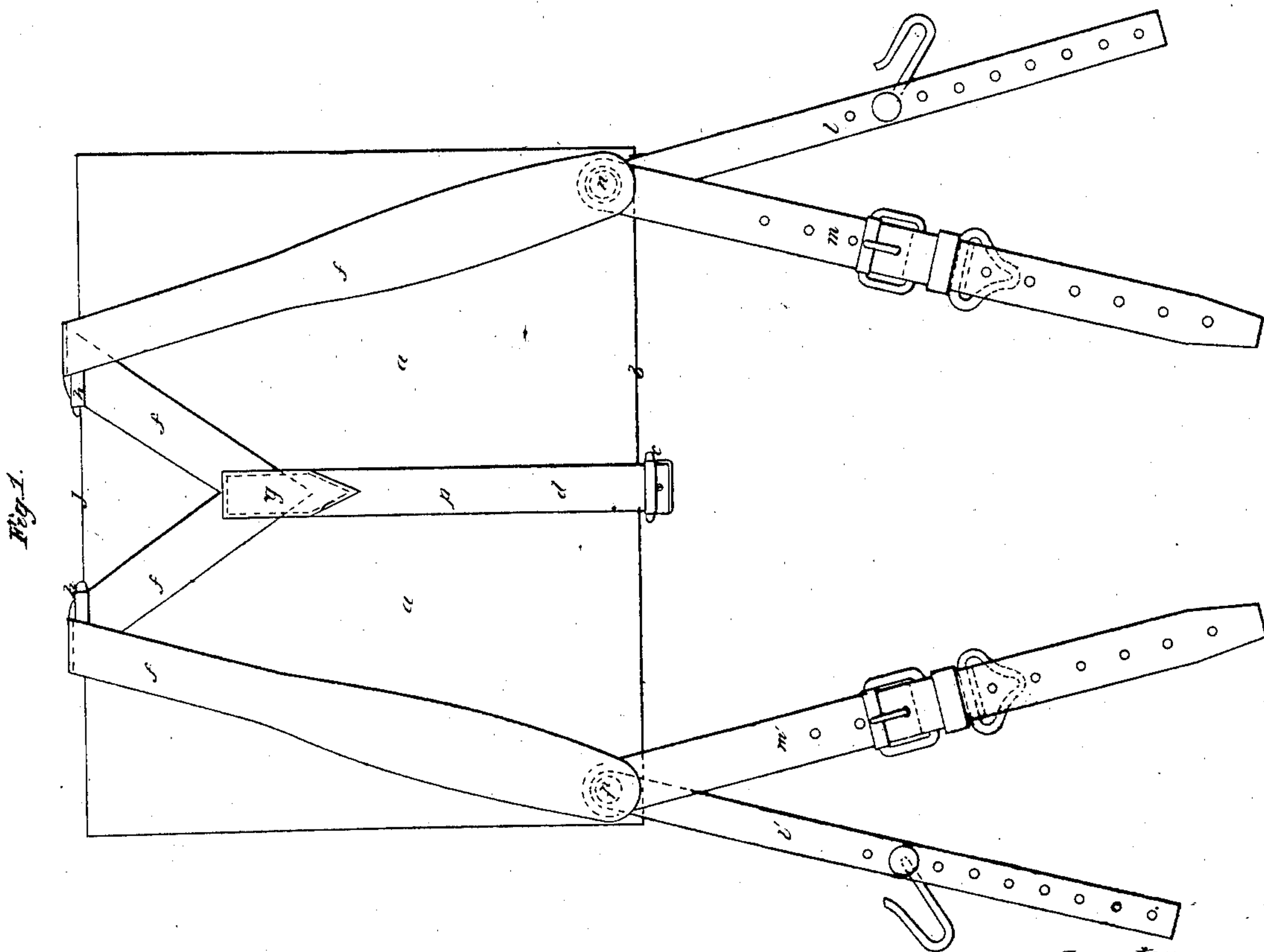
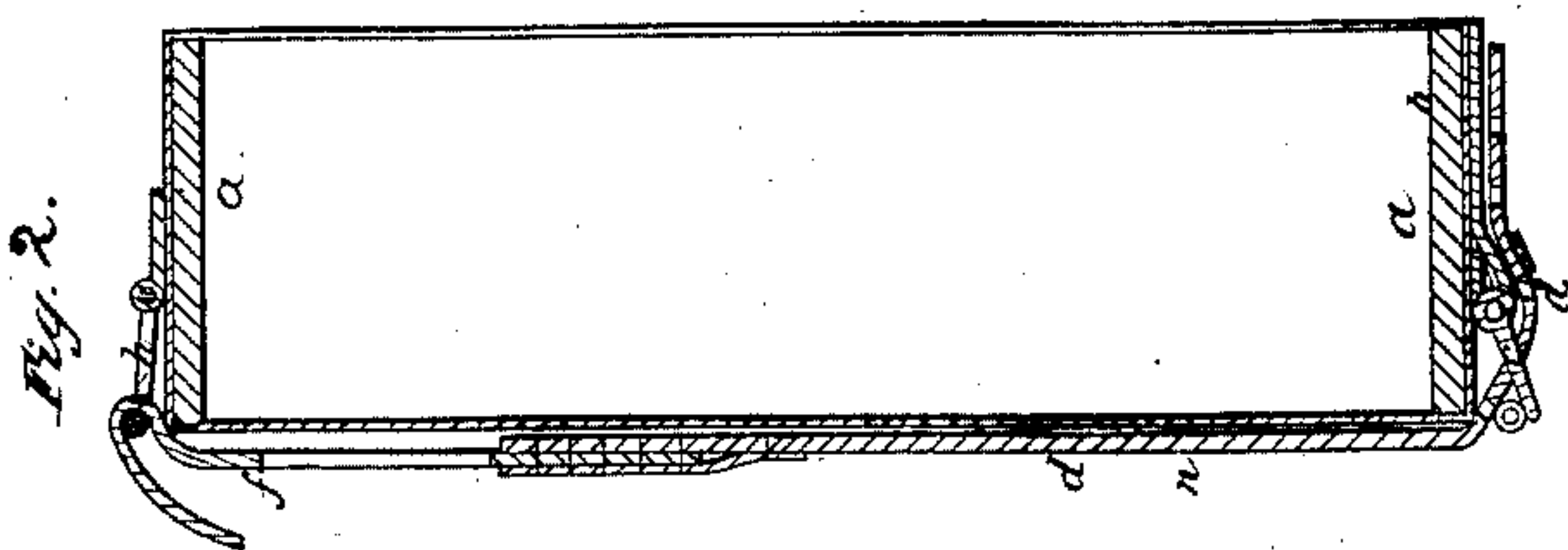


