

115,094

PATENT



SPECIFICATION

Application Date, Apr. 26, 1917. No. 5904/17.

Complete Accepted; Apr. 26, 1918.

COMPLETE SPECIFICATION.

Improvements in or relating to Woven Pockets for Cartridges
or the like.

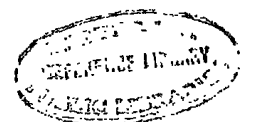
We, THE MILLS EQUIPMENT COMPANY, LIMITED, Manufacturers, of
56, Victoria Street, London, S.W., and CHARLES GORDON BATES, Designer, of
Imperial Works, Fountayne Road, Broad Lane, Tottenham, London, N., do
hereby declare the nature of this invention and in what manner the same
5 is to be performed, to be particularly described and ascertained in and by the
following statement:—

This invention relates to woven pockets for cartridges or the like and has for
its object to effect certain improvements in the methods of weaving and con-
structing hooded covers for such pockets.

- 10 A hooded cover that is to say one which has side portions united to the top
and to the front flap so as to close in the whole mouth of the pocket has pre-
viously been formed from a continuous woven strip of fabric having a plain
woven centre portion and lateral portions in which the warp threads were
intermittently floated. Such a strip was cut off in lengths each of which by
15 folding and joining parts by stitching was made up into a form such as to
constitute a hooded cover. In the covers so made from strip material woven
as previously proposed it was not possible to produce as neatly finished and
durable a cover as is desirable since in order to effect the necessary joins between
the lateral and centre portions when making up the cover the parts had to be
20 superimposed and one secured on the face of the other. Moreover it was not
easy to arrange and secure the material at the corners and angles of the cover
so as to give a neat finish and prevent fraying. These defects are obviated
by the present improvements.

- According to this invention a pocket cover of the type indicated is formed
25 from a one piece woven strip which comprises a two-ply centre portion and
single ply lateral portions the plies of the centre portion being intermittently
separated at the edges and inwardly therefrom in the process of weaving so that
when the woven strip has been cut into lengths each length can be made up
into the form of a hood with the ends of the lateral portions inserted between
30 the plies of the centre portion and there secured by stitching or otherwise.
The weaving of the strip may be effected in various ways so as to produce the
cut lengths of the necessary shape and formation and the manner in which
each length is made up into a hooded cover may vary in accordance with the
different woven formations. In one case the lateral portions of the woven
35 strip may constitute wings which are integral with that part of the centre
portion which forms the front flap of the cover when one cut edge of each

[Price 6d.]



lateral portion is attached by stitching to the centre portion of the strip which forms the top of the cover after the edge of the lateral portion has been inserted between the plies of this centre portion which at this part are woven separate at the lateral edges and inwardly therefrom. Selvaged rear edges are thus obtained for the wings. Again the lateral portions of the woven strip may constitute wings which are integral with that part of the centre portion which forms the top of the cover when one cut edge of each lateral portion is attached by stitching to the centre portion of the strip which forms the front flap of the cover after the edge of the lateral portion has been inserted between the plies of this centre portion which in this case are woven separate at this part. The rear edges of the wings will then be cut edges which are finished by turning over and stitching. In the weaving of the strip from which the covers are made the two plies of which the centre portion of this strip is composed are united by binder threads for certain lengths of the fabric but woven separate at the lateral edges and inwardly therefrom for certain other lengths while all the warp threads of one of the plies are intermittently floated. The warp threads of the lateral portions are also intermittently floated so that each lateral portion of the strip is composed of plain closely woven lengths which alternate with lengths of floated threads. In a modified method of weaving the strip the two plies of which the centre portion is composed are united by binder threads for certain lengths, woven separate at the lateral edges and inwardly therefrom for certain other lengths, and woven separate in tubular form for yet other lengths, none of the warp threads of the centre portion being in this case floated. The lateral portions of the strip are composed as before of plain closely woven lengths which alternate with lengths of floated threads.

The strips are so woven and the lengths so cut therefrom that each cover when made up will be provided with a rearwardly extending part of the centre portion of the strip which will serve for attaching the cover to the backing or belt on which is formed or mounted the pocket to which the cover is to be applied. These pockets are usually woven integral with the backing and the upper edge of the latter is split to form two plies between which the rear extension of the cover is inserted and there secured by stitching or in some other convenient manner. It is desirable that this attaching part of the cover be formed so that it may be thus inserted and secured in a neat manner and this may be effected when the strip is woven according to this invention in one or other of the ways indicated. This part of the centre portion of the strip which is to form the attaching part of the cover may be woven with the two plies bound together or more or less separated or the threads of one ply floated so that the attaching part may be composed of a two ply part or a single ply part.

