

PATENT SPECIFICATION

311,136



Application Date: June 26, 1928. No. 18,496 / 28.

Complete Left: March 12, 1929.

Complete Accepted: May 9, 1929.

PROVISIONAL SPECIFICATION.

Improvements in or relating to Military Equipments.

We, THE MILLS EQUIPMENT COMPANY LIMITED, a Company registered under the Laws of Great Britain, and ALBERT ALEXANDER LETHERN, British Subject, both of 56, Victoria Street, Westminster, London, S.W. 1., do hereby declare the nature of this invention to be as follows:—

This invention relates to military equipments of the kind comprising a belt, brace members detachably connected to the back of the belt and a brace extension member or the like through which the front portions of the braces are detachably connected to the front of the belt. The ends of the brace members in such equipments hang down below the belt and can be cross-connected to the haversack and water bottle or equivalent articles which thus balance one another, the pack or knapsack, when such is carried, being either secured to the brace members so that its weight is balanced by the cartridge carriers or articles on the front of the belt, or else supported like a rucksack over the brace members to the front portions of which its sling members can be connected.

At present it is necessary to provide a separate equipment for the various branches of the Service and the main object of the present invention is so to modify the main or basic portions of an equipment having the above general characteristics that it can be adapted to a number of special uses. This will not only give greater flexibility in the Field, but lead to considerable economies in manufacture and reduce the number of articles or parts of equipment which have to be held in stock.

According to this invention, instead of the brace members loosely crossing one another a short distance above the point at which they are connected to the back of the waist-belt, they are connected together by a bridge piece or slide, adapted not only to connect these two separate brace members together, but also to serve as an anchorage for the free ends of rearwardly extending straps connected to pouches or the like detachably connected to the front portion of the belt.

Both the braces and rearwardly extending straps are separately detachable members and the bridge member must not be confused with slides or the like previously used in military equipments to connect brace members made up of a single length of material looped or folded through the slide.

The belt itself is preferably of the known "back-adjustment" type, comprising forward portions carrying at their front ends the two portions of a clasp and at their rear ends C-shaped members or the like adapted to engage flat loops woven on the inner wall of the central half-belt. The forward ends of the main brace members are connected to the front portions of the belt by detachable brace extensions, of the known type, and these brace extensions are furnished with straps which when led rearwards in a diagonal line are adapted to support a haversack, water bottle or like article approximately on a level with the belt for use by mounted troops. Alternatively these straps may be connected to the base of the pack or knapsack when this is directly connected to the brace members and not carried as a rucksack.

The front and rear ends of the brace members hang down below the belt and can support the haversack and water bottle or equivalent articles in the known manner. Instead of the front portions of the belt merely serving as a support for any pocket, pouch, holster or the like which may be mounted upon them, they may be replaced by backings having one or more cartridge pockets woven upon them, as in the known type of equipment.

In modern warfare troops are often conveyed by mechanical transport over long distances, and it is desirable that they should not be encumbered by heavy articles of equipment whilst being so conveyed. On the other hand provision must be made for these articles to be carried on the soldier in action and when he is in the vicinity of the firing line. For example, many bulky and heavy instruments must be carried in connection with signalling apparatus, by those engaged in forward observation for

artillery work, by Lewis gunners and for a variety of other purposes, and provision must be made for carrying these articles as soon as the soldier leaves the wagon upon which they are normally carried.

5 An equipment having the main characteristics above described is well suited for use with a variety of pouches, pockets, cases or the like which can be mounted
10 upon the front portions of the belt member in a readily interchangeable manner by any of the known means hitherto employed, and such pouches or pockets are preferably made like the rest of the
15 equipment from woven material and provided with readily collapsible side walls or gussets enabling them to be folded back flat against the wearer when they do not actually contain the article to be carried.
20 In the case of large pockets or pouches for heavy articles, in addition, to rearwardly extending straps or strips of woven fabric to connect the back of the pocket to the bridge piece at the junction
25 of the brace members, a forwardly extending supporting strap is conveniently provided, which is secured to the back of the pocket and, passing upwards through its front wall, can be connected as by
30 means of a swivel or the like to a loop on the front of the braces. This front strap with its swivel or similar fastening device is adjustable in length, and when the pouch is not in actual use can be
35 accommodated within the pouch before the latter is flattened against the wearer. The fastenings on the pouch enable it to retain its flattened shape when it is so closed.

