June 30, 1942. J. W. FOSTER 2,287,872

PRINTER'S BLANKET

Filed June 5, 1939

Fig. 1.

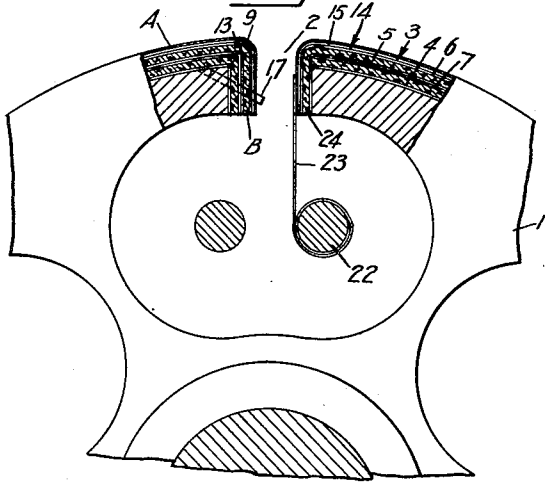


Fig. 2.

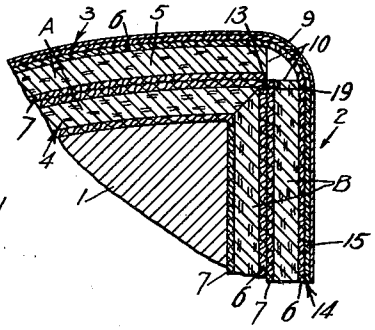


Fig. 4.

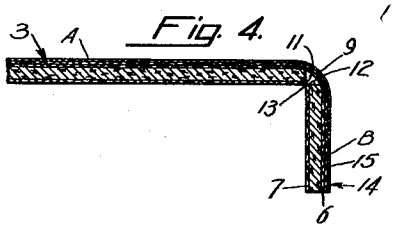


Fig. 3.

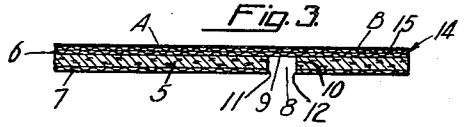


Fig. 5.

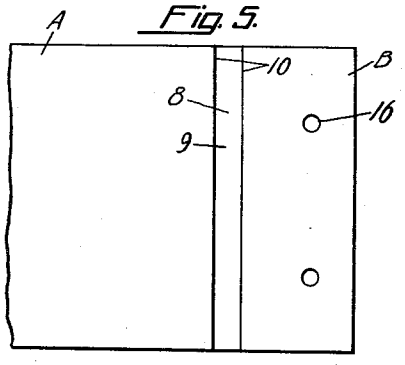


Fig. 6.

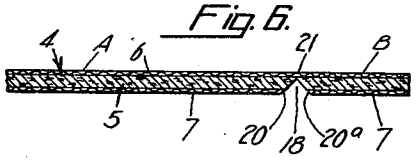


Fig. 9.

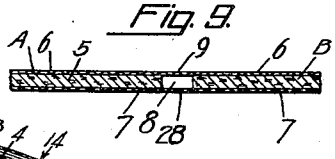


Fig. 8.

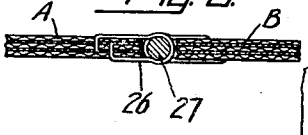
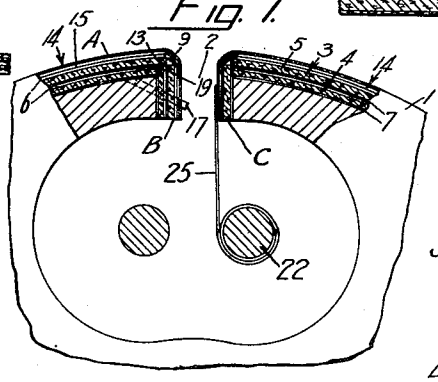


Fig. 7.



