

No. 657,575.

Patented Sept. 11, 1900.

V. SMERDOFF.
KNAPSACK.

(No Model.)

(Application filed May 9, 1899.)

2 Sheets—Sheet 1.

Fig. 1.

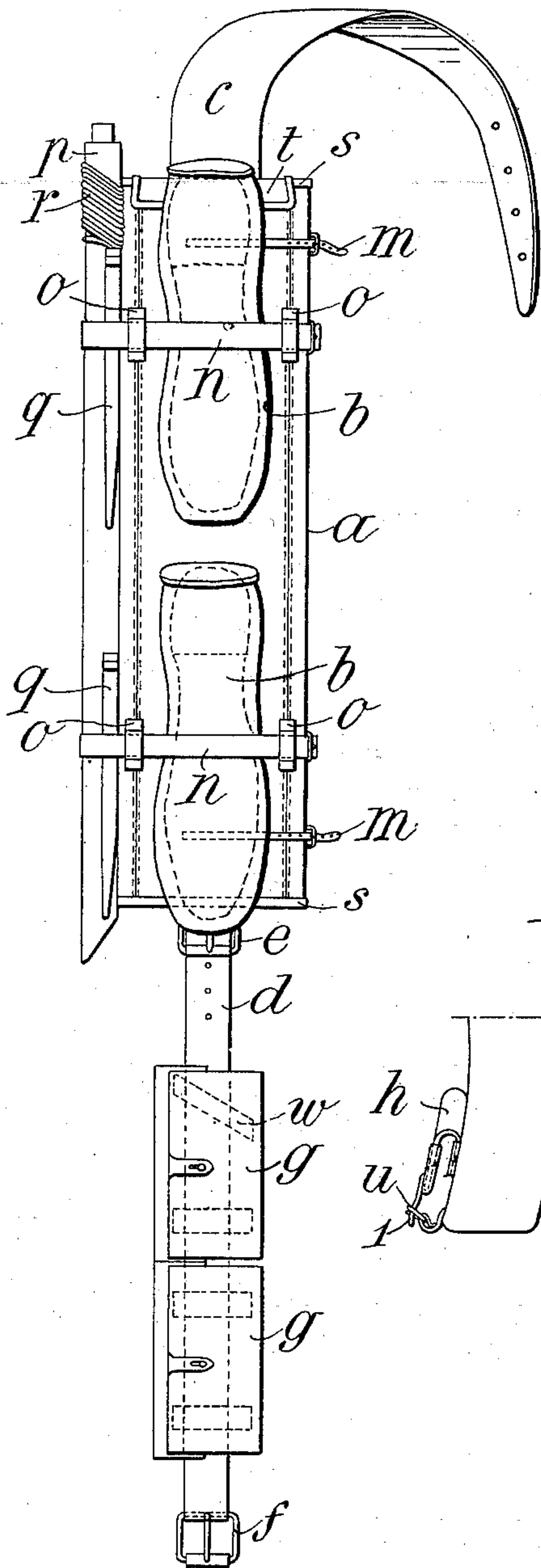


Fig. 2.

