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PROVISIONAL SPECIFICATION.

Improvements in or relating to Military Equipments.

We, THE MILLS EQUIPMENT COMPANY, LIMITED, Manufacturers, and ALBERT ALEXANDER LETHERN, Clerk, all of 72, Victoria Street, Westminster, London, S.W., do hereby declare the nature of this invention to be as follows:—

This invention relates to military equipments of the type wherein sling members are cross-connected to the water bottle and haversack and also serve to support the waist belt by being detachably connected thereto. The object of this invention is to provide an equipment particularly intended for use by cavalry or mounted forces as opposed to infantry.

The usual cavalry or mounted infantry equipment comprises a bandoleer and a haversack and water bottle suspended by slings from the wearer's shoulders, the slings being of such length that the water bottle and haversack fall some distance below the waist. Consequently, these articles are liable to cause discomfort to the wearer when they are shaken about owing to the movement of the horse. If, on the other hand, the water bottle and haversack are disposed above the waist, then the wearer is unable to have ready access to them.

According to this invention the sling members, which are attached to a waist belt and cross-connected to the water bottle and haversack, are of such length that these articles are supported above the waist belt and are normally held in this position and against the wearer's body, so that they do not shake about. Provision is however made whereby the normal positions of the haversack and water bottle can be readily changed thus rendering them easily accessible to the wearer. The equipment as a whole is preferably made of woven fabric.

To enable the wearer to have access to the water bottle and haversack, they are supported at their rear ends by means of supplementary straps or strips which may be passed through loops or the like on the main sling members to which their forward ends are normally secured. When it is desired to open the haversack or water bottle the supplementary supporting strip is disconnected from the main sling member, thus releasing the rear attachment and enabling the haversack or water bottle to be pulled forward into the desired position and if necessary the bottle can be released from its carrier.

In its simplest form the equipment according to this invention comprises a waist belt provided with short brace-extension members connected to the front portions thereof in any known detachable manner. For instance, the brace-extension members may carry substantially C-shaped fingers which engage flat loops woven in one with the belt, or these fingers may merely engage the upper or lower edges of the belt. At their upper ends the brace-extension members are provided with slides or buckles of known type to which the forward ends of the sling members are attached. Preferably the sling members comprise a single strip of woven material, the strip being passed through a slide, which occupies a position on the strip about midway of its length, the slide being provided with a loop or eye through which is passed the strip constituting the rear brace-extension members, whereby the sling members are connected to the back of the waist belt.

The rear brace-extension members are preferably formed from a single strip, the free ends of which are respectively connected to slides on the bottom of the

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water bottle carrier and haversack. Buckles or slides attached to the back of the belt serve to connect it to the rear brace-extension members at some points in the length of the latter.

The water bottle carrier and haversack are each provided with slides of a known type at their forward and rear upper corners. The forward slide in each case is engaged by a rearwardly extending tag or strip formed on or connected to the front brace-extension members, and the rear slide is in each case connected to a supplementary strap which passes through loops on the main sling member and has its forward end detachably connected to the front brace-extension or forward end of the main sling member. Preferably each supplementary strap is half the width of a main sling member, its forward end being provided with a plate having a keyhole slot adapted to engage a stud or the like formed on the outer face of the front brace-extension member.

As the main sling members are formed from a single strip of woven fabric, it is possible to detach this strip from the rear and forward brace-extension members and the central slide which normally forms it into two sling members. When so detached from the other portions of the equipment, the strip in question may be used as a plain single sling to support either the haversack or water bottle. To this end, the buckles or slides on the water bottle carrier and haversack are preferably of a size to engage the broad main sling member. Since, however, the supplementary strap which, when the complete equipment is worn, supports the rear end of the haversack and water bottle carrier is only half the width of the main sling member, it is necessary to provide an adapter member for each of the rear slides on the water bottle carrier and haversack. Such an adapter comprises a short length of woven material which tapers, the wide end engaging the wide slide on the haversack or water bottle carrier, while the narrow end carries a buckle or slide of the correct size to be engaged by the supplementary narrow supporting straps.

The supplementary straps are provided with slides which enable their length to be adjusted, or slides may be attached to the outer faces of the front brace-extension members to permit of adjustment in the effective length of these supplementary straps. The slotted plates, however, are preferred, since they can be readily detached and enable the wearer to bring the water bottle and haversack forward as desired.

As in the case of the main sling members the supplementary straps may be employed to form a single sling for the purpose of supporting the haversack or water bottle. To this end the two supplementary straps are connected together by passing the free end of one strap through the slide on the end of the other strap, the slotted plates being first slid up close to the slides on the straps so as to lie between the two straps when they are connected together, being thus kept in position and out of sight. Adaptor members are then connected to the slides on the water-bottle or haversack as the case may be, and the two free ends of the supplementary straps made to engage the narrow slides carried by the adaptor members. The length of the sling may be varied by adjusting the distance between the two slides on the supplementary straps and by altering the position of the adaptor member on the free ends of the straps. In this way it is possible to carry the water bottle and haversack simultaneously by means of plain cross-slings of the usual type.