40 It will be readily understood that any number of pouches or pockets can be provided and kept in store to accommodate a variety of articles which are necessary in modern warfare and that to adapt one
45 of the improved equipments to a special purpose it is only necessary to substitute one set of pouches or pockets for another. Moreover as these pockets are readily detachable the equipment can be worn
50 without them and in all cases, whether the pocket or pouch is carried or not, the haversack and water bottle can be connected to the equipment either so as to hang below the belt, as in the case of
55 infantry, or for mounted troops so as to be supported upon the belt substantially on a level therewith through the medium

of the additional straps on the brace extension members and suitable rear fastening members on the belt. These
60 may be in the form of slotted plates, connected to the rear of the belt and adapted to engage suitable studs on the water bottle or other article.

Not only is an equipment having the
65 above characteristic features capable of being used for a variety of purposes, but in addition the provision of the bridge member enables the load to be properly balanced even if this is carried only upon
70 one side. Thus the rearwardly extending straps on the front pockets in effect constitute additional back brace members as they are connected by the bridge piece to both the main braces. Hence if a load
75 is carried, say, only on the left-hand side, some of the pull on the rearwardly extending member will be distributed by the bridge piece to the left-hand brace member although the upper end of this rearwardly extending strap is actually
80 attached to that portion of the bridge piece which serves the right-hand brace member. Thus the braces are kept from slipping and the loads are balanced.

85 An equipment according to the present invention, merely by changing the articles which are mounted upon it, can serve alike for officers and other ranks in all branches of the Service and moreover
90 if the side walls of the pouches or pockets are of a collapsible nature, instead of having to assemble the equipment on reaching their destination, the troops can insert into these pockets cases containing
95 say signalling instruments, telephones, Lewis gun magazines or the like which have up to that point been carried upon the wagon or the like.

100 It will be understood that the whole equipment is preferably made of the usual woven material and any known means may be used for fastening the lids or covers of the pockets, or for connecting
105 the component parts together.

The pack or knapsack when employed may be formed in two parts, capable of being worn together or singly, with or without cartridge pockets on the front of the belt or other portions of the equipment.

Dated this 26th day of June, 1928.

KILBURN & STRODE,
Agents for the Applicants.

COMPLETE SPECIFICATION.

Improvements in or relating to Military Equipments.

We, THE MILLS EQUIPMENT COMPANY, of Great Britain, and ALBERT LIMITED, a Company registered under the ALEXANDER LETHERN, British Subject, 115

both of 56, Victoria Street, Westminster, London, S.W. 1., do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

This invention relates to military equipments of the kind comprising a belt, brace members detachably connected to the back of the belt and a brace extension member or the like through which the front portions of the braces are detachably connected to the front of the belt. The ends of the brace members in such equipments hang down below the belt and can be cross-connected to the haversack and water bottle or equivalent articles which thus balance one another, the pack or knapsack, when such is carried, being either secured to the brace members so that its weight is balanced by the cartridge carriers or articles on the front of the belt, or else supported like a rucksack over the brace members to the front portions of which its sling members can be connected.

At present it is necessary to provide a separate equipment for the various branches of the Service and the main object of the present invention is so to modify the main or basic portions of an equipment having the above general characteristics that it can be adapted to a number of special uses. This will not only give greater flexibility in the Field, but lead to considerable economies in manufacture and reduce the number of articles or parts of equipment which have to be held in stock.

According to this invention, instead of the brace members loosely crossing one another a short distance above the point at which they are connected to the back of the waist-belt, they are connected together by a bridge piece or slide, adapted not only to connect these two separate brace members together, but also to serve as an anchorage for the free ends of rearwardly extending straps connected to pouches or the like detachably connected to the front portion of the belt. Both the braces and rearwardly extending straps are separately detachable members and the bridge member must not be confused with slides or the like previously used in military equipments to connect brace members made up of a single length of material looped or folded through the slide.