INVENTOR
John W. Foster

By [illegible]
ATTORNEY

Patented June 30, 1942

2,287,872

UNITED STATES PATENT OFFICE

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PRINTER'S BLANKET

John W. Foster, Ridgewood, N. J., assignor to Tingue, Brown & Co., a corporation of New York

Application June 5, 1939, Serial No. 277,472

15 Claims. (Cl. 154—54.5)

My invention relates to printers' blankets.

It has among its objects to provide an improved blanket of the type adapted to eliminate a hump or so-called bolster at the edge of the cylinder slot. A further object of my invention is to provide such an improved blanket having an improved hinge construction at a terminal edge of the cylinder. Other objects are to provide an improved hinge construction utilizing a part of the blanket to form a fabric hinge and also having improved means for protecting this hinge in an improved manner. A still further object of my invention is to provide such an improved construction having an improved hinged flap adapted to extend into the cylinder slot and which is markedly stronger and better adapted to be connected to the pins in the slot or to carry a canvas flap connected to a reel, than the mere fabric flaps heretofore used. Still other objects of my invention are to provide such an improved blanket which is adapted to be inexpensively produced from a standard blanket, and which is further adapted to be embodied in either top, intermediate, or bottom blankets, all in such manner as thereby substantially to extend the field of use of such standard blankets at small expense. A further object is to provide improved combinations of blankets whereby the cylinder is packed in an improved manner while utilizing blankets having hinged flaps. These and other objects and advantages of my improvements will, however, hereinafter more fully appear.

In the accompanying drawing, I have shown for purposes of illustration certain embodiments which my invention may assume in practice.

In the drawing:

Figure 1 is an end elevation, partially in section, of a portion of a cylinder equipped with one form of my improvements;

Fig. 2 is an enlarged detail sectional view of the blanketing structure at the left hand edge of the slot shown in Figure 1;

Fig. 3 is a detail longitudinal sectional view of the top blanket shown in Figures 1 and 2, when the same is disposed in sheet form;

Fig. 4 is a view similar to Figure 3, but showing the same bent to form a hinge;

Fig. 5 is a bottom plan view of the construction shown in Figure 3;

Fig. 6 is a view similar to Figure 2, but showing the under blanket shown in Figures 1 and 2;

Fig. 7 is a view similar to Figure 1, but showing a modified construction;

Fig. 8 is a view similar to Figures 2 and 3 showing a further modified construction, and

Fig. 9 is a like view showing a further modified construction.

In the illustrative construction shown in Figures 1 to 6, I have shown a cylinder 1 having a slot 2 of any usual form, and blanketing comprising a top blanket, generally indicated at 3, and an under blanket, generally indicated at 4, carried on the circumference of this cylinder; these blankets being of an improved construction and connected in the cylinder slot in an improved manner, as hereinafter described.

Referring more particularly to the top blanket 3, it will be noted that the same, as herein illustrated, includes a comminuted cork body 5 of well known form having top and bottom fabric faces 6 and 7 suitably attached thereto. Herein, this blanket comprises two portions A and B, of which the portion A is the body portion of the blanket extending around the cylinder, while the portion B is a so-called flap portion formed of the same material as portion A and adapted to be received in the slot 2 while being connected to the portion A by my improved hinge. Herein, this hinge includes a transverse slot 8 extending through the bottom fabric face of the blanket and the cork body 5 to the fabric 6 on the outer face of the cork, in such manner as to form a canvas hinge portion 9. In a preferred construction, this slot is formed by cutting the same in the under face of a completed blanket, care being taken to cut clear through the cork portion 5 without cutting the canvas portion 9 of the top fabric 6 which in use overlies the slot 8 and forms a canvas hinge connecting the blanket portions A and B. If desired, however, the slot may be more shallow, a portion of the cork also remaining uncut. Here attention is also directed to the fact that the walls 10 of the slot 8 are of such form and so spaced as to provide an effective hinge. Further, the width of this slot 8 herein is such that the flap portion B may be disposed substantially at right angles to the adjacent end of the portion A. Moreover, when so disposed, it will be noted that the adjacent ends 11 and 12 of the fabric 6 on the under surfaces of the portions A and B are brought into adjacency in such manner as to provide an inner closed right angle corner 13, as shown in Figure 4, which is inwardly spaced from the fabric hinge portion 9, which is then bent around this closed corner outside the latter. While a completely separate drawsheet may be used if desired in the usual manner outside my

improved blanket, it will be noted that herein I have also attached such a drawsheet 14 to my blanket, by suitably cementing the fabric on the inner face 15 of this drawsheet directly to the outer face of the fabric 6 so that both sections A and B underlies this cemented on drawsheet and the hinge portion 9 between these portions A and B is thus also reenforced by the additional fabric 15 of the drawsheet. Here also it will be observed that suitable apertures 16 are provided in the flap portion B to receive the usual pins 17 provided on one wall of the cylinder slot 2.