It will be appreciated that the sling members may be formed from two separate lengths of material if desired, and, where this is the case, the central slide which unites the main sling members to the rear brace-extension members can be done away with. Further, it is not necessary to employ separate straps for the rear brace-extension members since the main sling members may be connected together at the point where they cross and themselves extended to engage slides on the waist belt, their lower ends finally engaging buckles or slides on the water bottle carrier or haversack.

The cartridge carriers may be of the usual type and mounted on the belt, in

some cases the front brace-extension members being replaced by additional carriers each of which has a rearwardly extending tag to engage the haversack or water bottle carrier.

Since the buckles or slides on the bottom of the haversack and water bottle carrier are engaged by the ends of the rear brace-extension members, the whole equipment fits closely to the wearer's body and cannot shift or shake about with the movement of the horse.

It will be understood that though only a water bottle and haversack have been specially mentioned any other portion of the equipment may be supported in the manner described, and the details of construction may be modified in various ways without departing from this invention.

Dated this 8th day of February, 1911.

B. E. DUNBAR KILBURN,
Agent for the Applicants.

COMPLETE SPECIFICATION.

Improvements in or relating to Military Equipments.

We, THE MILLS EQUIPMENT COMPANY, LIMITED, Manufacturers, and ALBERT ALEXANDER LETHERN, Clerk, all of 72, Victoria Street, Westminster, London, S.W., 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 type comprising a waist belt and sling members which are cross-connected to the water bottle and haversack. The object of this invention is to provide an equipment particularly intended for use by cavalry or mounted forces as opposed to infantry.

The usual cavalry or mounted infantry equipment comprises a bandoleer and a haversack and water bottle suspended by slings from the wearer's shoulders, the slings being of such length that the water bottle and haversack fall some distance below the waist. Consequently, these articles are liable to cause discomfort to the wearer when they are shaken about owing to the movement of the horse. If, on the other hand, the water bottle and haversack are disposed above the waist, then the wearer is unable to have ready access to them.

According to this invention the sling members are of such a length that they support the haversack and water bottle above the waist belt, these articles being normally held in this position against the wearer's body by the rear end of the sling member and by a rearward extension or tag connected to the front end of the sling member. The waist belt is supported by brace members of any convenient type, the rear ends of the braces being extended below the edge of the belt and connected to buckles or slides on the bottom of the haversack and water bottle carrier to prevent these articles from shaking with the movement of the horse. The sling members are movable relatively to the brace members and, unlike the braces, are not united where they cross one another at the wearer's back, so that, by releasing the front ends of the sling members, it is possible to draw the water bottle or haversack into a forward position and render it easily accessible to the wearer. When the effective length of the sling members is thus varied, their continuity is temporarily broken and the weights they normally support are then transferred to the braces until the sling members are returned to their normal position. The equipment as a whole is preferably made of woven fabric.

In the accompanying drawings which show one form of equipment according to this invention,

Figure 1 is a perspective view seen from the front showing the haversack and water bottle in their normal positions,

Figure 2 is a similar view, the cartridge carriers on the right hand side of the belt being omitted, showing the water bottle in its forward position so as to render it easier of access to the wearer, and

Figures 3 and 4 are detail views of adapter portions for attachment to the sling members hereinafter more particularly described.

In the construction illustrated the equipment comprises a waist belt A provided with short brace-extension members B connected to the front portions thereof by means of substantially C-shaped fingers which engage flat loops A^1 woven in one with the belt, the fingers passing over the edge of the belt and engaging flat loops on the outer surface thereof as shown in Figure 2. At their upper ends the brace-extension members are provided with slides B^1 of the known type to which the forward ends of the main brace members C are attached. The brace members comprise a single strip of woven material which is passed through a slide C^1 occupying a position on the strip C about midway of its length, the slide C^1 being provided with a loop or eye at its lower edge through which is passed the strip D constituting the rear brace-extension members whereby the main brace members are connected to the back of the waist belt. The braces thus comprise the front portions B, the main portions C and the rear extensions D.

The rear brace-extension members D are shown formed from a single strip, the free ends of which are respectively connected to slides on the bottom of the water bottle carrier E and haversack F. Buckles or slides D^1 attached to the back of the belt serve to connect it to the rear brace-extension members D at a convenient point in the length of the latter.

