Oct. 31, 1950 C. P. KALER 2,528,371

METHOD OF STOCKING MANUFACTURE

Filed March 14, 1949

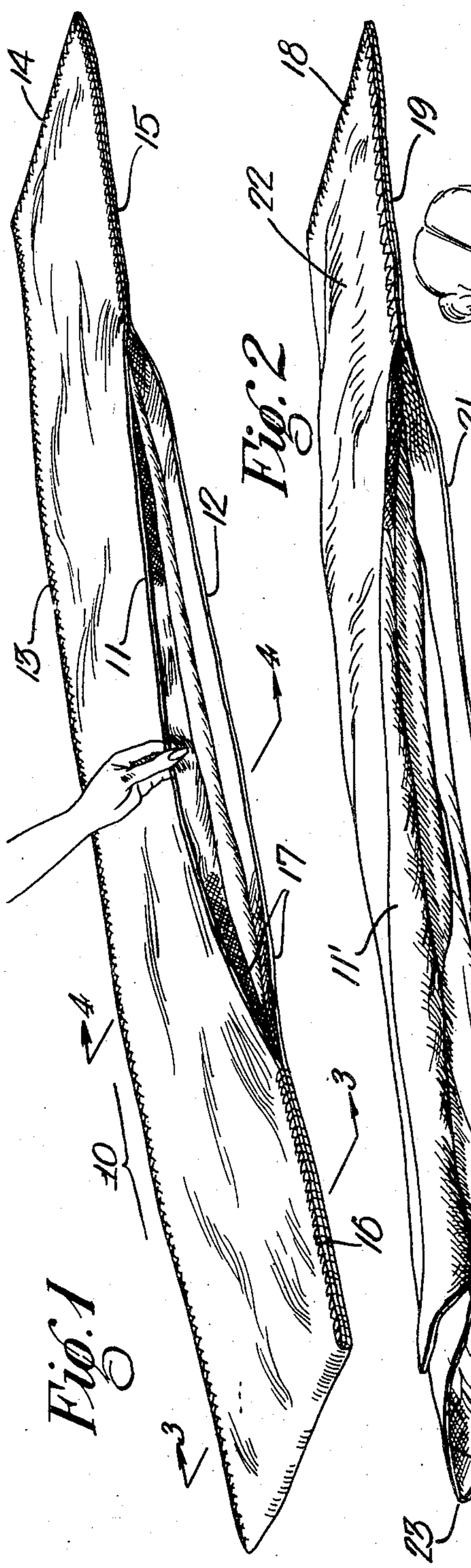

Fig. 1

Fig. 2

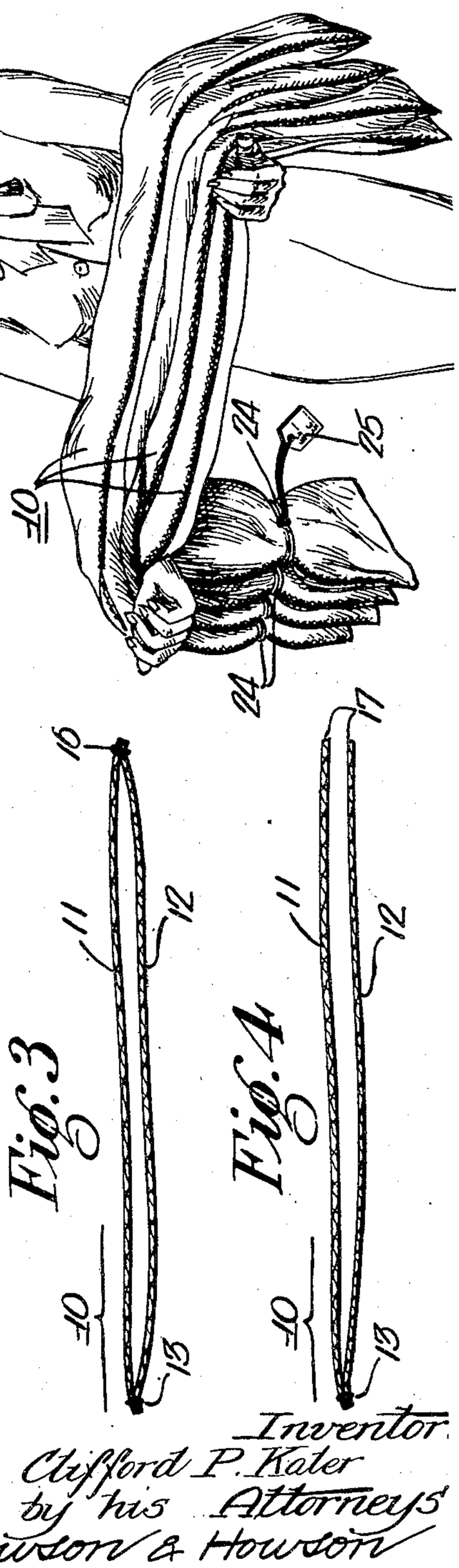

Fig. 5

Fig. 3

Fig. 4

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Patented Oct. 31, 1950 2,528,371

UNITED STATES PATENT OFFICE

2,528,371

METHOD OF STOCKING MANUFACTURE

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Application March 14, 1949, Serial No. 81,358

2 Claims. (Cl. 2—239)

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This invention relates to the manufacture of stockings and more particularly to an improved method of utilizing a protective carrier or case for transporting partially completed stockings during the manufacturing process.

This application is a continuation-in-part of my copending application Serial No. 760,433 filed July 11, 1947.