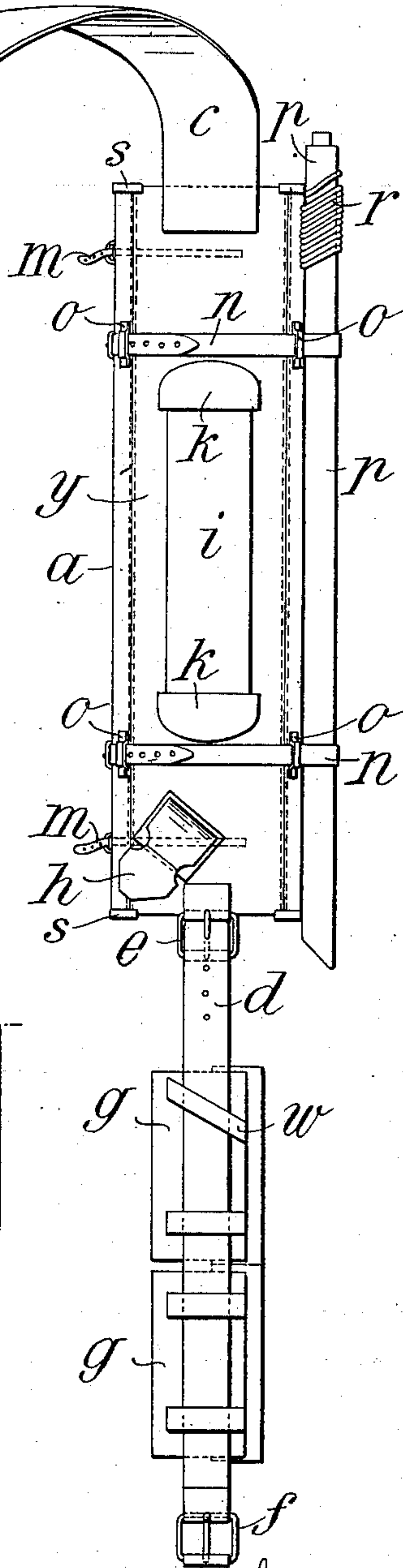
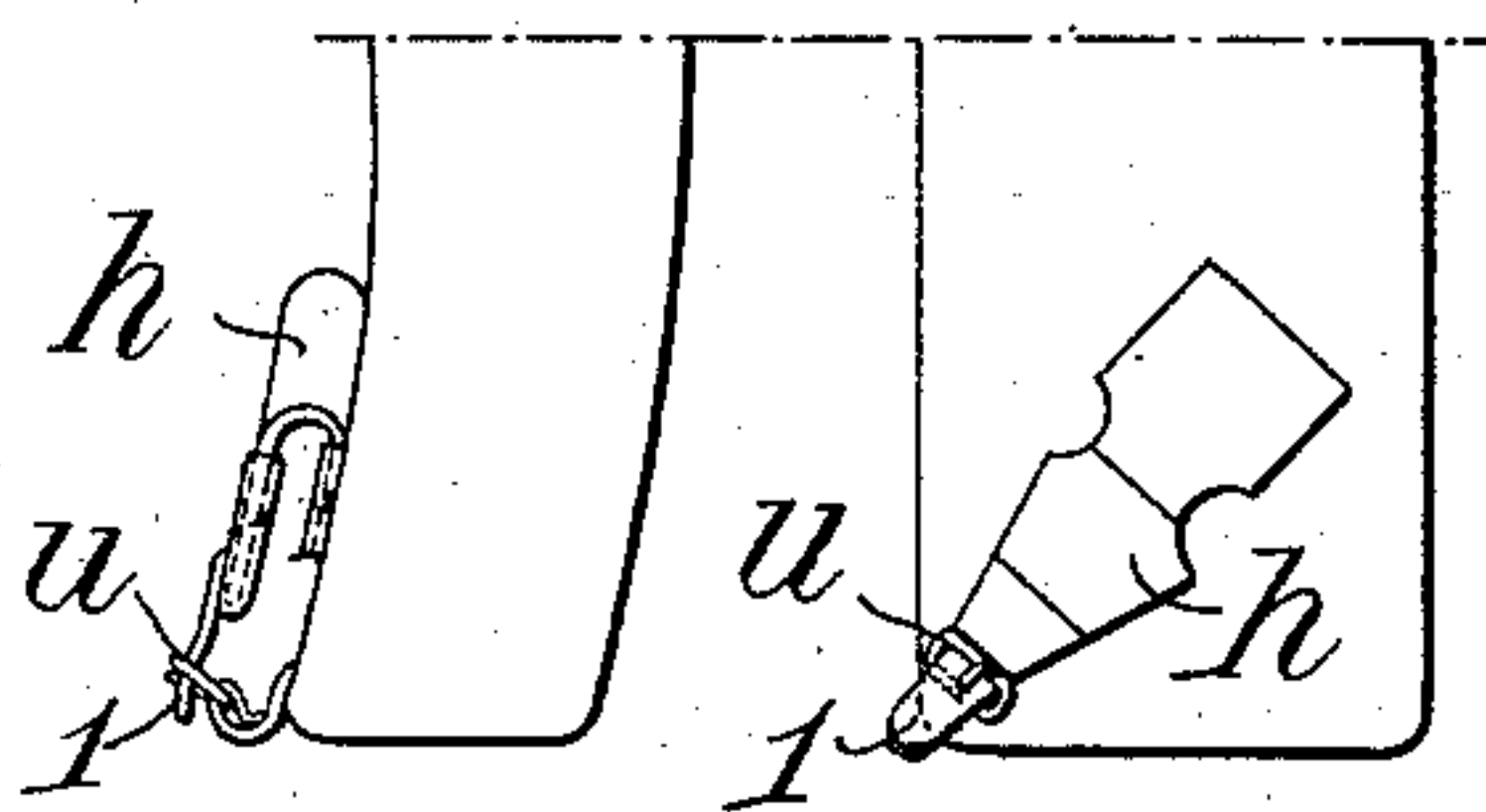