The water bottle carrier E and haversack F are each provided with slides of a known type at their forward and rear upper corners, the forward slides E^1, F^1 of the water bottle carrier and haversack respectively being engaged by a rearwardly extending tag or strip B^2 formed on or connected to the front brace-extension members B. The rear slide E^2 of the water bottle carrier and F^2 of the haversack is in each case connected to a sling member G which passes through loops C^2 on the brace members C and has its forward end detachably connected to the front brace-extension or forward end of the braces. In the equipment illustrated, each sling member G is half the width of a main brace-member C, its forward end being provided with a plate G^1 having a keyhole slot adapted to engage a stud or the like G^2 formed on the outer face of the front brace-extension member. Each sling member G is further provided with a slide or buckle G^3 which enables its length to be adjusted.

Normally the haversack and water bottle occupy the position shown in Figure 1, the rear corners thereof being maintained in place against the wearer's back by means of the sling members G, the tag B^2, which may be regarded as being connected to the sling members, engaging the front corners of the haversack and water bottle carrier. If it is desired to bring forward, say the water bottle, the left hand sling member G is released by disengaging its plate G^1 from the stud G^2 and the lower end of the strap D is disengaged from the slide on the base of the water bottle. If the wearer then grasps the water bottle it can be brought into a forward position, as the effective length of the sling member G is increased so that it can move relatively to the braces until the slide G^3 on the sling member engages the loop C^2. The water bottle is thus brought forward into the position shown in Figure 2, the rearwardly extending tag B^2 being contracted as shown. When in this position the water bottle can be removed from its carrier without difficulty and the entire carrier can readily be returned to its normal position without disturbing any other parts of the equipment by pulling downward the sling member G and re-establishing its continuity by causing the plate G^1 it carries to re-engage the stud G^2. Access can be had to the haversack in precisely the same way, the right hand sling member being operated in this instance.

If desired a buckle or slide may be employed instead of the keyhole plate G^1, but the latter is preferred as it can be more readily disengaged.

As the main portion C of the braces is formed from a single strip of woven fabric, it is possible to detach this strip from the rear and forward brace-extension members and the central slide C^1 which forms it into two members. When so detached from the other portions of the equipment, the strip C may be used as a plain single sling to support either the haversack F or the water bottle in its carrier E. To this end the buckles or slides E^1, E^2 on the water bottle carrier and those on the haversack F are of a size to engage the broad brace member C. Since however the sling members G which, when the complete equipment is worn engage the slide on the rear end of the haversack and water bottle carrier, are only half the width of the brace member C, it is necessary to provide an adapter member for each of the rear slides E^2 F^2 on the water bottle carrier and haversack respectively. Such an adapter comprises a short length of woven material H (Figure 3) which tapers, the wide end of this adapter engaging the slide F^2 or E^2, while the narrow end is provided with a slide or buckle H^1 of the correct size to be engaged by the rear end of the sling members G.

Alternatively, the rear end of the sling members may have a widened portion permanently attached thereto by stitching or the like. Such an arrangement is shown in detail in Figure 4 and at H^2 in Figure 1 as engaging the rear slide F^2 of the haversack F.

As in the case of the main portion C of the braces the sling members G may be employed to form a single sling for the purpose of supporting the haversack and water bottle. To this end the two sling members G are connected together by passing the free end of one through the slide G^3 on the end of the other, the slotted plates G^1 being first slid up close to the slides on the straps so as to lie between the two straps when they are connected together, being thus kept in position and out of sight. If necessary, adapter members such as H are then connected to the slides on the water bottle carrier or haversack as the case may be and the two free ends of the sling members are made to engage the slides carried by such adapter members or those on the water bottle carrier or haversack direct. The length of the sling thus formed may be varied by adjusting the difference between the two slides on the straps G and by altering the position of the adapter members on the free ends of the straps. In this way, by employing both the brace member C and the sling members G, the haversack and water bottle can be carried simultaneously, below the waist belt, by plain cross-slings of the usual type.

It will be appreciated that the main portion C of the braces may be formed from two separate lengths of material if desired, and, where this is the case, the central slide C^1 which unites the main portion of the braces to the rear brace-extension members can be done away with. Further it is not necessary to employ separate straps for the rear brace-extension members since the braces may be connected together at the point where they cross, and themselves extended to engage slides on the waist belt, their lower ends finally engaging buckles or slides on the water bottle carrier or haversack.

The cartridge carriers may be of the usual type and mounted on the belt as shown, in some cases the front brace-extension members being replaced by additional carriers, each of which has a rearwardly extending tag to engage the haversack or water bottle carrier.

Since the buckles or slides on the bottom of the haversack F and water bottle carrier E are engaged by the ends of the rear brace-extension members, the whole equipment fits closely to the wearer's body and cannot shift or shake about with the movement of the horse.

It will be understood that though only a water bottle and haversack have been specially mentioned any other portion of the equipment may be supported in

the manner described, and the details of construction may be modified in various ways without departing from this invention.