The accompanying drawings illustrate by way of example several alternative methods of weaving the strip fabric and making up the cut lengths thereof into hooded covers. In these drawings,

Figure 1 is a perspective view of a part of a strip of fabric woven according to this invention.

Figure 2 is a similar view showing the underside of the strip illustrated in Figure 1.

Figure 3 is a perspective view on a somewhat larger scale of a hooded cover made up from a length cut from a strip of fabric woven as shown in Figures 1 and 2.

Figure 4 illustrates an alternative method of arranging the fabric in the loom, the end representing the appearance of the fabric if cut on the line 4—4 in Figure 1.

Figure 5 is a perspective view of a strip of fabric woven according to another method, part of the fabric being shown as broken away to illustrate the formation.

Figure 6 shows on a somewhat larger scale a hooded cover made up from a length cut from a strip of fabric woven as shown in Figure 5.

Figure 7 illustrates yet another method of weaving the fabric strip.

Figure 8 is an underside view showing the manner of making up a hooded cover from a length cut from a strip of fabric woven as shown in Figure 7.

Figure 9 is a perspective view showing a woven pocket of the type indicated with a hooded cover fitted thereto the cover being constructed in accordance with this invention and as illustrated in Figures 1, 2 and 3.

Like letters indicate like parts throughout the drawings.

10 Referring to Figures 1, 2 and 3 the centre portion of the woven strip comprises two plies A and B which for a certain length are woven separate over a part of the width of the fabric but at the middle part C are united by binder threads. While this length of the fabric is being woven the warp threads D which are employed in the formation of the lateral parts of the strip are floated.

15 When this section or length of the fabric, which may be designated *a*, has been woven all the warp threads are shedded and the formation of a closely woven part extending throughout the whole width of the fabric is commenced. The two plies of which the centre portion E of this closely woven part is formed are here united by binder threads over the whole width of this portion.

20 The lateral portions F are woven single ply. The weaving of this full width closely woven part is continued for a length, which may be designated *b*, except that towards the end of this part all the warp threads comprised in the upper ply A are floated as at A¹ while the weaving of the lower ply alone is continued. Thus for a short length here the fabric is woven single ply

25 throughout its whole width. The repeat then occurs and the weaving of another length *a* recommences. The weaving of the lateral portions F now ceases and the warp threads D of which these lateral portions are composed are floated while at the same time the weaving of the floated central warp threads A¹ begins again in the formation of the central part C and the lateral separated plies A and B. It is to be noted as shown in Figure 2 that towards the end of a length *a* the weaving of the lateral portions F is begun while the separate weaving of the plies A and B is still being effected and before these plies are united by the binder threads throughout the whole width of the central portion E. Thus there is formed as at F¹ a short length where the lateral

30 portions F constitute extensions to the edges of the fabric of the upper ply A of the central portion.

A length *a b* cut from the fabric strip suffices to form one hooded cover for a pocket the transverse cut through the strip being made on the line where the floating of the warp threads A¹ ceases and the floating of the lateral warp

45 threads D commences. A cover such as shown in Figure 3 can then be made up from this cut length in the following manner. First the closely woven lateral portions or wings F are folded down along the edges of the thicker central portion which forms the front flap of the cover. The floated warp threads D having been cut off a short distance from the ends F¹ of the lateral

50 portions F each of these rough ends is then inserted between the separated plies A and B and there secured by stitching or in some other convenient manner. The floated threads A¹ of the centre portion are cut off so that the whole front edge of the cover is then formed of the single ply B and can be turned in and sewn so as to give a neat finish to the edges of the front flap E

55 and wings F. It will be seen that the rear edges F² of the wings F are in this case formed by the selvaged edges of the fabric strip and consequently no turning in or finishing of these edges is needed.

The top portion of the cover is provided with a rearwardly extending part by means of which the cover may be attached to the pocket in the manner

55 shown in Figure 9. This rearwardly extending part is comprised by the end of the solidly woven central two ply portion C and the ends of the separated plies A and B on either side thereof. If desired parts of the inner ply A may

be cut away or the separated plies may be left intact when the flap for attachment will be of two ply thickness throughout its whole width.

Figure 9 illustrates by way of example a pocket of the type for which the improved cover is more especially designed this pocket G being adapted to contain a substantially rectangular package and woven integral with a belt or backing G¹ the upper edge of which is split or divided into two separate plies G² and G³. The rearwardly extending flap of the cover is inserted between these plies G² G³ and there secured by sewing or otherwise as found convenient. It is to be noted that the top as well as the front flap of the cover is formed of material of two ply thickness and the front corners of the cover where it is exposed to much wear are smooth without joints liable to fray out as the side flaps or wings F are integral continuations of the front flap E. Further by reason of the joins between the wings F and the top of the cover being made as described by inserting the end parts of the side wings between the separated plies of the edges of the top or centre portion a secure junction is effected between these parts and a neat appearance is obtained both on the inside of the cover as well as on its outside.