Fig. 7.



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Fig. 4



Fig. 5.

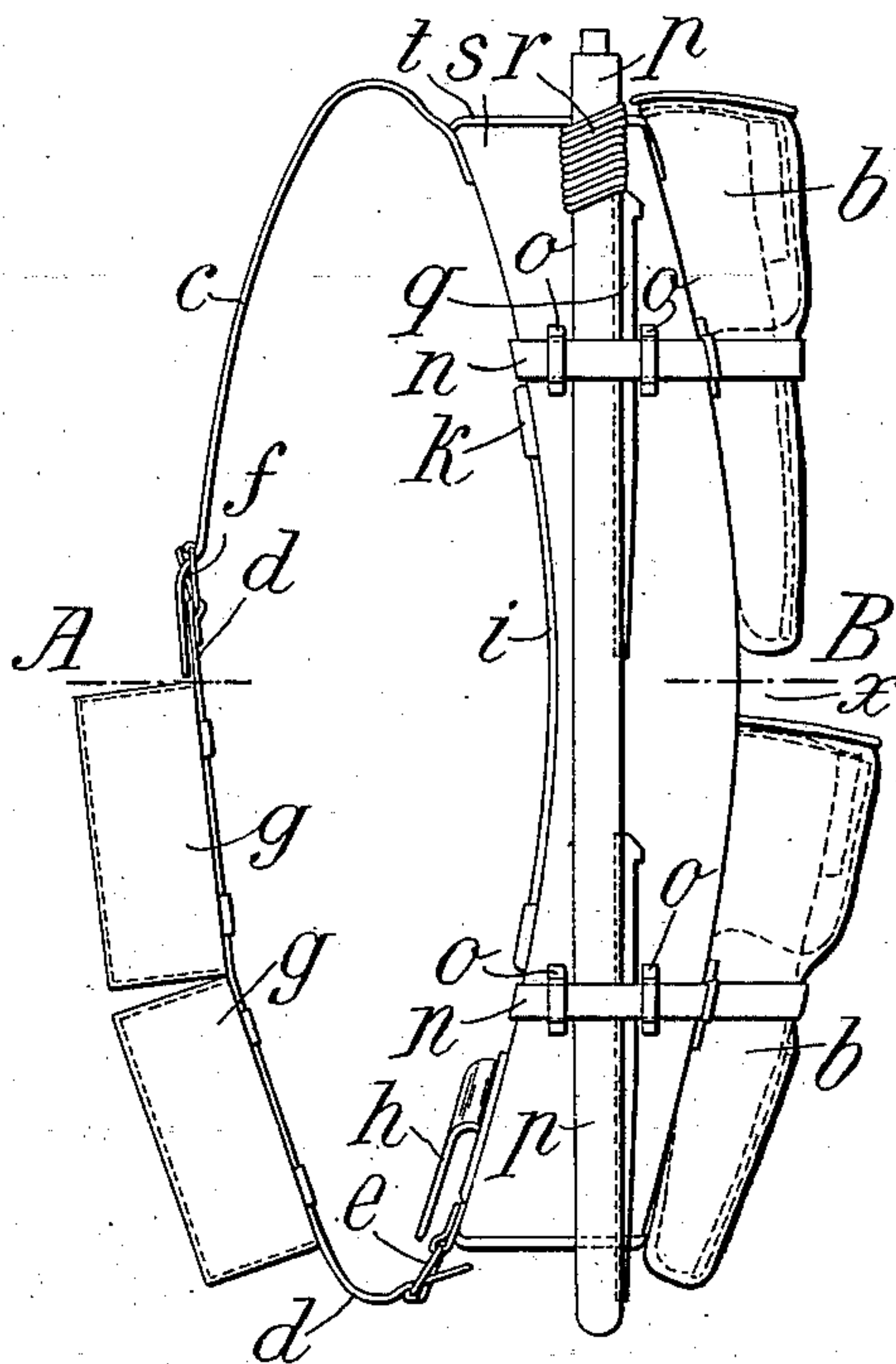


Fig. 6

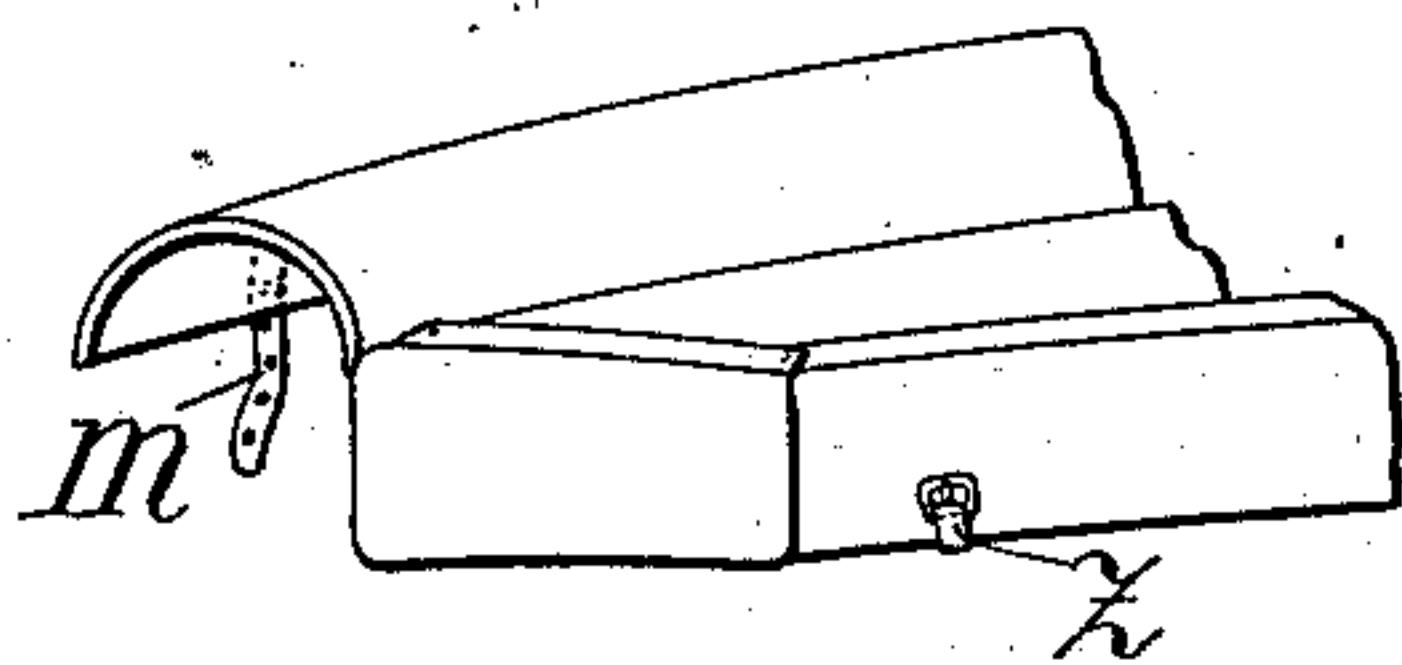


Fig. 7.