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

1. In a military equipment the combination with sling members cross-connected to the water bottle carrier and haversack of brace members, which support the waist belt, and means for varying the effective length of the rear portions of the sling members as and for the purpose set forth.

2. In a military equipment the combination with sling members cross-connected to the water bottle carrier and haversack of brace members supporting the waist belt and a connecting member which enables the continuity of each sling member to be temporarily broken for the purpose described, the weights normally carried by the sling members being then borne by the braces as set forth.

3. In a military equipment the combination with sling members of a haversack and water bottle carrier, each of which is normally supported at its forward corner by a tag extending in a rearward direction from the front portion of a brace member, at its rear corner by a sling member, and at its base by the rear end of the braces supporting the waist-belt or by an extension from these braces as set forth.

4. In a military equipment the combination with sling members adapted to lie over and move relatively to the brace members and normally support the haversack and water bottle above the waist belt of adapter members such as H as and for the purpose set forth.

5. The combination and arrangement of parts constituting the complete military equipment for cavalry or the like as described and illustrated in Figures 1 and 2 of the accompanying drawings.

Dated this 27th day of July, 1911.

B. E. DUNBAR KILBURN,
Agent for the Applicants.

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MILLS EQUIPMENT CO. & *another's* Complete Specification.

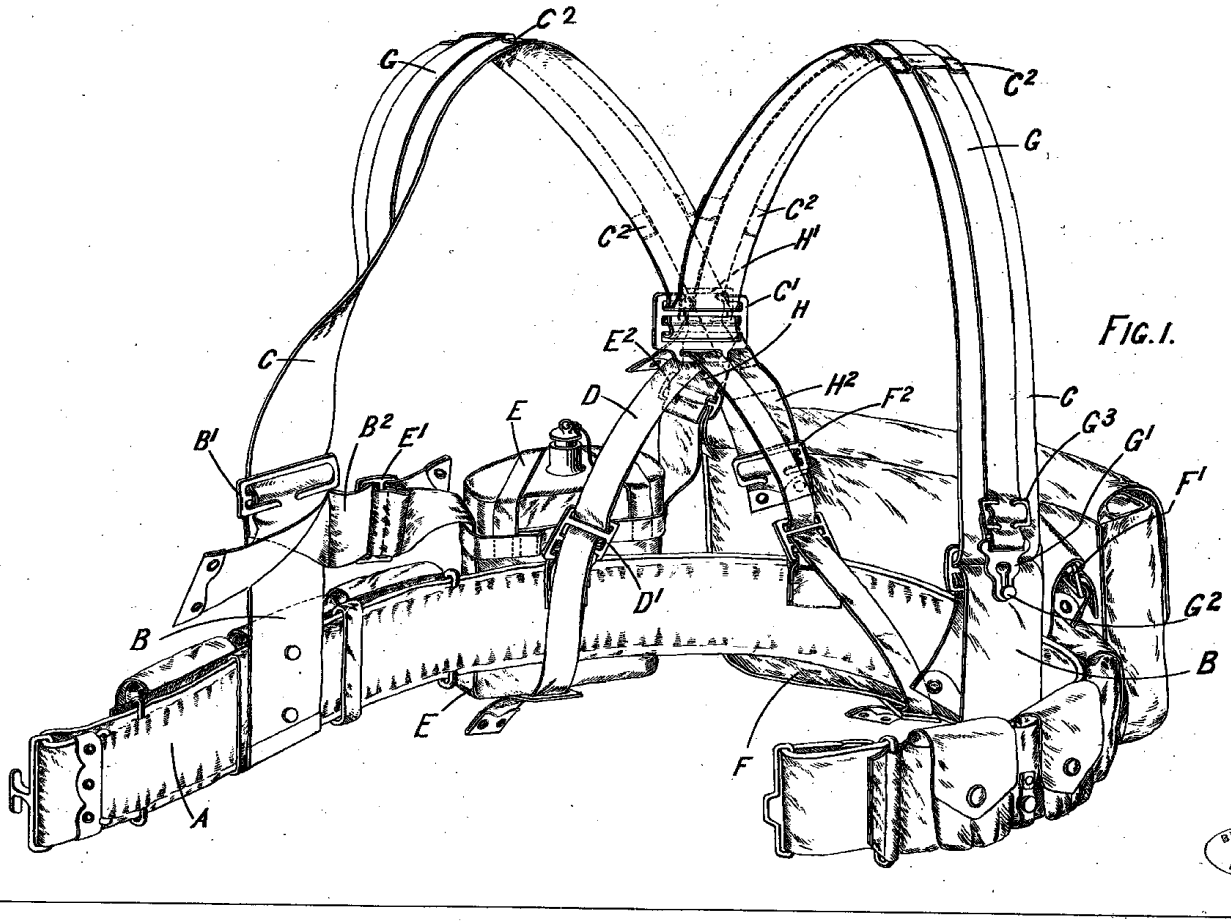
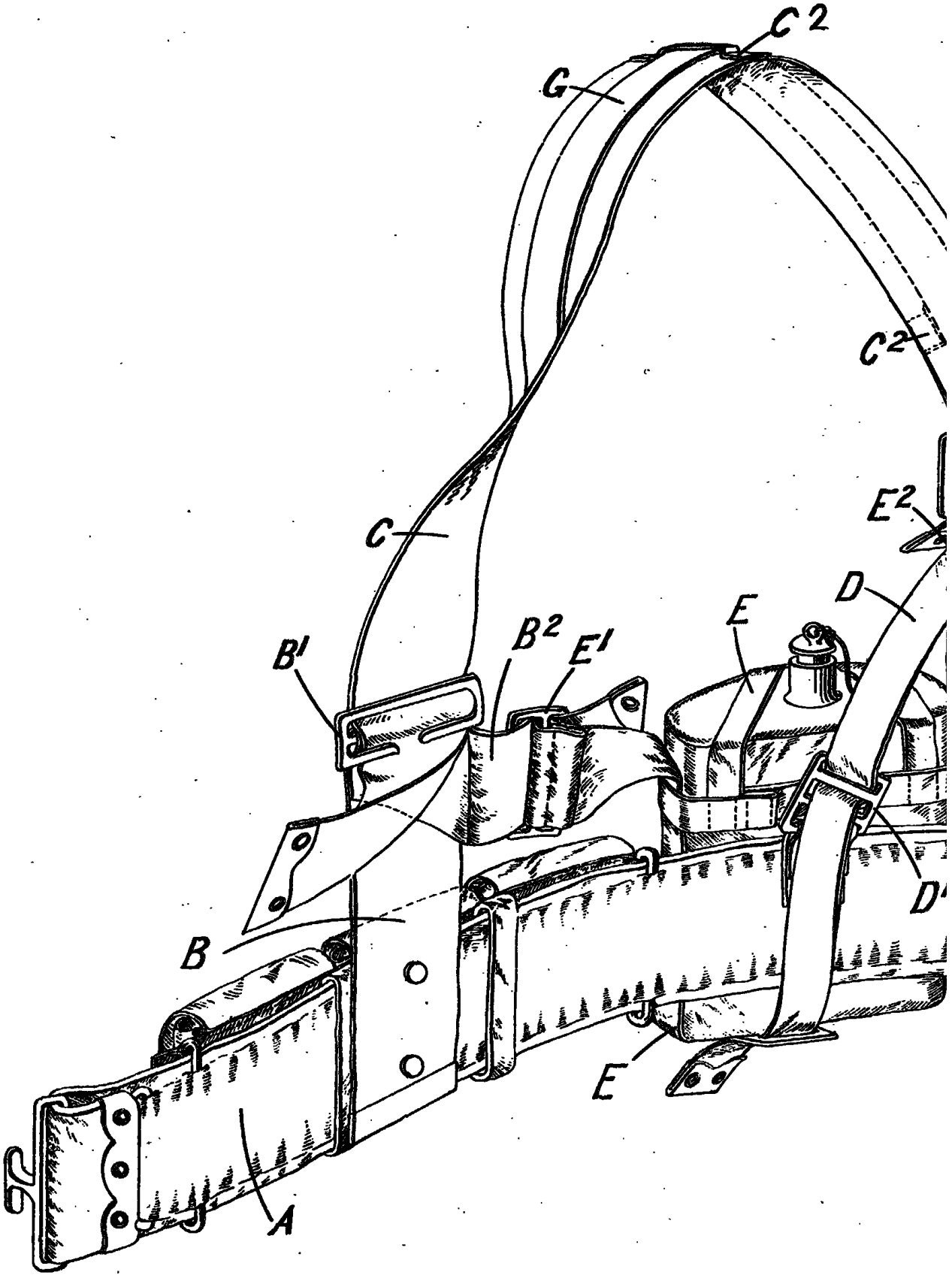


FIG. 1.

Malby & Sons, Photo-Litho.