In modern warfare troops are often conveyed by mechanical transport over long distances, and it is desirable that they should not be encumbered by heavy articles of equipment whilst being so conveyed. On the other hand provision

must be made for these articles to be carried on the soldier in action and when he is in the vicinity of the firing line. For example, many bulky and heavy instruments must be carried in connection with signalling apparatus, by those engaged in forward observation for artillery work, by Lewis gunners and for a variety of other purposes, and provision must be made for carrying these articles as soon as the soldier leaves the wagon upon which they are normally carried.

An equipment having the main characteristics above described is well suited for use with a variety of pouches, pockets, cases or the like which can be mounted upon the front portions of the belt member in a readily interchangeable manner by any of the known means hitherto employed, and such pouches or pockets are preferably made like the rest of the equipment from woven material and provided with readily collapsible side walls or gussets enabling them to be folded back flat against the wearer when they do not actually contain the article to be carried. In the case of large pockets or pouches for heavy articles, in addition, to rearwardly extending straps or strips of woven fabric to connect the back of the pocket to the bridge piece at the junction of the brace members, a forwardly extending supporting strap is conveniently provided, which is secured to the back of the pocket and, passing upwards through its front wall, can be connected as by means of a swivel or the like to a loop on the front of the braces. This front strap with its swivel or similar fastening device is adjustable in length, and when the pouch is not in actual use can be accommodated within the pouch before the latter is flattened against the wearer. The fastenings on the pouch enable it to retain its flattened shape when it is so closed.

An equipment constructed in accordance with this invention is illustrated by way of example in the accompanying drawings, in which

Figure 1 shows the equipment ready to be worn, the inner surfaces of the belt and brace members being seen,

Figure 2 is a rear view of the equipment shown in Figure 1 as worn,

Figure 3 is a front view of the same equipment, the larger pouch on the wearer's right-hand side being collapsed, and

Figure 4 is a similar front view with the larger pouch containing its heavy package.

The equipment illustrated comprises a waist belt of the known "back-adjusting" type, i.e. a belt comprising a cen-

70

75

80

85

90

95

100

105

110

115

120

125

130

tral portion A and forward portions A¹ furnished at their rear ends with C-shaped metal fingers A² which engage with woven loops in the central portion A. 5 Secured to the back of the belt near the centre are buckles or slides B through which are passed the rear ends of the main brace members C. The forward ends of these brace members are connected to 10 the front portions A¹ of the waist belt by brace extension members C¹, the attachment device between the brace extension members and the belt being of known type and the forward ends of the actual 15 brace members themselves hanging down below the belt. Similarly the rear ends of the brace members C hang down below the back of the belt thus enabling two articles of equipment of approximately 20 similar weight to be suspended from the brace members in the known manner. In the particular example illustrated a large haversack D is connected to the brace members on the wearer's right-hand 25 side and a smaller haversack D¹ on the left.

Just above the point where the brace members cross one another they are connected together by means of a bridge 30 piece E clearly shown in Figures 1 and 2 which is furnished with a central slot and a slide on either side thereof. This bridge member not only unites the braces but further serves as an anchorage for the rear ends of additional woven or like 35 straps F of which the forward ends are secured to the article of equipment detachably connected to the front portions of the belt A¹. In the particular example shown a large collapsible pouch G adapted 40 to contain signalling lamps or the like is arranged on the wearer's right-hand side and a smaller pouch H for field glasses or some such article of equipment is arranged on the wearer's left. The forward ends of the additional straps F are secured to the backs or lower edges of 45 these pouches as clearly shown in Figure 1. In rear of the pouch H is a water bottle J and a frog J¹ for a pair of pliers or like tool. On the opposite side of the belt a small pouch K is removably connected to the belt behind the large pouch G for some article of signalling equip- 50 ment.