During the process of stocking knitting, it is necessary to transport stockings from one operation to another, for example, from the knitter to the looper, to the seamer, to the form examiner, and thence to the pre-boarding and sizing operations. In the ordinary hosiery mill, there has been considerable loss due to damage to the stockings which occurs while carrying them from one operation to the other through the mill. It will be readily appreciated that the extremely fragile nature of stockings and the difficulty of removing dirt make protection extremely desirable in order to avoid a substantial number of rejects.

The most prevalent source of loss in the manufacture of stockings arises from the handling of the stockings by the various operators which results in a condition known in the industry as "pull threads" or "snags." These are caused primarily because the stocking threads catch on the operator's finger nails or parts of his clothing, and in most cases the stocking is completely ruined when such a condition occurs. Excessive soiling is a secondary but serious problem confronted in stocking manufacturing.

I have found that a very efficient and inexpensive protector can be fabricated from a piece of textile or synthetic plastic material folded to form either one or two pockets into which a number of partially completed stockings may be placed. The casing or bag is of generally rectangular shape, the dimensions being sufficient to enclose several full length stockings when flat.

The bag may be formed from two pieces of material, the edges of which are partially sewed together, or it may be formed by folding a single piece of material of double length about a transverse bend or a single length of material of double width about a longitudinal bend. The edges of the bag may then be sewed together to provide a container having a pocket at each end or one having merely a single pocket.

An object of this invention is to provide an improved method of manufacturing stockings to prevent loss due to pull threads and soiling of the stockings.

Further objects will be apparent from the specification and drawings in which:

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Fig. 1 is a perspective of a stocking bag constructed in accordance with the invention having a pocket at each end;

Fig. 2 is a modified form of a protective stocking bag having a single pocket;

Fig. 3 is a section taken along 3—3 of Fig. 1;

Fig. 4 is a section taken along 4—4 of Fig. 1; and

Fig. 5 illustrates the method of utilizing the protective stocking bags in the manufacture of stockings and shows the method of tying the stockings in the bags.

The stocking bag proper, designated by the numeral 10 in Fig. 1, is formed from a long strip of soft textile or plastic material approximately nine inches wide and ninety-six inches long. This strip is folded in half to form an enclosed elongated receptacle having an upper ply 11 and a lower ply 12. One side 13 is then stitched its entire length, the end 14 opposite the fold is stitched, and the other side is stitched part way from the ends of the receptacle at 15 and 16, thus leaving an opening formed by the edges of plies 11 and 12 located centrally of side 17. While it will be understood that the above dimensions are not critical, it has been found that a bag of approximately this size conveniently holds about twenty-four stockings.

A modified form of the protective bag is illustrated in Fig. 2 in which the original piece of material is approximately forty-eight inches long and eighteen inches wide but is folded in half longitudinally instead of transversely. The material at one end 18 is sewed together and the stitching is continued partially along the opposite side at 19. The other end 20 is left open as well as a substantial portion of side 21. This construction forms a single pocket 22 in one end of the bag and in addition, the upper ply 11′ is joined to the lower ply 12′ by means of the fold in the material at 23.

In operation, the partially finished stockings are placed by the knitter in the bag with the welts all in the same end of the carrier. One end of the bag is then tied, either by a string or rubber band (as shown in Fig. 5), and a suitable ticket 25 may be attached during this operation. The bags are then carried from the knitter to the looper who, without removing the binding 24, pulls out the stockings to perform the looping operation. A suitable notation is then made on the ticket and the bag is then passed to the seamer who likewise partially removes the stockings from the bag to perform the seaming operation, whereupon the stockings may be reinserted completely in the bag and transferred to the

form examiner and then to the pre-boarding and sizing operations. Of course, it will be understood that if desired, the examiner may completely remove the stockings from the bag if the additional protection in one of the operations is not deemed to be necessary.

It will be understood that the looping operation is performed upon the toes of the stockings, and therefore, the bags should be tied at the end containing the welts in order to permit this operation without removing the binding. The same applies to the seaming operation but it will be understood that either end of the stocking may be tied in accordance with the particular procedure employed in any mill. Furthermore, the binding may be applied whether the form of Fig. 1 or of Fig. 2 is utilized, but in the case of the form of Fig. 2, it is desirable that the tags and binding be applied near the end opposite pocket **22**.

The provisions of a cheap, light-weight case or bag for transferring nylon, silk or rayon stockings from one manufacturing operation to another, as well as for storing them between operations has greatly improved the manufacture of stockings in that rejections due to pull threads have been in a large measure eliminated. The construction of the bags is adapted to permit ready insertion and removal of the stockings and

the double pocket form may be employed to eliminate the use of the binding if desired.

I claim:

1. The method of manufacturing stockings which comprises the steps of placing knitted stockings in a protective casing with the welts of the stockings adjacent each other, tying the one end of the casing and the stockings, transporting the casing and stockings to the looper, extracting the toes from the casing, performing the looping operation, and reinserting the stockings into the casing without removing the tie.

2. The method of manufacturing stockings which comprises the steps of placing knitted stockings in a protective casing with the welts of the stockings adjacent each other, tying one end of the casing and the stockings, transporting the casing and the stockings to the looper, extracting the untied end of the stockings from the casing, performing the looping operation, reinserting the stockings into the casing without removing the tie, transporting the casing and stockings to the seamer, extracting one end of the stockings from the casing without removing the tie, and performing the seaming operation.

CLIFFORD P. KALER.

No references cited.

Disclaimer

2,528,371.—*Clifford P. Kaler*, Lansdale, Pa. METHOD OF STOCKING MANUFACTURE. Patent dated Oct. 31, 1950. Disclaimer filed Dec. 28, 1950, by the inventor.

Hereby disclaims from the specification the following: Page 1, column 2, line 53, "partially"; page 2, column 3, lines 11 and 12, "The same applies to the seaming operation"; and claim 2.

[*Official Gazette January 23, 1951.*]