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



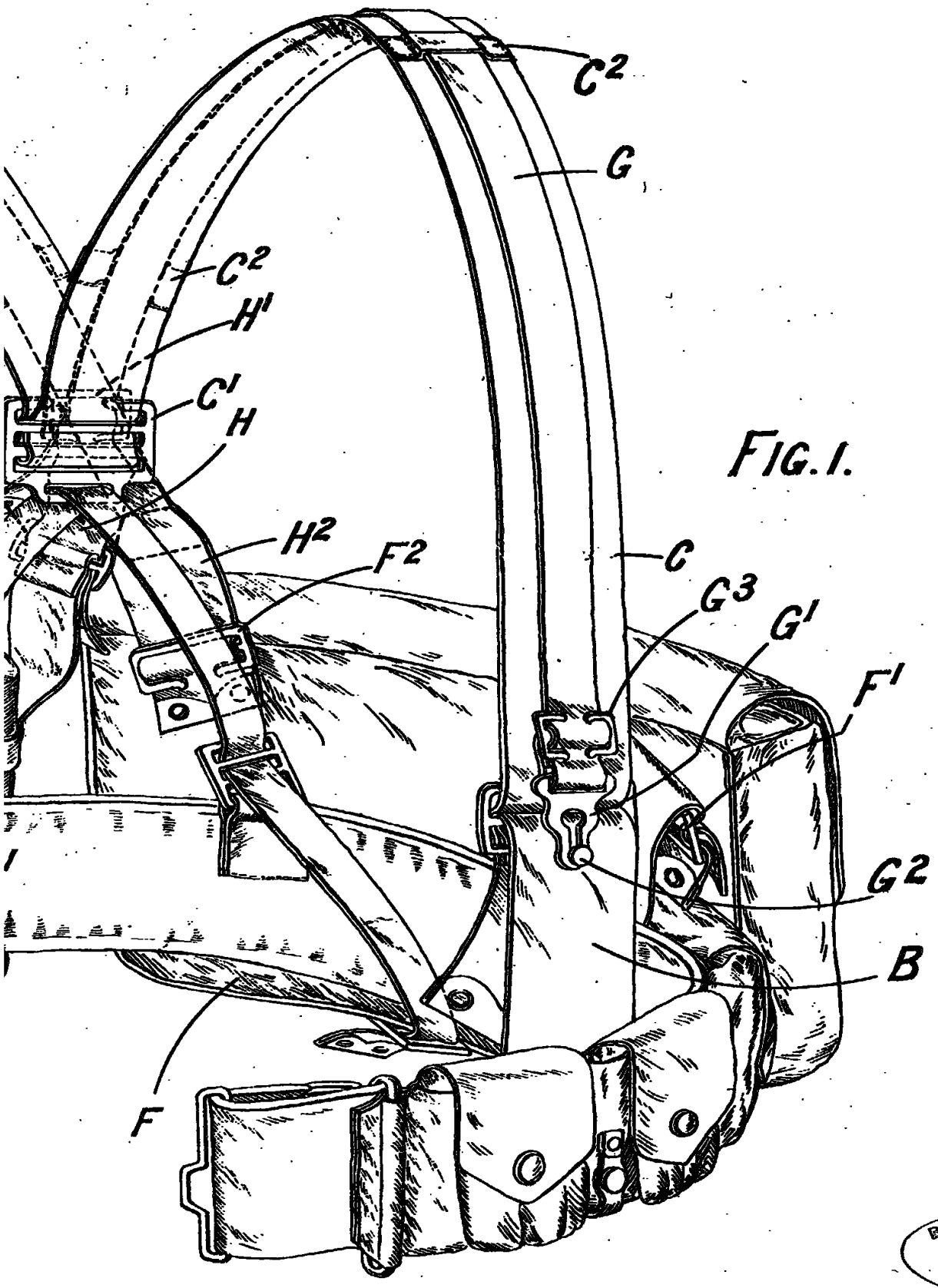
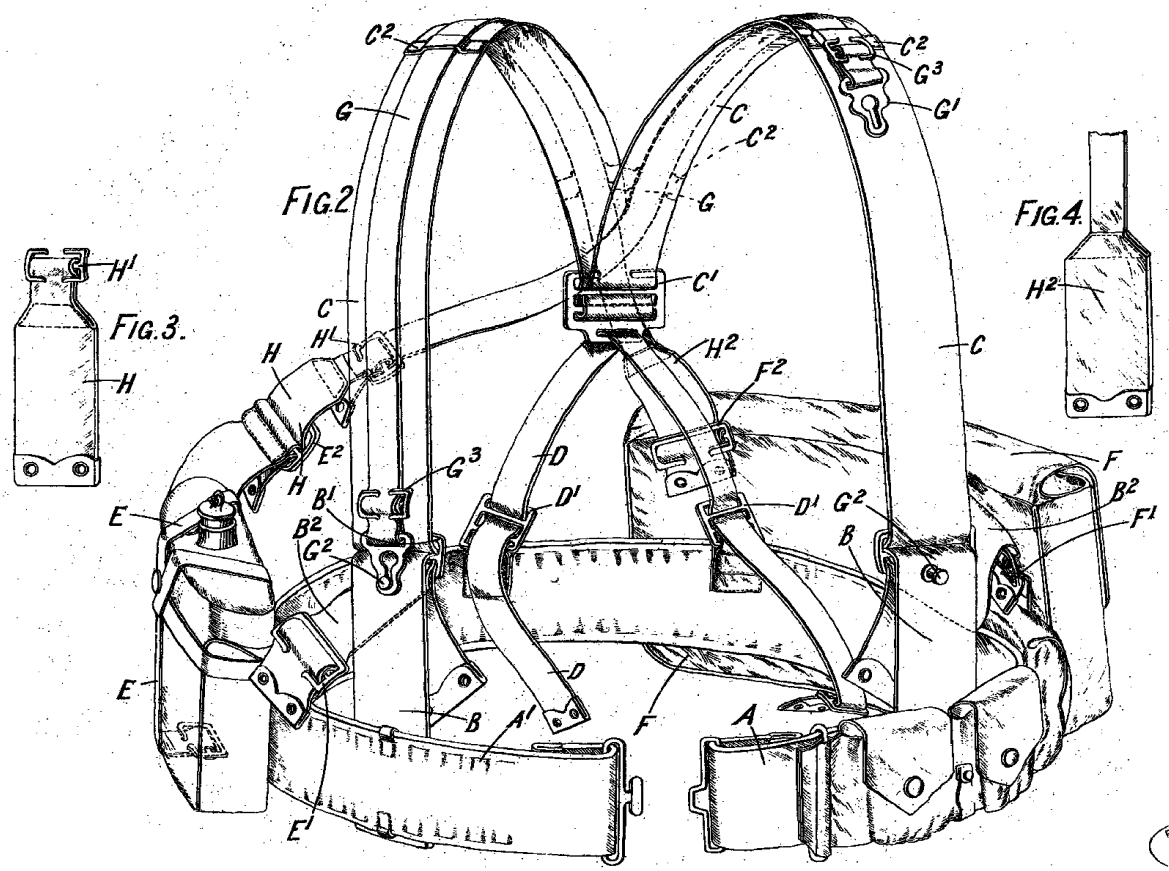