When the case containing the signalling lamps or like equipment is to be carried by the signaller the large pouch G is opened out as shown in Figure 4 and 60 the case containing the article of equipment is slipped into the pouch. The weight of the article is partly taken by means of an undersling L secured to the back of the pouch, furnished with a 65 swivel L¹ at its free end and secured to

a ring on the brace extension as clearly shown in Figure 4. The strap L¹ is of adjustable length and when not in use can be housed within the pouch or below the flap of the pouch when the latter is 70 collapsed as in Figure 3.

The rearwardly extending straps F constitute additional back brace members as they are connected by the bridge piece E to both main braces C. Hence if the load 75 is carried say only on the right-hand side, if the left back brace is omitted as in Figure 2, some of the pull on the right-hand brace member F will be distributed by the bridge piece to the main right brace member C although the upper end of the member F is actually attached by the bridge piece to the left-hand brace member C. 80

It will be understood that any number 85 of pouches or pockets may be provided and kept in store to accommodate a variety of articles necessary in modern warfare, and that to adapt one of the improved equipments to any special apparatus only needs the substitution of one 90 set of pouches or pockets for another. Further each pocket is individually detachable so that the equipment can be worn with one or more pockets or any 95 variety of pockets at will. The haversack and water bottle can either be connected to the equipment so as to hang below the belt as for infantry or they may be supported on a level with the belt for 100 mounted troops or for specialists such as signallers or battery staff who have relatively large and special loads to carry.

An equipment according to this invention can serve alike for officers and other 105 ranks in all branches of the service, individual items of equipment being changed to suit the rank and duties of the wearer. If the side walls of the pouches are of a collapsible nature, instead of having to 110 assemble the equipment on reaching their destination the troops can insert into these pockets cases containing signalling instruments, telephones, Lewis or other machine gun magazines or the like which up to 115 that point have been carried upon a wagon or other vehicle.

It will be understood that the whole equipment is preferably made of the 120 usual woven material and any known means may be used for fastening the lids or covers of the pockets, or for connecting the component parts together.

The pack or knapsack when employed may be formed in two parts, capable of 125 being worn together or singly, with or without cartridge pockets on the front of the belt or other portions of the equipment.

Having now particularly described and 130

ascertained the nature of our said invention and in what manner the same is to be performed, we declare that what we claim is:—

- 5 1. In a military equipment the combination with a belt having brace members detachably connected to the back and front portions thereof of a bridge member connecting the braces together where
10 they cross and also serving as an anchorage for the rear ends of two independent straps the forward ends of which can be connected to pouches or like receptacles detachably mounted on the front
15 parts of the belt.
2. In a military equipment the combination with a belt having brace members detachably secured to its front and rear portions of a bridge member connecting the brace members together where
20 they cross one another, one or more collapsible pouches detachably mounted on the front portion of the belt, a rearwardly extending strap connecting the
25 back of each pouch to the bridge member and an additional supporting sling for