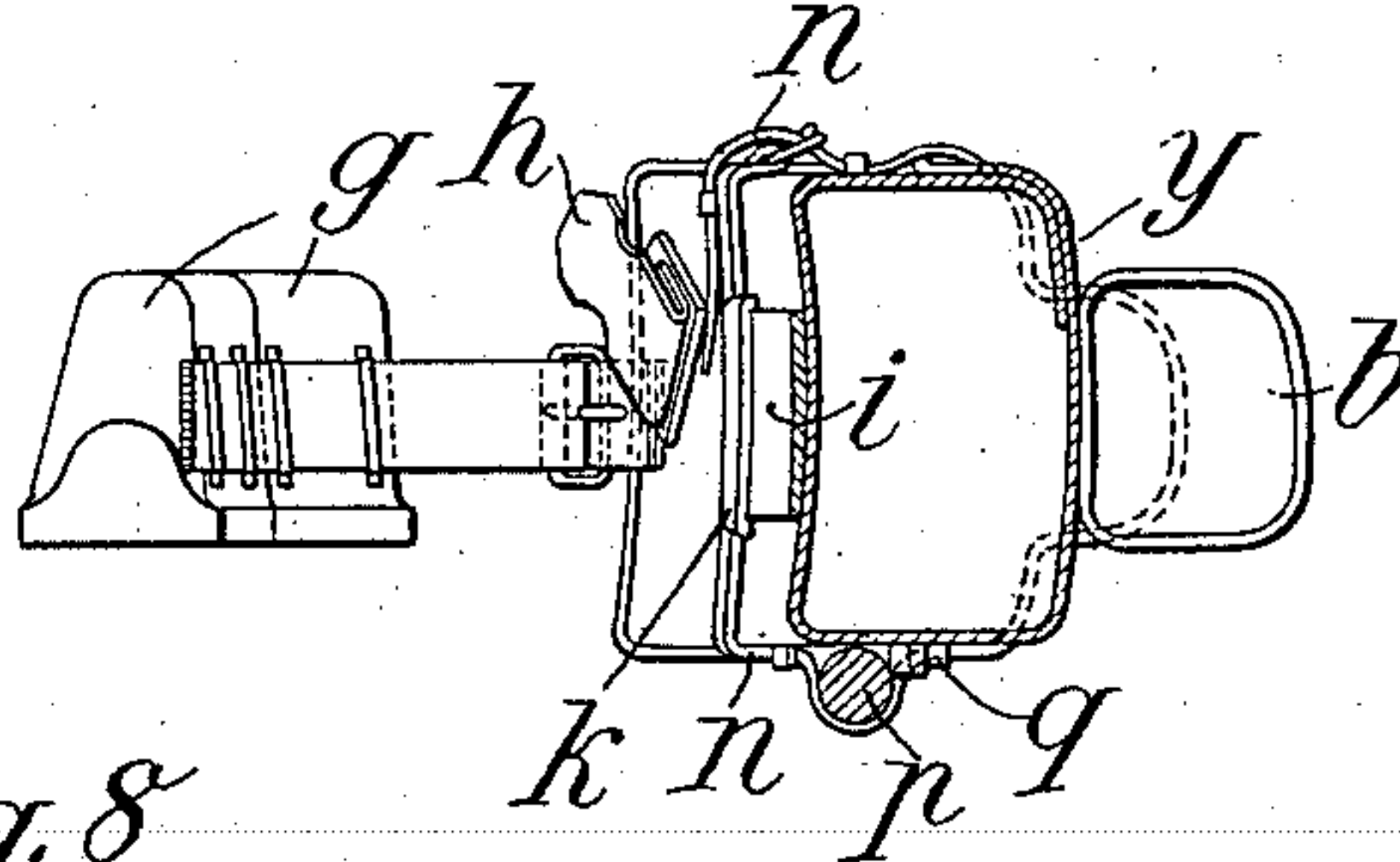
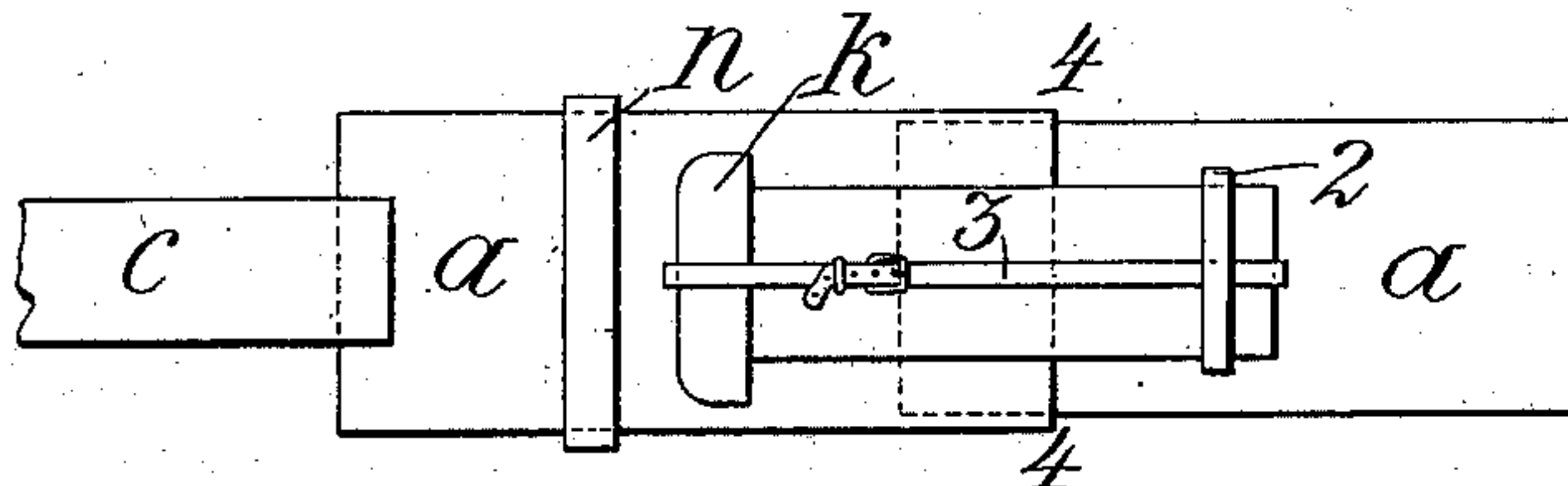


