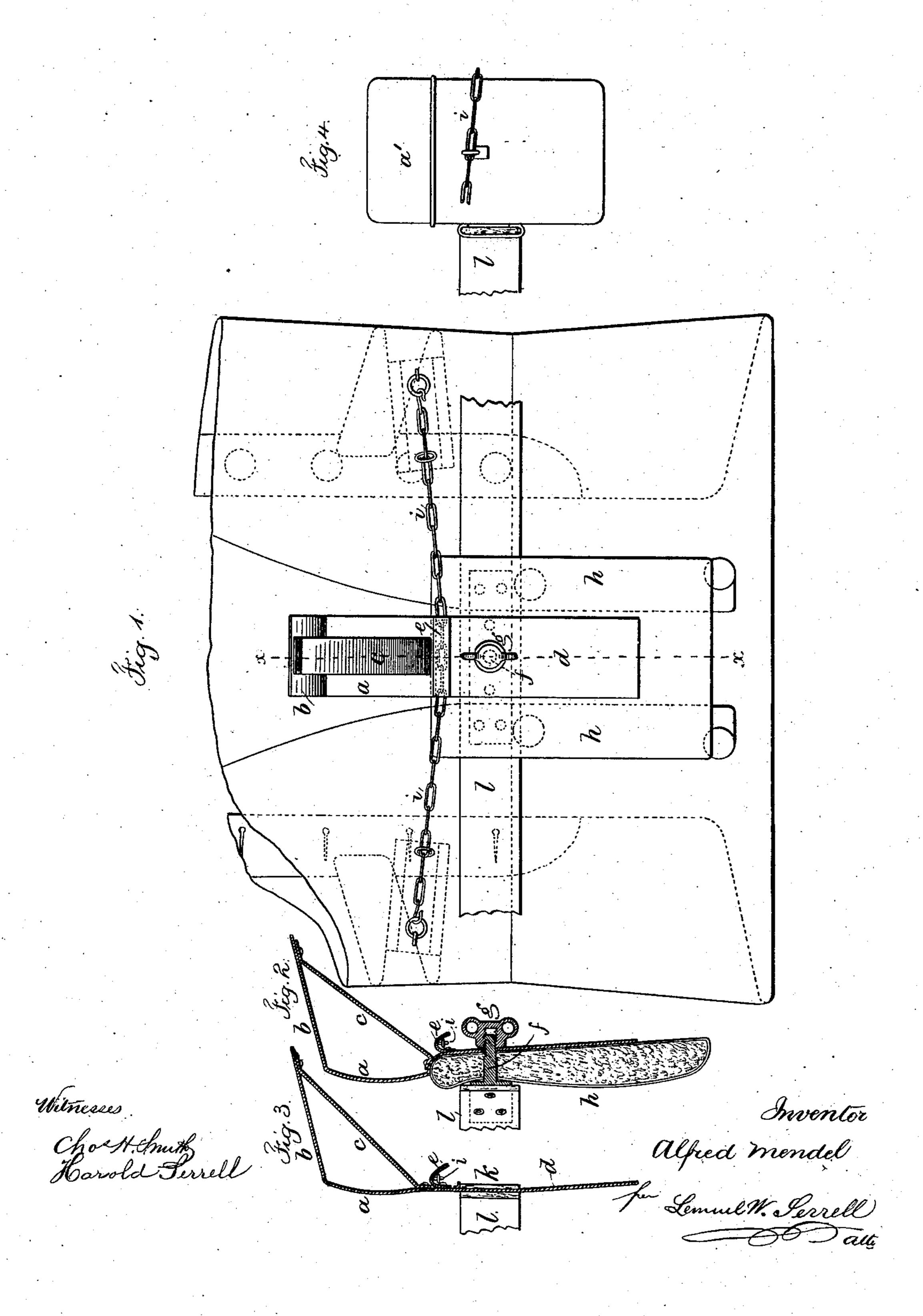
## A. MENDEL.

## MEANS FOR CARRYING KNAPSACKS.

No. 292,566.

Patented Jan. 29, 1884.



N. PETERS, Photo-Lithographor, Washington, D. C.

## United States Patent Office.

ALFRED MENDEL, OF DRESDEN, SAXONY, GERMANY.

## MEANS FOR CARRYING KNAPSACKS.

SPECIFICATION forming part of Letters Patent No. 292,566, dated January 29, 1884.

Application filed November 10, 1883. (No model.)