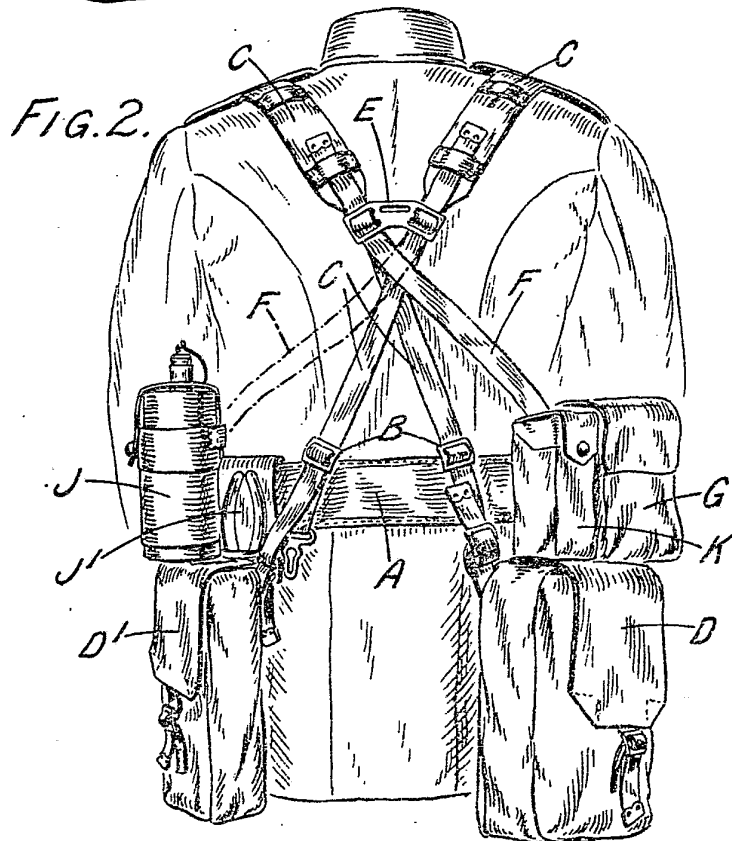
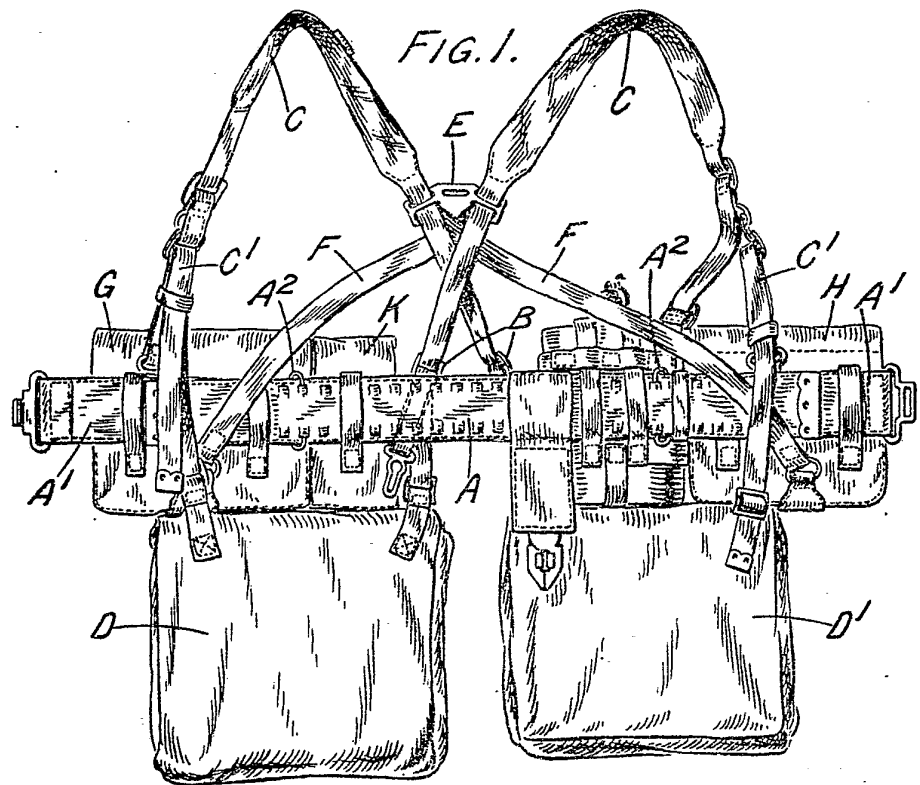
each pouch when loaded with a bulky or heavy article attached to the back and front wall of the pouch and connected by a swivel or like catch to the forward portion of the appropriate brace member. 30

3. A military equipment as claimed in Claims 1 or 2 in which the rear ends of the brace members hang down below the belt to support the rear corners of the water bottle, haversack or like article and the forward ends of the braces are connected to the belt by brace extension members and also hang down to support the forward corners of the haversack and water bottle or equivalent articles of equipment. 35 40