The fastening of the cover when closed over the pocket may be effected in any known manner as for instance by means of a snap fastener of which one part would be fixed in the front wall of the pocket while the other part is mounted in a suitable position towards the edge of the front flap of the cover.

The weaving of the fabric strip from which the improved covers are formed may be carried out so that the strip leaves the loom as a broad flat strip such as shown in Figures 1 and 2. If however it should not happen to be convenient to arrange the fabric thus in the loom it may be woven in the form shown in Figure 4. Here the lateral portions are woven folded over upon the central portion in a manner already known and adopted in the weaving of fabric whose width exceeds the width of the reed. In this figure the cut end of the strip represents a section taken on the line 4—4 in Figure 1 and clearly illustrates the formation at that part of the strip with the central floated threads A¹ of the ply A and the lateral portions F as continuous closely woven lateral extensions of this part B¹ of the lower central ply.

Figures 5 and 6 illustrate a modified method of weaving the fabric strip and the manner in which a hooded cover is made up therefrom. Here the weaving commences with the plies A and B formed separate throughout the whole width of the central portion of the strip except on the centre line where the plies must be united owing to the passage of the weft thread from one ply to the other if as may be convenient the fabric is woven on a single shuttle loom. If a two shuttle loom is employed the plies may here be woven entirely separate. At this stage the lateral portions F¹ of the strip are formed as lateral extensions of the lower central ply A. The fabric is thus woven for a length which may be designated *a*. The formation of a closely woven part which extends throughout the whole width of the fabric is now commenced. In the central portion E the two plies A and B are united by binder threads to form a solid two ply fabric while the lateral portions or wings F are single ply. The weaving of this full width closely woven part is continued for a length which may be designated *b*. At the end of this length there is formed a length, which may be designated *c*, in which the plies of the central portion are again woven separate as at A² B² the separation of the plies extending to the centre line as indicated in Figure 5 or only a short distance inwards from the edges as in the fabric strip illustrated in Figure 1. For the first part of this length *c* the weaving of the lateral portions of the strip is continued as at F² these parts constituting lateral extensions of the lower central ply A². The warp threads D of the lateral portions are then all floated. The plies A and B are then united by binder threads to form a closely woven portion E¹ forming a length *d* the warp threads of the lateral portions being still floated. Next for a length *e* the central plies are woven separate but with their edges joined to form

a tube $A^3 B^3$ while the warp threads D of the lateral portions are again floated. At the end of this length e the repeat occurs and the weaving of another length a is commenced with the plies A and B woven separate and the lateral portions woven as at F^1 .

- 5 . A fabric strip thus woven is cut transversely into lengths about the place where the weaving of the tubular part $A^3 B^3$ ends and the weaving of the separated plies A and B begins so that such a length of the fabric comprises all the successive parts a, b, c, d and e . This length is then made up in the following manner into a hooded cover such as shown in Figure 6. The floated lateral warp threads D having been cut off the lateral woven portions or wings F are folded down along the edges of the central portion E which in this case forms the top of the cover and the ends F^2 of these wings F are inserted between the separated plies A^2 and B^2 and there secured by stitching or otherwise. With the strip thus woven the rear edges of the wings F are cut and not selvaged and it is therefore necessary to finish off these edges by turning over and sewing. The inner central ply A of which the side portions F^1 are continuations is at the same time rolled up or turned over and sewn as far as practicable having regard to the connection of this ply A to the ply B on the centre line. This leaves the ply B to form the rearward extension of the top of the cover by means of which the cover is attached to the pocket in the manner shown and described in Figure 9. The end of the front flap of the cover is finished off by tucking the angles into the tubular part $A^3 B^3$ and similarly turning in the edges and securing all by sewing.

- In the strip woven as shown in Figure 5 and in the cover shown in Figure 6 it will be noted that the lateral portions or wings F are of less width so that the sides of the cover have less depth than in the case of the strip and cover shown in Figures 1 and 3. The lateral portions F in the strip shown in Figure 5 may be woven of the same width as the corresponding parts in the strip shown in Figure 1 in which case however it will be necessary to increase the length c wherein the plies A^2 and B^2 are woven separate in order to permit of the insertion of the end parts F^2 of the wings. This will involve reducing the length d of the closely woven part E^1 and this part may even be dispensed with and the separate weaving of the plies A^2 and B^2 continued until the weaving of the tubular part $A^3 B^3$ commences. It would probably be preferable however to weave a short length of closely woven fabric such as E^1 so as to unite the edges of the separated plies beyond where the parts F^2 have been inserted and to give a neater finish at the sides of the front flap and at the places where the tucking into the tubular part $A^3 B^3$ begins.