To all whom it may concern:

Be it known that I, Alfred Mendel, of Dresden, in the kingdom of Saxony, German Empire, have invented an Improvement in Means for Carrying Knapsacks for Military, Tourists', and other Purposes, of which the following is a specification.

The object of this invention is to provide means by which the load or weight of the knapsack, generally carried on the back by military men, tourists, &c., is taken away from the shoulders and distributed over a larger

area of the body.

Hitherto, in the mode of carrying the knap-15 sack, the entire weight or load of it rested by means of straps on the comparatively small surface or area presented by the shoulders. The straps used in some countries by military men are provided with hooks by which such 20 straps are hooked underneath the sword-belt, but they do not relieve the shoulders. The freedom of movement in the shoulders greatly promotes the comfort and facility in marching. By the hereinafter-described means the 25 necessary mobility of the shoulders is not interfered with by the knapsack, and the person is better able to endure exertion or fatigue. The object sought is attained by providing a rest or bearer for carrying the knapsack, which 30 piece is supported by a chain fixed to and carried by the coat in such a manner that the coat forms a broad belt for distributing the weight of the knapsack on the person. The load or weight of the knapsack does not rest, as here-35 tofore, by small straps upon comparatively small parts of the body, but is carried or distributed in front and on the sides of the buttoned coat. The shoulder-straps now merely serve to hold the knapsack toward the body. 40 The bearer, or carrying-piece, upon which the knapsack rests, is not carried by the swordbelt, (though the bearer or carrying-piece is attached to this belt,) but is carried or supported by the connection to the coat.

In the drawings, Figure 1 represents part of a coat, with my knapsack-holding device in place. Fig. 2 is a section at x x. Fig. 3 represents a modification in the manner of connecting the carrying-piece to the belt, and

50 Fig. 4 illustrates how a camp-kettle may be connected to the sword-belt and form the support for the knapsack.

The bearer or carrying-piece a consists, mainly, of an angle-piece of sheet iron or steel. The horizontal part b of this angle-piece forms 55 the rest for the knapsack. The part b is supported by the brace-piece c. The vertical part d is provided with a hook, e, into which the chain is passed. The bearer or carrying piece a, with its vertical part d, is now either in- 60 serted into a sheath, k, fastened to the belt l, as seen in Fig. 3, or it is fixed to said belt l by means of a screw-bolt, f, and nut g, as shown in Figs. 1 and 2. In using this bolt and nut it is recommended to insert or place between 65 the belt l and the carrying-piece a a cushion, h, stuffed in any suitable manner; but this cushion may also be used as a repository for lint, flaps, patches, or such like soft articles of outfit for marching men. This cushion 70 transfers the pressure of the part d to a larger area of the body. The chain i may be hooked into two hooks, protruding at any convenient part from the coat; or the chain may at its one end be fixed to the coat by a button, a ball, 75 or an eye, and may be hung with its other end in a hook or ring, according to the required length, this hook or ring being also fixed to the coat. The chain must be of such length that it actually carries the bearer a by the 80 hook e, and that this bearer a is not carried

It is of importance that the two devices for fastening the chain to the coat—namely, the button, ball, or eye on one side, and the hook 85 or ring on the other side—are not merely sewed or attached to the cloth or its lining, but are sewed or attached to straps or patches of leather or similar strong material, which extend over a large area at the inside of the coat. 90 The load or weight of the knapsack is transferred by means of the chain i and the bearer or carrier a b c d to a large area of the body; in fact, the coat, buttoned in front, forms a broad belt carrying the knapsack. The shoulous ders are perfectly freed from pressure, load, or weight, and are not hindered in mobility

during marching.

by the belt l.

For military purposes there may be used instead or in the place of the bearer or carry- 100 ing-piece a the field or camp-kettle a', which is to be attached or fixed in the above-described manner to the sword-belt. Into the two lugs of the field or camp kettle a' the chain

i is hooked, which chain in this instance may be made in two parts—one for each side of the kettle. The cover of the kettle a' forms the rest for the knapsack; the kettle a' itself forms the bearer or carrying-piece, which hangs by the chains i, the chains being supported by the buttoned coat in the above-described manner.

I claim as my invention—

10 1. The combination, with the knapsackbearer, of attaching devices for connecting such bearer to the coat at the sides thereof, substantially as specified.

2. The combination, with the knapsack-bearer, of the attaching devices for connecting such bearer to the coat at the sides thereof and the device for connecting the bearer to the waist-belt, substantially as specified.

This specification signed by me this 19th

day of October, A. D. 1883.

ALFRED MENDEL.

Witnesses:

Wilhelm Wiesenhütter, Martin Körner.