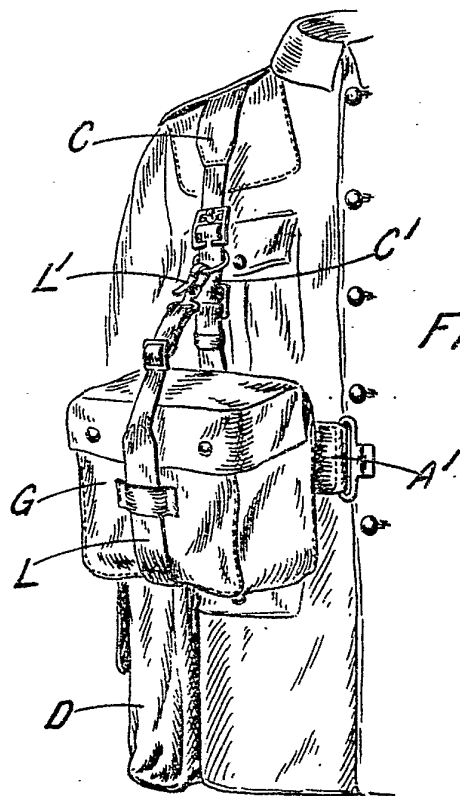
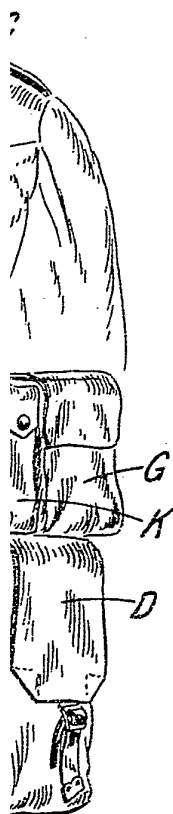
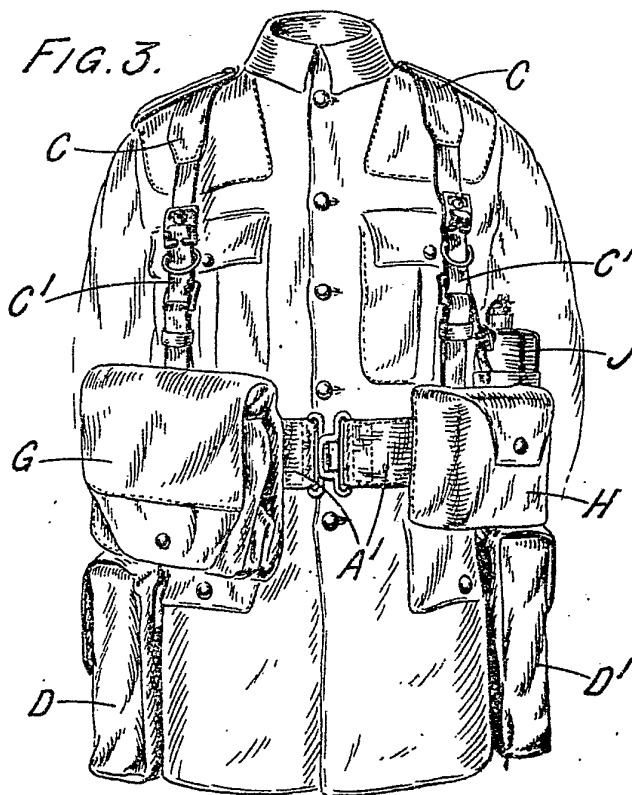
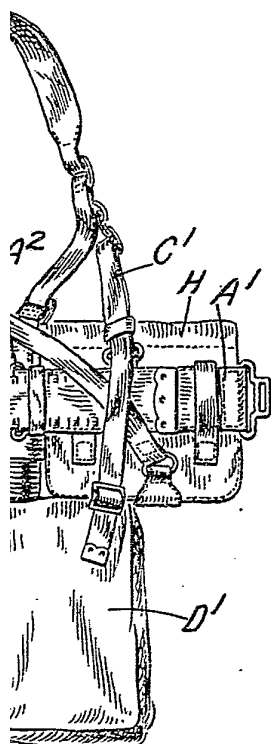
4. The combination and arrangement of parts constituting the complete military equipment with detachable and interchangeable carriers for various articles of equipment or ammunition as described or as illustrated in the accompanying drawings. 45

Dated this 12th day of March, 1929.