- Yet another method of weaving the fabric strip is shown in Figure 7 and a hooded cover made up therefrom is illustrated in Figure 8. Here the weaving commences with the plies A and B separated entirely or up to the centre line or for a suitable distance inwards from the edges of these plies the ply A however being extended laterally to form the parts F^1 of the lateral portions or wings F. The strip is thus woven for a length which may be designated a . Then follows a length b of closely woven fabric extending the full width of the strip the centre portion E being formed by uniting the plies A and B by binder threads while the lateral portions F are single ply. Next the plies are again woven separate as at $A^2 B^2$ for a suitable distance inwards from the edges of the central portion this separation of the plies being continued for a length c . The weaving of the side portions F is carried on for a short distance as at F^2 and as lateral extensions of the ply A^2 and then the warp threads D used in the weaving of these side portions are all floated. The next length d is comprised by the closely woven central portion E^1 in the formation of which the plies A^2 and B^2 are united by binder threads. The plies of which the central portion is composed are then again separated to a suitable extent across the width of the fabric as at $A^4 B^4$ and for a short length designated e . Throughout the lengths d and e the lateral warp threads D are floated. The weaving of the ply A^4 now

ceases and all the warp threads A^1 used in its composition are floated for a length designated f but the weaving of the ply B^4 is continued so that the central portion of the strip is here composed only of this single ply throughout its whole width. The repeat then occurs and the weaving of the separated plies A and B together with the lateral portions F^1 recommences.

In Figure 7 the threads D and a part of a lateral portion F F^1 are broken away on one side of the strip in order to show more clearly the construction of the central portion.

A length of the fabric strip suitable for making up into a hooded cover is cut off on a transverse line just before the weaving of the floated threads A^1 into the separated ply A is begun so that at one end of the length there is a short piece of the plain single ply central portion B . When making up the cover the floated threads D and A^1 are cut off and the side portions F are folded along the edges of the solidly woven central portion E which forms the top of the cover. The ends F^2 of the side wings F are then inserted between the plies A^2 B^2 and there secured by stitches or otherwise these plies together with the closely woven central portion E^1 constituting the front flap of the cover. The rear edges of the wings F which are comprised by the parts F^1 are finished off by turning over and sewing. When turning over these edges the ply A which is continuous with the parts F^1 is also rolled or turned over so as to enclose the ragged ends of the floated warp threads A^1 as shown in Figure 8. This leaves the single ply B available to form the flap or extension of the top of the cover by means of which the cover is attached to the pocket in the manner shown in Figure 9. The end of the front flap is finished off by turning over and sewing the end of the single ply B^4 in such a way as to enclose the ragged ends of the floated threads A^1 and the end of the ply A^4 .

In this form of the improved cover as in that shown in Figure 6 the wings F are not woven so wide as in the cover shown in Figure 3 but wider wings may be provided if desired. In that case the length c over which the plies A^2 B^2 are separated must be prolonged to permit of inserting the ends F^2 of the wider lateral portions F . The closely woven central portion E^1 would then be proportionately reduced in length or dispensed with.

Other formations of the woven strip and modifications in the construction of the cover may be made to meet requirements in the weaving or in the pocket to which the cover is to be fitted.

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. A cover for a pocket for cartridges or the like formed from a one piece woven strip comprising a two-ply centre portion and single ply lateral portions the plies of the centre portion being intermittently separated at the edges and inwardly therefrom in the process of weaving so that when the woven strip has been cut into lengths each length can be made up into the form of a hood with the ends of the lateral portions inserted between the plies of the centre portion and there secured by stitching or otherwise.

2. A woven one piece hooded cover for a pocket for cartridges or the like formed from a strip of material having a two-ply centre portion and single ply lateral portions the latter constituting wings which are integral with the front flap of the cover and have their cut edges attached by stitching to the centre portion of the strip which forms the top of the cover after insertion between the plies of this centre portion which at this part are woven separate at the lateral edges and inwardly therefrom, selvaged rear edges being thus obtained for the wings.