Fig. 8



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UNITED STATES PATENT OFFICE.

VLADIMIR SMERDOFF, OF WARSAW, RUSSIA.

KNAPSACK.

SPECIFICATION forming part of Letters Patent No. 657,575, dated September 11, 1900.

Application filed May 9, 1899. Serial No. 716,127. (No model.)

To all whom it may concern:

Be it known that I, VLADIMIR SMERDOFF, lieutenant in the Volhynien Regiment of Life Guards, a subject of the Emperor of Russia, residing at Warsaw, in the Province of Poland, in the Empire of Russia, have invented certain new and useful Improvements in Knapsacks; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to characters of reference marked thereon, which form a part of this specification.

A knapsack according to this invention is carried on the back by means of a strap passing from the right shoulder to the left hip and buckled together on the breast and is supported by the waist-belt by means of a hook, so that the whole weight of the knapsack is transmitted to the left hip, and the right shoulder of the soldier is thus completely freed from weight, which greatly facilitates the handling of the rifle or the side-arm. By means of an outwardly-arched plate the knapsack is kept away from the back of the soldier, so that air can circulate freely between the soldier's body and the knapsack.

Figures 1 and 2 of the accompanying drawings are respectively a back and a front elevation of such a knapsack. Fig. 3 is a horizontal section corresponding to the line A B of Fig. 5. Fig. 4 shows a soldier with his greatcoat on and carrying the knapsack and the tent-sheets crossed over his breast and back. Fig. 5 is a side view of the knapsack. Fig. 6 shows the closing arrangement, and Fig. 7 shows the carrying-hook in front and side view. Fig. 8 shows another example of a knapsack according to this invention somewhat different from that shown in Figs. 1 to 7.