KILBURN & STRODE,
Agents for the Applicants.



[This Drawing is a reproduction of the Original on a reduced scale.]



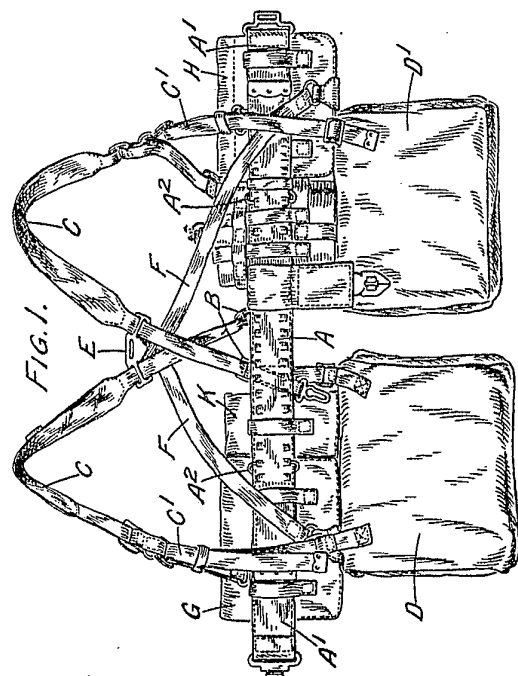


FIG. 1.

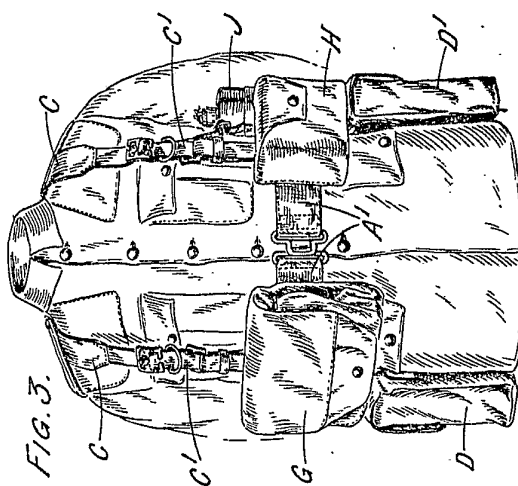


FIG. 3.

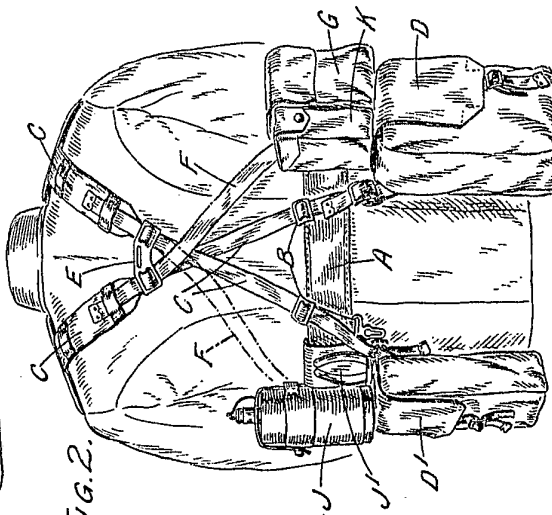


FIG. 2.

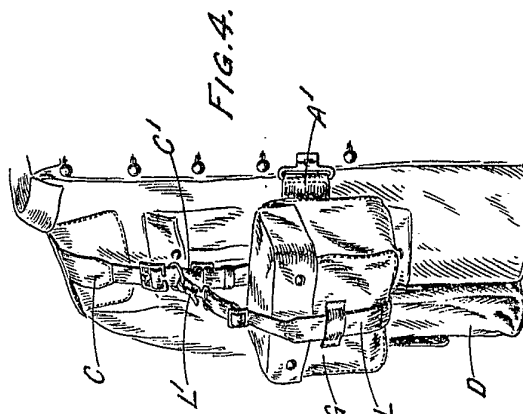


FIG. 4.

[This Drawing is a reproduction of the Original on a reduced scale]