3. A woven one piece hooded cover for a pocket for cartridges or the like formed from a strip of material having a two-ply centre portion and single ply lateral portions the latter constituting wings which are integral with the top of

the cover and have their cut edges attached by stitching to the centre portion of the strip which forms the front flap of the cover after insertion between the plies of this centre portion which at this part are woven separate at the lateral edges and inwardly therefrom, the cut rear edges of the wings being finished
5 by turning over and stitching.

4. A one piece hooded cover for a pocket for cartridges or the like formed from a continuous woven strip of fabric having a two-ply centre portion and single ply lateral portions the plies of the centre portion being united by binder
10 threads for certain lengths of the fabric but woven separate at the lateral edges and inwardly therefrom for certain other lengths all the warp threads of one of the plies being intermittently floated and the warp threads of the lateral portions also intermittently floated, the strip being finally cut off in lengths which are made up to form the individual pocket covers.

5. A one piece hooded cover for a pocket for cartridges or the like formed from a continuous woven strip of fabric having a two-ply centre portion and single ply lateral portions the plies of the centre portion being united by binder
15 threads for certain lengths of the fabric but intermittently woven separate at the lateral edges and inwardly therefrom while other lengths of the centre portion are intermittently woven tubular, the lateral portions being alternatively
20 woven plain and having all the warp threads thereof floated, the strip being finally cut off in lengths which are made up to form the individual pocket covers.

6. The method of weaving a strip of fabric adapted to be cut into lengths to form hooded covers for pockets for cartridges or the like as described and illustrated in Figures 1 and 2 or in Figure 4 or in Figure 5 or in Figure 7 of the
25 accompanying drawings.

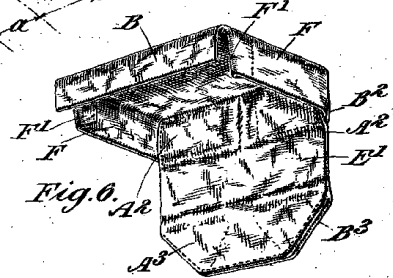
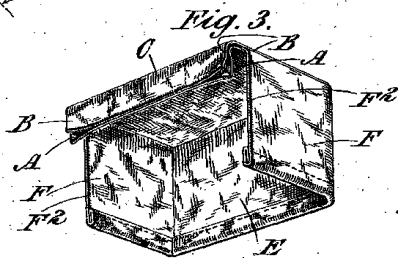
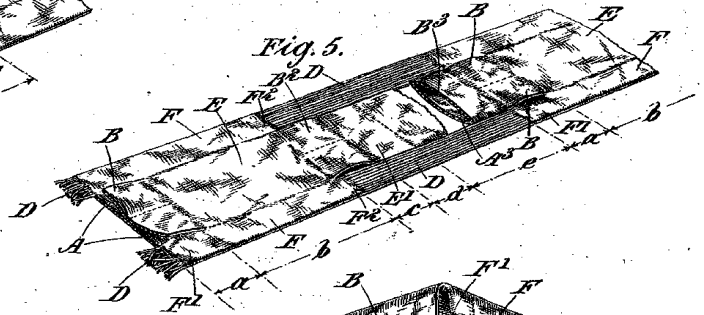
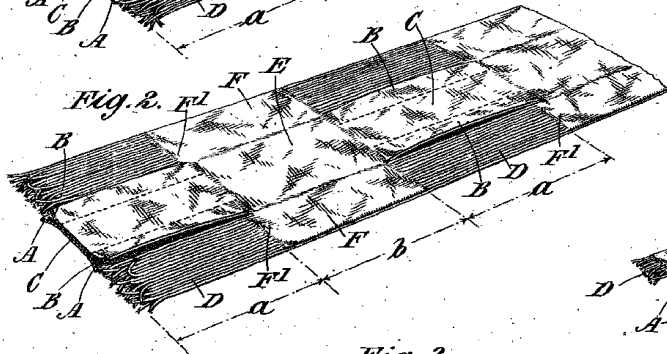
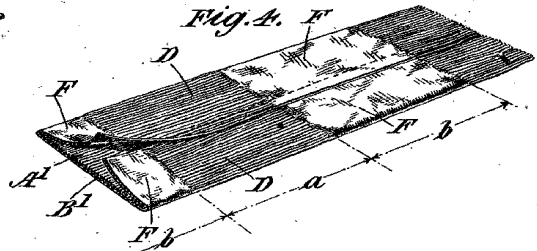
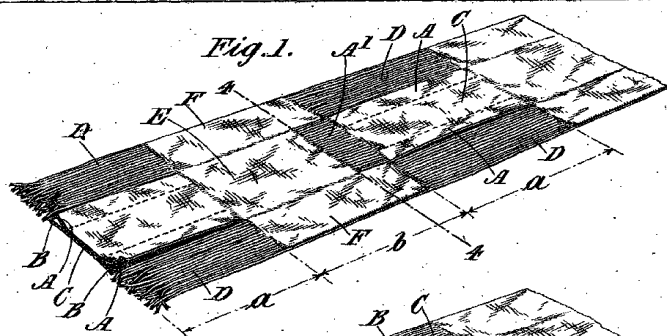
7. The complete woven one piece hooded cover for a pocket for cartridges or the like as described and illustrated in Figures 3 and 9 or in Figure 6 or in Figure 8 of the accompanying drawings.