FIG. 1.

Malby & Sons, Photo-Litho.



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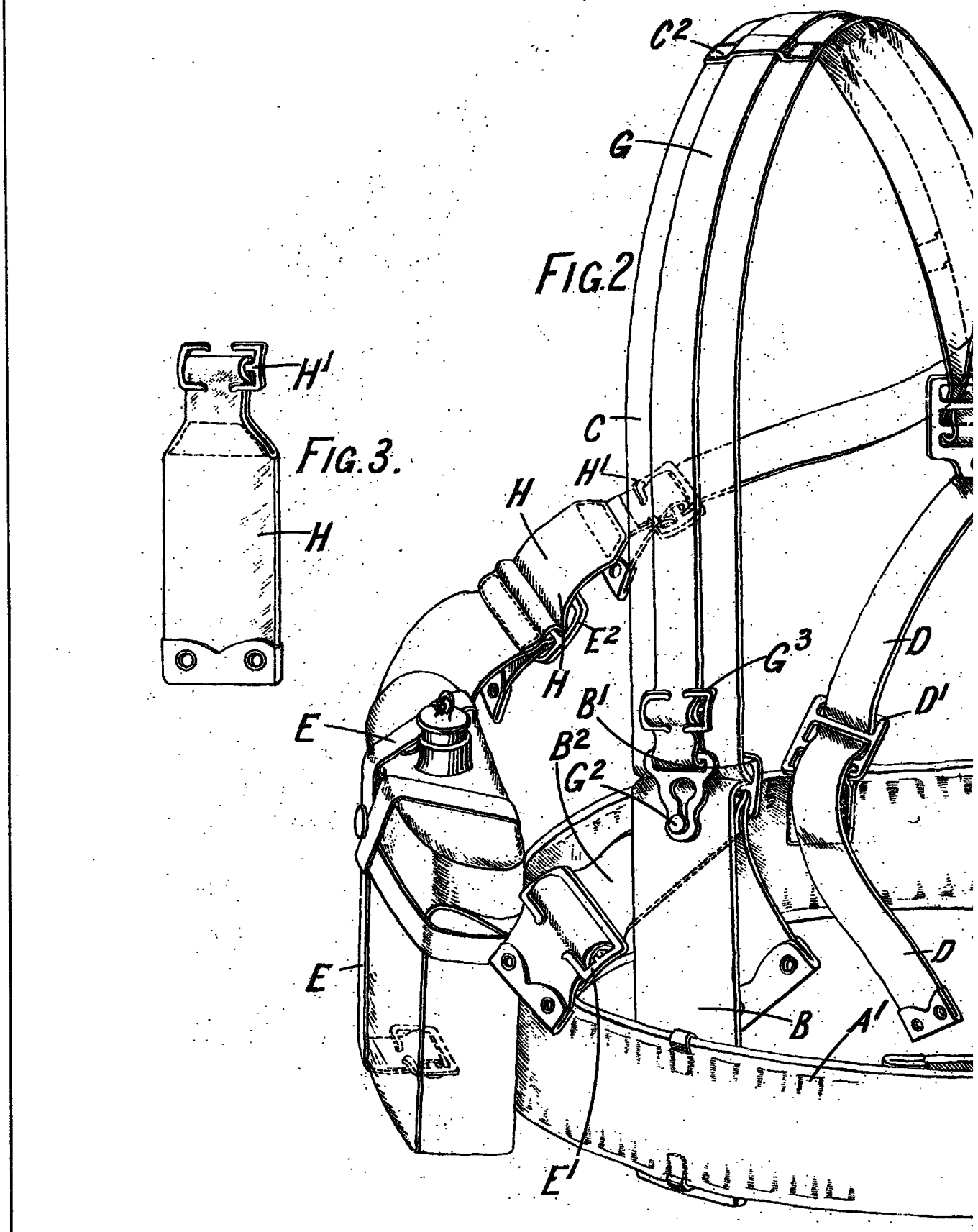