Cooperating with this top blanket 3 is also my improved inner blanket 4, herein forming the bottom blanket. This blanket 4 is also of my improved hinged construction and includes like parts A and B. This blanket being a bottom blanket, there is of course no drawsheet attached to the top surface thereof. Further, the transverse slot, while of the same depth as heretofore, is of different form from that previously described, the same being in the form of an inverted V-shaped groove 18. Despite this difference in the slot, it will be observed that as shown in Figure 2, this blanket also provides a closed corner 19 when, upon bending the flap B, the adjacent edges 20 and 20a of the under fabric 6 are brought together, the sloping sides of the V-slot then contacting each other and thereby acting effectively to protect the fabric hinge portion 21. Here also it will be understood that where the flap B of such a blanket is to cooperate with pins 17, apertures corresponding to the apertures 16 are provided in the flap B.

In the use of my improved construction, the blankets 3 and 4 have their flaps B attached to the pins 17, as illustrated in Figure 1. The opposite end of the top blanket 3 is connected in any suitable manner as to a usual reel 22, for example, by a canvas tail 23 suitably connected to that end 24 of the blanket 3 which is thus pulled down into the slot 2. Herein, as usual in bottom blankets, the corresponding extremity of the blanket 4 is not connected to the reel, the connection of the outer blanket 3 to the latter being sufficient, but extends substantially to the edge of the slot 2.

It will also be understood that where a usual form of separate drawsheet is used, as distinguished from the cemented hinge-reenforcing drawsheet heretofore described, a cork blanket similar to the cork portion of the blanket 3 may then be used with or without a blanket 4. Also, where there is a bottom blanket 4, the outer blanket may also have its flap B extended down into the slot and connected to the reel by an attached canvas tail, in order to prevent displacement of the under blankets should the relatively light drawsheet break. Although I prefer to use the form of hinge shown in Figure 3 on the outer of these under blankets, and the form shown in Figure 6 on the inner one of the same, it will of course be understood that a reverse arrangement may be used, and that if desired both of the under blankets may be of either hinged construction. Further, it will be evident that the shape and dimensions of the slot provided may be varied with different blankets, while still obtaining the advantage of my improved hinge and closed corner.

As a result of my improved construction, it will be observed that any hump or bolster is eliminated by the hinge. It is also made possible to utilize a portion of the blanket fabric as the hinge and yet this fabric hinge portion is amply protected by the closed corner, the fabric surfaces on the portions A and B of the blanket abutting to form an effective closed hinge protecting corner. Further, the yielding nature of the cork blanket body is such that the fabric hinge and the transverse slot may conform as necessary in each blanket, while the structure is such that as the canvas hinge portion is drawn down around the outer corner, the inner corner is even more effectually closed. In my improved constructions, it will also be observed that it is made possible to provide a flap extending from the hinge into the cylinder slot which is of the same construction as the body of the blanket, and, therefore, markedly better adapted to be connected to pins, or to have a canvas tail attached thereto, than a mere fabric extension from one face of the body of the blanket. Further, at the same time that this advantage and the advantages of my improved hinge are obtained, it will also be observed that it is made possible to produce my improved construction by inexpensive and readily made slotting or grooving of a standard blanket.

In Figure 7, I have illustrated a modified construction wherein a like hinge construction is provided at both ends of the blanket 3. Here, the additional flap portion C on the blanket 3 has a canvas flap 25 suitably attached thereto and connected to the reel 22 as heretofore. As shown, the corresponding extremity of the under or bottom blanket 4 extends to the edge of the slot and is not connected to the reel. As heretofore, however, it will be understood that where a separate drawsheet is used, the outer blanket may also have a flap portion corresponding to C and a canvas tail connected thereto and to the reel, in order to retain the under blankets in position should the drawsheet break.