Dated this 26th day of April, 1917.

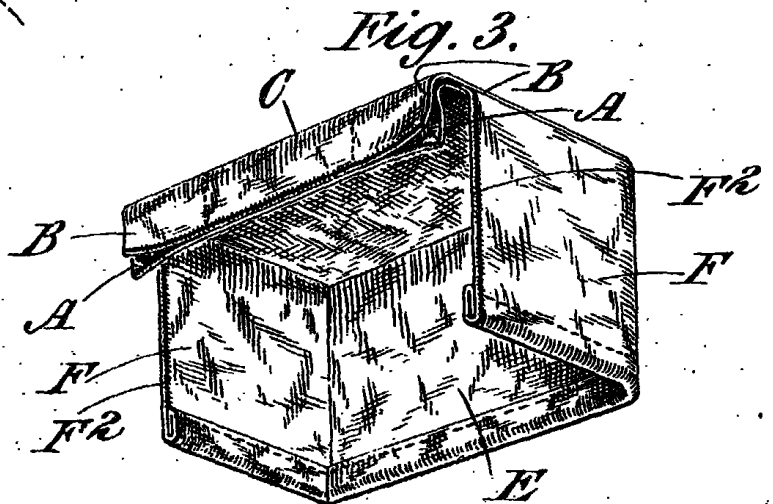