A. N. Clark,
Accounterment.

N^o 37,936.

Patented Mar. 17, 1863.



Witnesses.

Joseph Gurnett
to
Miss M. Magall

Inventor.

A. N. Clark by his atty
E. J. Lincoln

UNITED STATES PATENT OFFICE.

AUGUSTUS N. CLARK, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO RUBBER CLOTHING COMPANY.

IMPROVEMENT IN KNAPSACKS.

Specification forming part of Letters Patent No. 37,936, dated March 17, 1863.

To all whom it may concern:

Be it known that I, A. N. CLARK, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Knapsacks; and I do hereby declare that the following description, taken in connection with the accompanying drawings, hereinafter referred to, forms a full and exact specification of the same, wherein I have set forth the nature and principles of my said improvements by which my invention may be distinguished from all others of a similar class, together with such parts as I claim and desire to have secured to me by Letters Patent.

One very serious disadvantage arising from the use of knapsacks for soldiers, with the mode of attachment as now arranged, and which conduces very much to the inconvenience and discomfort of the soldier wearing the same, is that the straps or other means employed for the securing of the knapsack to the back would not admit of being so adjusted or arranged as to conform, or be easily adapted to the varying sizes and dimensions of the back, shoulders, &c. The most common way of arranging these straps has been to permanently fasten at one end, to the center, or the upper edge of the knapsack, two straps, to the other ends of each of which two other straps were jointed so as to freely turn. Thus, when the knapsack was placed upon the back and the straps thrown over the shoulders, one of the jointed straps in each case was hooked to the body-belt, and the other passed directly under the arm-pit and hooked or buckled to the lower edge of the knapsack. Now, it is evident from the above description that as no mode was provided for altering or adjusting the lengths of the straps permanently secured to the knapsack, the point of the said straps at which the fastening-straps were attached would vary in its relative position upon the chest of the person wearing the knapsack, according as he was full-chested and stout, or narrow-chested and slim, thereby producing in some cases, when the said point was too high or near the shoulders, a very unpleasant and uneasy feeling, and a slight binding or chafing of the arm-pit, &c.