The knapsack shown in Figs. 1 to 7, inclusive, comprises an oblong bag *a*, which in order that it may be as light as possible is made of black waterproof canvas or other suitable material, such as balloon-silk. The side *y* that is the farther from the soldier's back forms the cover and is secured by straps *m* and buckles *z*. The opposite side, which rests on the back, forms the bottom. The stiffening at the ends is effected by side pieces *s*.

At the upper end of the knapsack, which is at the height of the right shoulder when being carried, there is fastened a strap *c*, and at the lower end there is fastened a buckle *e*, in which is secured a strap *d*, on which are slid two cartridge-pouches for thirty cartridges each. On the other end of the strap *d* there is provided a buckle *f*, by means of which the upper strap *c* is fastened on the man's breast and the knapsack on the back secured in place. One of the cartridge-pouches *g* is provided with an oblique runner *w*, which when the knapsack itself is not carried is vertical and through which the waist-belt is then drawn, as hereinafter explained.

On the part of the knapsack which when the knapsack is worn is situated next to the man's back an outwardly-arched wooden plate *i* is held by two leather pockets *k*, whereby the knapsack is prevented from lying close to the back of the soldier, so that air can circulate freely between the knapsack and the back of the man.

Close to the lower buckle *e* there is fastened a carrying-hook *h*, covered with leather, or a leather strip of similar dimensions, which, as the case may be, is hooked to the waist-belt or secured to it by means of a buckle *u*, Fig. 7. Thus the whole weight of the knapsack is transferred to the left hip, and the right shoulder is completely freed from weight, which is a great advantage in shooting or using the side-arm.

The knapsack is closed by a cover *t*, which extends over the upper perforated side portion *s* and is secured by means of a buckle-strap *v*. After opening the cover the long side *y* can be thrown back in the manner shown in Fig. 6 and then fastened by means of straps *m* and buckles *z*. The knapsack can thus be opened along its entire length and at the top or only at the top by unbuckling the cover *t*.

The knapsack, which is closed by two or more little straps *m*, is provided at the upper and at the lower end with four leather runners *o*, through which are drawn two straps *n*, of which the upper one may be broader and longer than the lower one and by means of which the spare shoes kept in the bags *b*, the tent-poles *p*, with the tent-cords *r* wound

around them, and the tent-pegs *q* are buckled firmly to the knapsack. On the upper side of the boot-bags runners can also be provided in order to keep the straps *n* secure and in place.

In Fig. 4 the soldier is shown as carrying (in addition to the knapsack *a*) the tent-sheets from the left shoulder to the right hip. In this case the spare shoes are not carried in the bags *b* on the outside of the knapsack *a*, but in the tent-cloth, to which also the tent-poles *p* and the tent-pegs *q* are buckled or secured by means of the tent-ropes, as shown.

The knapsack is thrown over the right shoulder in such a manner that the concave side rests on the back. The carrying-hook *h* is made to engage with the waist-belt and fastened by means of the buckle *l*. The cartridge-pouches rest in front on the left side of the body near the hip. The rolled great-coat is carried from the left shoulder to the right hip and crosses the knapsack on the back, on which it rests in the space *x*, Fig. 5, between the shoe-bags *b*. If the cartridge-pouches *g* alone are to be carried and the knapsack *a* is to be laid aside, the upper strap *n*, which is made broader and longer for the purpose, is unbuckled and after loosening the fastenings at *f* and *e* is secured at one end to the buckle *f* and at the other end by means of its own buckle to the strap *d*. The cartridge-pouch strap *d n* thus lengthened is also carried from the right shoulder to the left hip, and the waist-belt is drawn through the cartridge-pouch runner *w*.