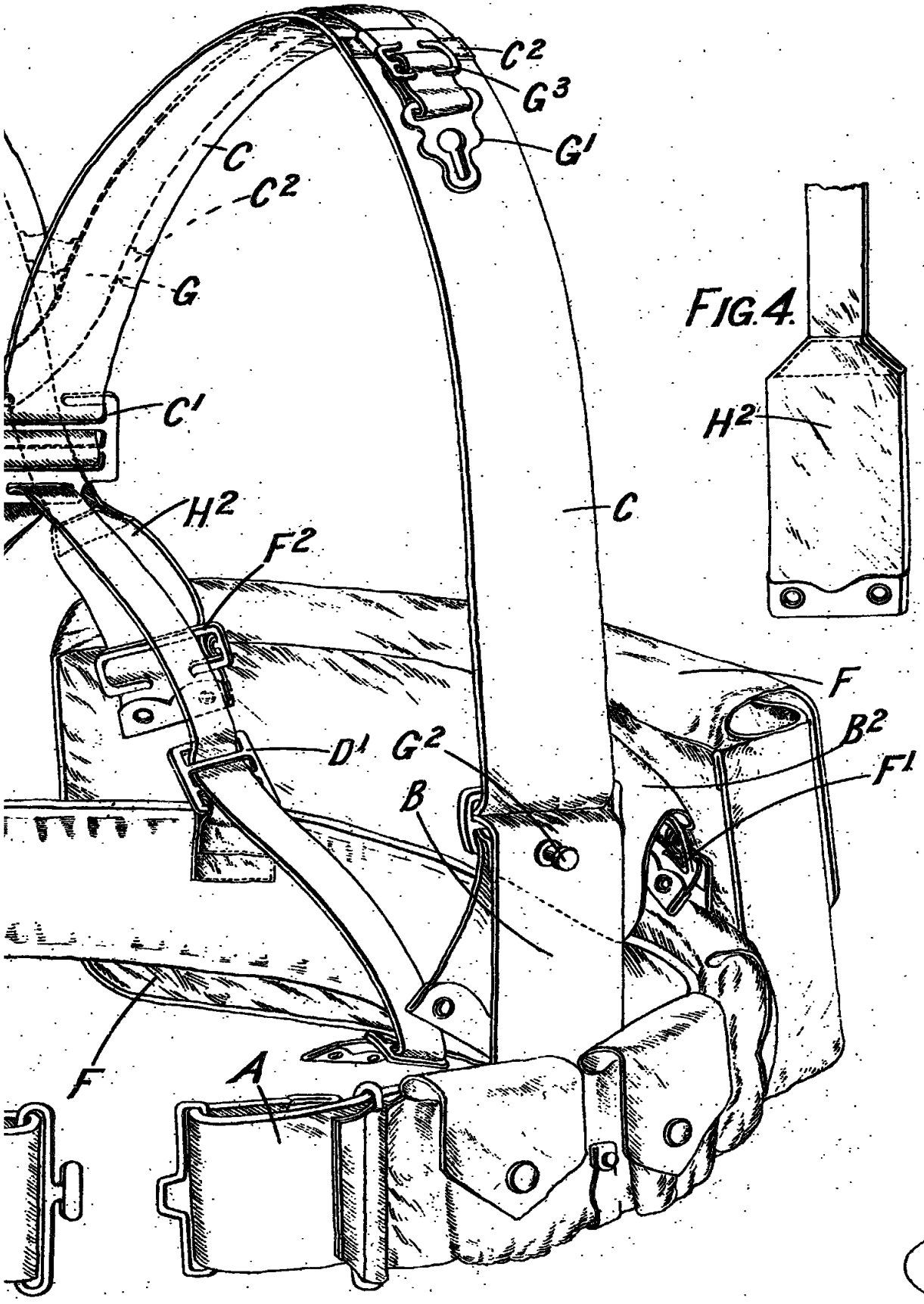

FIG. 4.

Malby & Sons, Photo-Litho.