The object aimed at and secured by the

present invention is to so arrange the means employed for securing the knapsack to the back of persons as to permit of its being altered or adjusted in such a manner as to be easily adapted to the back of any person, whether stout or slim. I accomplish this result by attaching to the lower edge of the knapsack at its center, by means of a buckle or other suitable device, a strap, to the other end of which, near the center of the knapsack, two radiating-straps are permanently fastened at an angle to the same, and then passed through guides upon the top portion of the knapsack, over the shoulders of the person wearing the knapsack. Two swinging-straps are then attached to the end of the angular straps resting upon the chest, one of which straps in each case is hooked to the body-belt, and the other passed under the arm-pit to the lower edge of the knapsack. The length of the strap attached to the lower edge of the knapsack at its center, by means of the buckle or other suitable device, is thus susceptible of being regulated at pleasure, so as to vary the position of the point upon the chest of persons, from which the fastening-straps are respectively passed to the body-belt and the lower edge of the knapsack, thereby permitting the same to be always placed at its most advantageous position, and the one most adapted to the comfort of the person wearing the knapsack.

Another great advantage secured by my improvements over all others is the obviating in a great measure of the unpleasant and burdensome strain upon the shoulders, caused by the weight of the knapsack and its contents, which has been greatly increased by the manner in which the attachment-straps have been heretofore secured to the knapsack, the tendency of the knapsack and its contents being to pull off from the shoulders, and thus cause the person to bend forward in order to keep the knapsack in proper position, whereas my improvements produce an opposite result, the top of the knapsack being held up to the back, and the lower portion being allowed to swing off, the beneficial results of which are apparent without further explanation.

In the accompanying plate of drawings, Figure 1 is a front view of a knapsack with my im-

proved mode of attachment applied thereto. Fig. 2 is a central vertical transverse section of same.

a a in the accompanying drawings represent the box-portion of a knapsack that is covered with rubber cloth, leather, or any other suitable material, and arranged in the ordinary manner. To the lower edge, *b*, of the knapsack *a*, and in its center, a buckle, *c*, is permanently secured, through which a strap, *d*, is passed and buckled.

f f are straps sewed or otherwise fastened to the end *g* of the strap *d*, and which pass upward at an angle to the said strap *d*, and through guides *h h* of the top surface, *j*, of the knapsack and near each end of the same,

l m and *l' m'* are the fastening straps attached to the end *n* of the straps *f f*, so as to turn loosely thereon, one of which *l, l'*, in each case hooks to the body-belt, and the other, *m m'*, to the lower edge of the knapsack.

By means of the buckle *c*, above referred to, it is evident that the length of the portion *n* of the strap *g* above the same can be adjusted at pleasure by simply moving the strap through the buckle in the ordinary manner, and consequently the turning-point *n* of the fastening straps can be varied in position

upon the chest of the person wearing the knapsack, and thus be made to suit the varying dimensions of the chest, &c., in different persons, and to always allow the said turning-point to be placed in the position most suitable and most adapted to the comfort and ease of the person.

From the above description it will be seen that by hanging the knapsack in the manner described—that is, at the upper edge—instead of the common way, at the center, the knapsack is prevented from pulling off from the shoulders and back, and is also firmly and securely held up to the same, the advantages of which are readily apparent.

Having thus described my improvements, what I claim as my invention, and desire to have secured to me by Letters Patent, is—

The combination, with shoulder-straps radiating from an adjustable center-strap, as described, of guides or loops fixed to the upper side of the knapsack, the whole being arranged together, and operating substantially as described, and for the purposes specified.

AUGUSTUS N. CLARK.

Witnesses:

JOSEPH GAVETT,

ALBERT W. BROWN.