In Figures 8 and 9, I have illustrated certain modified constructions which may be used if desired. In Figure 8, it will be noted that the hinge comprises a so-called clipper laced connection similar to those used on belts or the like; and having aligned metal clips 26 fixed to adjacent ends of sections A and B and connected by a pivot pin 27 slipped through the round protruding ends of the clips. In this construction, preferably the sections A and B, while resilient, are more firm than those in blankets 3 and 4 and are preferably formed of a series of laminated fabric portions connected by thin layers of resilient adhesive. Such a blanket is especially adapted to use as a bottom blanket and to cooperate with outer blankets such as shown in Figures 3 and 5, wherein there is sufficient resiliency to permit the protruding metal clip ends to be yieldingly received in the inner faces of the closed corner without distortion of the latter or wear on the hinge portion. In Figure 9, on the other hand, it will be observed that while the cork is entirely removed as in Figure 3, a bridging portion 28 is provided by the uncut under fabric 7, in such manner as thereby to produce a double thickness hinge of canvas, as distinguished from the single canvas hinges utilized in the constructions of Figures 3 and 6. Here it will be understood that the blanket of Figure 8 may, if desired, be used with a separate drawsheet or with a drawsheet cemented thereto, although because of the wear of the metal parts directly on such a drawsheet, the use of one of my improved outer blankets such as shown in Figures 3 or 5 is definitely to be preferred. Further, the blanket of Figure 9 may, if desired,

have a drawsheet cemented thereto as shown in Figure 3. Obviously, the width of the slots provided and the angles of their walls may be varied in the construction shown in Figure 9, as well as in those previously described.

Attention is particularly directed to the fact that in my improved construction cooperating top and bottom blankets are provided having my improved hinged flaps thereon and disposable in a new relation to one another. Accordingly, my blankets may be used in accordance with standard practice in a two or three blanket packing. Further, it will be observed that whether my improved hinge construction is embodied in a top blanket or a bottom blanket or used with a drawsheet cemented to the top blanket or a separate drawsheet, the thickness of neither the top blanket nor the bottom blanket is appreciably increased by the hinge. Instead, the latter is, in all cases, disposed substantially within the thickness or gauge limits of the particular single upper or lower blanket to which it is applied. Thus, it is made possible to apply my improvements without disturbing established gauge limits or established practice as to two or three blanket combinations.

While I have in this application specifically described certain forms which my invention may assume in practice, it will be understood that these forms of the same are chosen for purposes of illustration and that the invention may be modified and embodied in other forms without departing from its spirit or the scope of the appended claims.

What I claim as new and desire to secure by Letters Patent is:

1. A printer's blanket of substantial thickness and having a resilient laminated body portion and a resilient laminated flap portion of the same material as said body portion, and also having a hinge connecting said portions and wall portions on adjacent end faces of said body and flap portions and having said wall portions longitudinally spaced by a distance at least as great as the thickness of said flap portion and cooperating with said hinge to bring portions of the underfaces of said body and flap portions into adjacency to form a substantially closed inner corner in certain angular relations of said body and flap portions.

2. A printer's blanket of substantial thickness and having a transverse slot adjacent one end thereof dividing said blanket into body and flap portions, and also having a flexible hinge portion substantially thinner than said blanket and bridging said slot, and means including adjacent wall portions of said body and flap portions for preventing the edge of a cylinder from entering said slot in certain angular relations of said portions.

3. A printer's blanket of substantial thickness and having a transverse slot adjacent one end thereof dividing said blanket into body and flap portions, and also having a hinge portion including fabric layer means forming an integral layer of each portion and extending continuously across said slot, and means including adjacent wall portions of said body and flap portions for preventing the edge of a cylinder from entering said slot in certain angular relations of said portions.