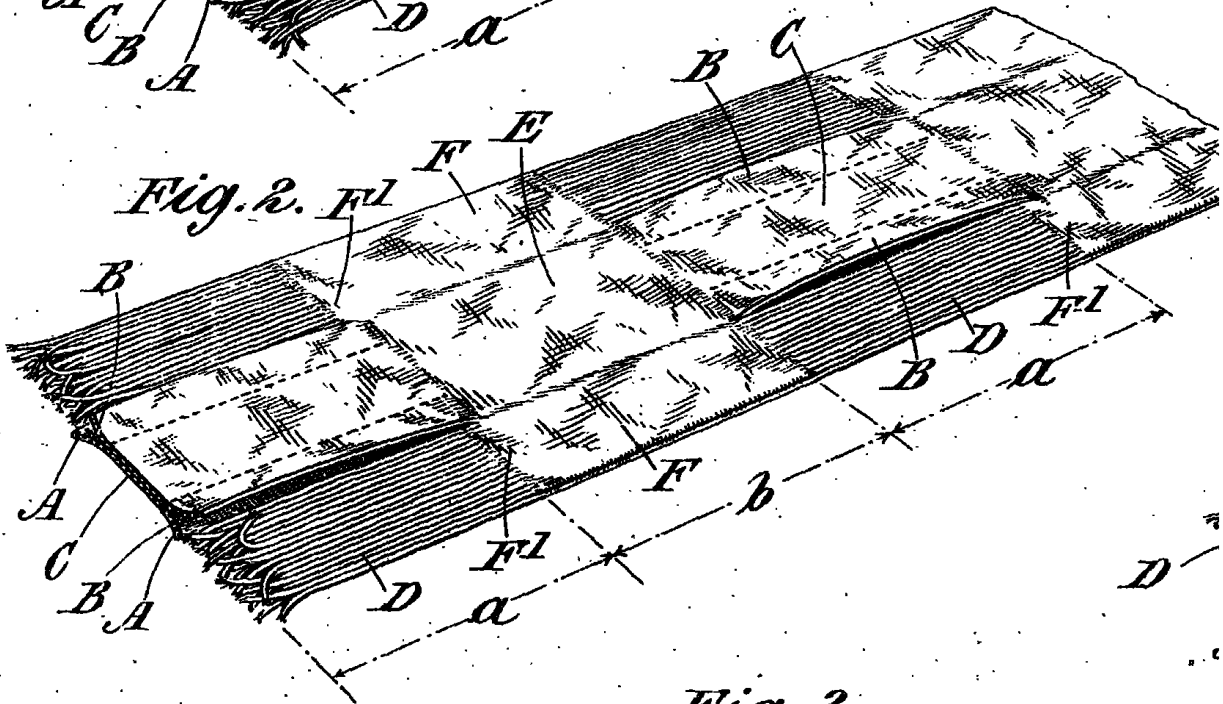
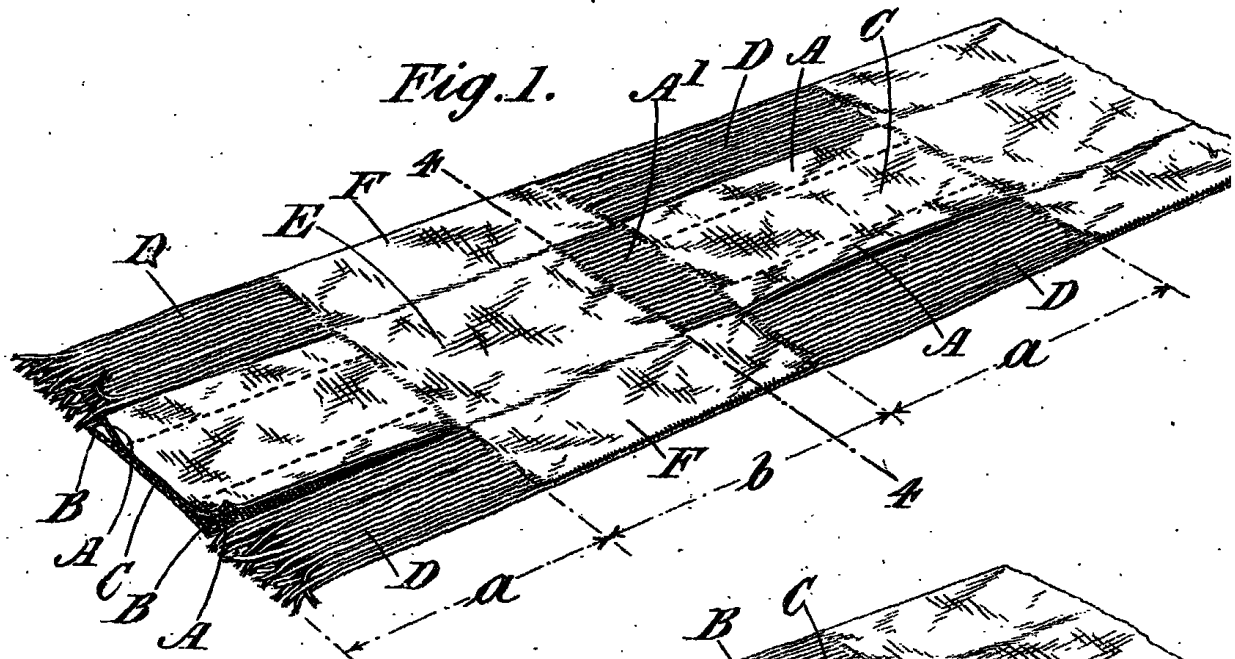
30