In order to prevent the upper end of the knapsack from striking against the right shoulder while running, there may be drawn through between the plate *i* and the knapsack, or so as to engage with the strap *n*, which holds the upper of the two shoe-bags *b*, a narrow strap, which is brought to the front under the arm-pits and buckled on the breast. When this strap is in use, it can be drawn, together with the strap that holds the upper boot-bag, through the runner that holds the latter and which is made somewhat larger.

If a knapsack is required that can be shortened for carrying less luggage and lengthened for carrying more luggage, the example shown in Fig. 8 is used. The plate, of wood, *i* is in this case fastened only by the upper end to the leather pocket *k*, while the lower end passes freely under a leather runner 2, and over the upper pocket *k* and the wooden plate *i* runs a narrow strap 3, which holds the wood plate *i* firmly. The bag *a* itself is made in two parts, one of which is slid inside the other, so that the length of the bag can be increased or reduced, as required.

The advantages of a knapsack according to this invention are great lightness, an easy way of carrying, which completely frees the soldier's right shoulder from weight by transferring the load to the left hip, and free cir-

culatation of air between the knapsack and the back of the man.

I claim—

1. A knapsack to be carried obliquely across the back of the body, comprising an oblong flexible receptacle closed at one end only, the outer side of said receptacle constituting a cover therefor, a cover for the open end of the receptacle, straps secured to the opposite ends thereof, means for connecting said straps in front of the body and an arched plate secured to the inner side of said receptacle, for the purpose set forth.

2. A knapsack to be carried obliquely across the back of the body, comprising an oblong flexible receptacle closed at one end only, the outer side of said receptacle forming a cover therefor and for its open end, straps secured to opposite ends of the receptacle, means for connecting the straps in front of the body, and an arched plate secured to the inner side of said receptacle, for the purpose set forth.

3. A knapsack to be carried obliquely across the back of the body comprising an oblong flexible receptacle closed at one end only, the outer side of said receptacle constituting a cover therefor, and for the opened end of the receptacle, straps secured to the opposite ends thereof and adapted to be connected in front of the body, pockets secured to the inner side of said receptacle, an arched plate held in said pockets, and a carrying-hook secured to the lower end of the receptacle for supporting it from the waist-belt, substantially as specified.

4. A knapsack to be carried obliquely across the back of the body comprising an oblong flexible receptacle closed at one end only, the outer side of said receptacle constituting a cover therefor, straps secured to the opposite ends thereof and adapted to be connected in front of the body, cartridge-cases mounted on one of said straps, pockets secured to the inner side of the receptacle, an arched plate held in said pockets, supplemental receptacles mounted on each end of the main receptacle, straps for securing said supplemental receptacles and runners for holding said straps in position, substantially as and for the purpose specified.

5. A knapsack to be carried obliquely across the back of the body, comprising an oblong receptacle provided with strap-loops at different points, straps secured to opposite ends of the receptacle and means for connecting said straps in front of the body, in combination with shoe-holders and straps passing through the aforesaid loops on the receptacle for strapping said holders thereto at different points of its length, substantially as set forth.

6. A knapsack to be carried obliquely across the back of the body, comprising an oblong receptacle, a strap secured to one end thereof, a buckle secured to its opposite end,

a strap *d* connected at one end with said buckle and having a buckle at the opposite end, cartridge-pouches threaded on strap *d*, one of said pouches having an oblique strap-loop, said receptacle provided with strap-loops *o* and straps *n* held and guided thereby, one of said straps wider than the other, substantially as and for the purpose set forth.

7. A knapsack to be carried obliquely across the back of the body comprising an oblong receptacle, a strap secured to one end thereof, a buckle secured to its opposite end, a strap *d* connected at one end with said buckle and having a buckle at the opposite end, cartridge-pouches threaded on strap *d*,

one of said pouches having an oblique strap-loop, said receptacle provided with strap-loops *o*, straps *n* held and guided thereby, one of said straps wider than the other, and means for supporting one end of the receptacle from the waist-belt, substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

VLADIMIR SMERDOFF.

Witnesses:

WEADYSLAW ZAUIAWSSI,
ALEBSAUVER MOROZENIR.