4. A printer's blanket of substantial thickness and having a transverse slot adjacent one end thereof dividing said blanket into body and flap portions, and also having a flexible hinge overlying said slot, said slot having the walls thereof so spaced by said hinge that said portions substantially close said slot when said flap portion is substantially at right angles to the body portion.

5. A printer's blanket of substantial thickness and having a transverse slot adjacent one end thereof dividing said blanket into body and flap portions, and also having a flexible hinge overlying said slot, said body and flap portions being resilient and engageable with one another at opposite edges of said slot when relatively angularly disposed.

6. A printer's blanket of substantial thickness and having a transverse slot adjacent one end thereof dividing said blanket into body and flap portions, and also having a flexible hinge overlying said slot, said slot having an open end and walls spaced from each other at the open end of said slot by a distance substantially equal to the thickness of said blanket.

7. A printer's blanket of substantial thickness and having a transverse slot adjacent one end thereof dividing said blanket into body and flap portions, and also having a flexible hinge overlying said slot, said slot having an open end and walls closer together adjacent said hinge than at the open end of said slot.

8. A printer's blanket of substantial thickness and having a transverse slot adjacent one end thereof dividing said blanket into body and flap portions, and also having a resilient layer on each portion and plurality of fabric layers on the same face of said portions and of substantially less thickness than said resilient layer bridging said slot and forming a reenforced hinge, and adjacent wall portions of said body portion and flap portion forming a closed inner corner protecting said bridging layers in certain angular relations of said portions.

9. A printer's blanket of substantial thickness and having a transverse slot adjacent one end thereof dividing said blanket into body and flap portions, and also having a resilient layer on each portion and fabric layer means on said portions bridging said slot and forming a hinge, and a drawsheet fixed to the outer face of said layer means, said fabric layer means and said drawsheet having a combined thickness substantially less than said resilient layer, and adjacent wall portions of said body and flap portions forming a closed inner corner protecting said bridging layer means in certain angular relations of said portions.

10. In combination, separate outer and inner blankets each of substantial thickness and having body and flap portions connected by a hinge portion, said inner blanket being disposable within said outer blanket when said flap portions are substantially at right angles to said body portions with the hinge of said inner blanket in the inner corner of said outer blanket.

11. In combination, separate outer and inner printer's blankets each of substantial thickness and having body and flap portions spaced by a slot and having a hinge overlying said slot and said body and flap portions disposable substantially at right angles to one another, the outer blanket having said slot at the inner corner when so disposed and the inner blanket when so disposed having its hinge opposite said slot and in said inner corner.

12. In combination, outer and inner printer's blankets each of substantial thickness and having hinged body and flap portions disposed substan-

tially at right angles to one another, the outer blanket having resilient walls forming an inner corner and the inner blanket having its outer corner in said inner corner, said inner blanket also having wall portions on adjacent end faces of said hinged body and flap portions longitudinally spaced by a distance at least as great as the thickness of said flap portion and cooperating with the inner blanket hinge to bring portions of the underfaces of said body and flap portions into adjacency to form a substantially closed inner corner.

13. In combination, outer and inner printer's blankets each of substantial thickness and having hinged body and flap portions disposed substantially at right angles to one another, a drawsheet overlying said hinged body and flap portions of the outer blanket, the outer blanket having resilient walls forming a closed inner corner protecting said drawsheet and the inner blanket having a closed inner corner and its outer corner in the closed inner corner of said outer blanket.

14. In combination, outer and inner printer's blankets each of substantial thickness and having hinged body and flap portions disposed substantially at right angles to one another, the outer blanket having resilient walls forming an inner corner and the inner blanket having its outer corner in said inner corner, said inner blanket having projecting pivot means along its outer corner yieldingly received in the resilient edges of said inner corner.

15. In combination, outer and inner printer's blankets each of substantial thickness and having hinged body and flap portions disposed substantially at right angles to one another, the outer blanket having a drawsheet fixed thereon and also having resilient walls forming a closed inner corner protecting said drawsheet and the inner blanket having its outer corner in said inner corner, said inner blanket having projecting pivot means along its outer corner yieldingly received in the resilient edges of said inner corner.

JOHN W. FOSTER.