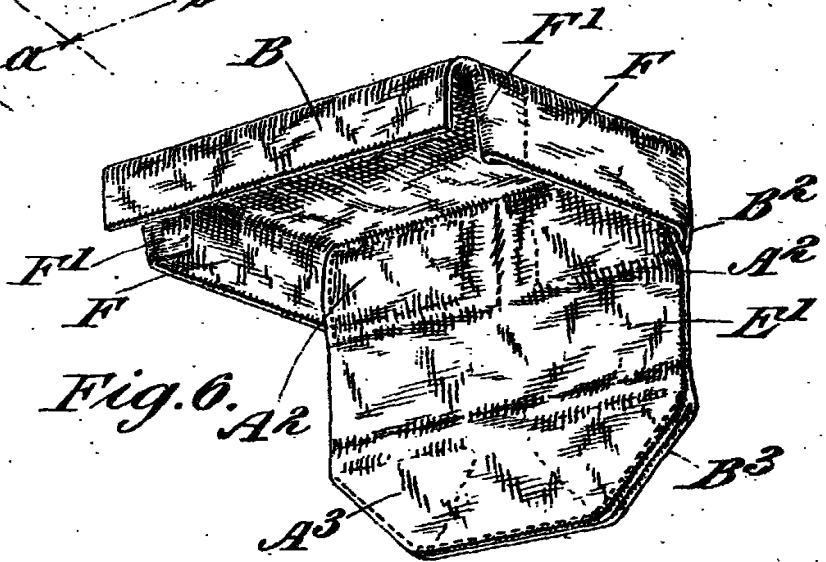
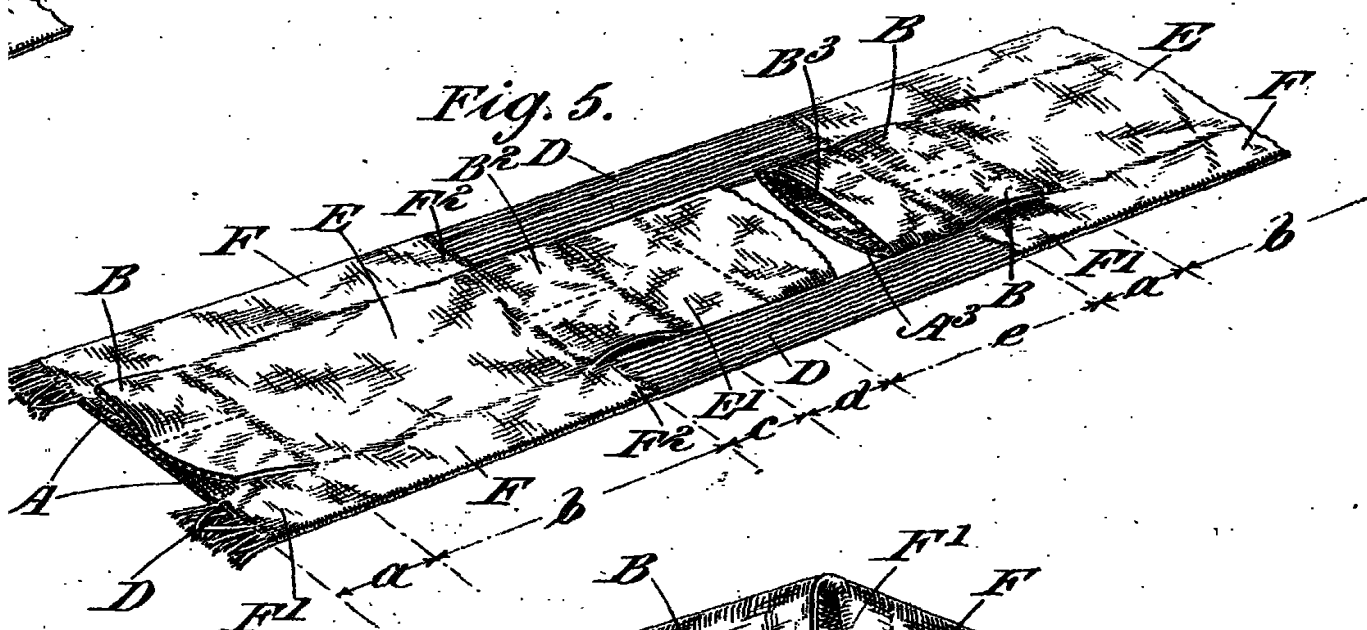
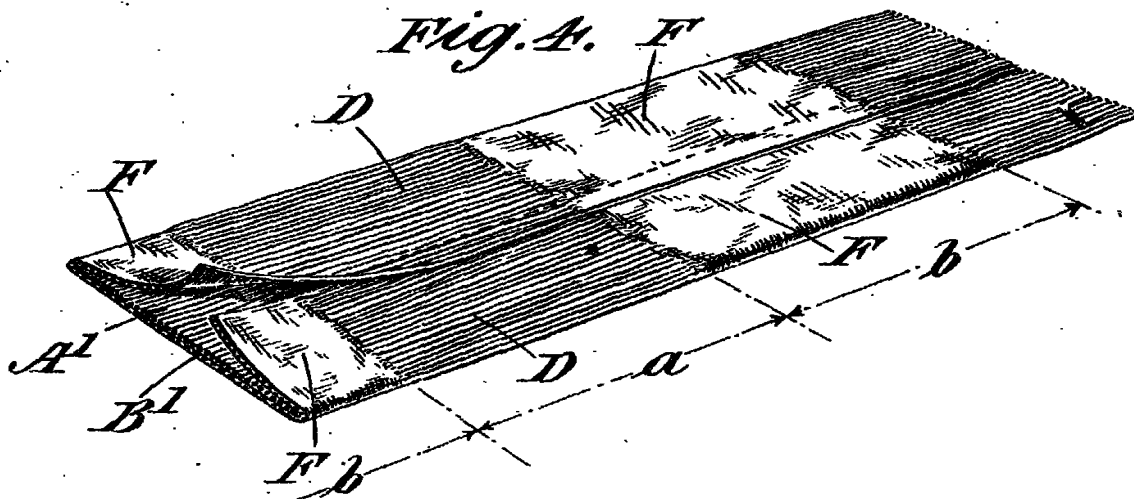
KILBURN & STRODE,
Agents for the Applicants.

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



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





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

