside, by which it can be lengthened or shortened to suit the wearer.

Slung in this way the weight of the knapsack is thrown upon the breast and shoulders
70 by the metallic breast-band K and suspension-straps I, without compressing the chest or cutting under the arm, and upon the buttocks of the wearer, where the supports in the sockets and the connecting-band rest, the hollow of
75 the back being entirely relieved and the leverage greatly reduced by the removal of the fulcrum from the bottom of the knapsack to the ends of the supports.

What I claim is—

In a device for supporting knapsacks, the elastic supports B, jointed at E, and provided with slides F, and adapted to rest in the
80 sheaths C and sockets G, substantially as shown and described.

WILLIAM HOFFMAN.

Witnesses:

C. R. CHAMBERLIN,
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