Dec. 6, 1938. C. D. FLEMING 2,139,544

APRON FOR FLATWORK IRONERS

led July 21, 1937

FIG. 1.

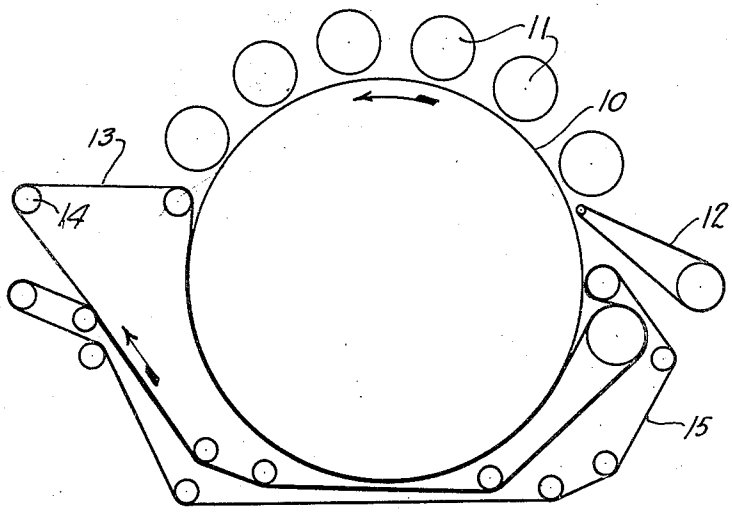


FIG. 2.

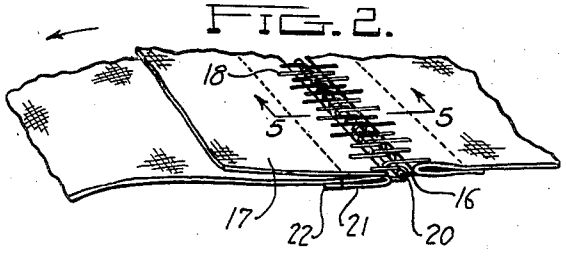


FIG. 3.

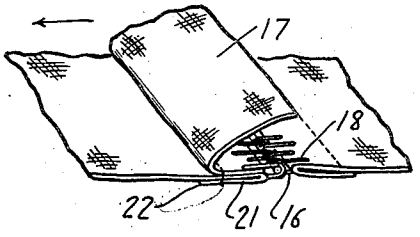


FIG. 4.

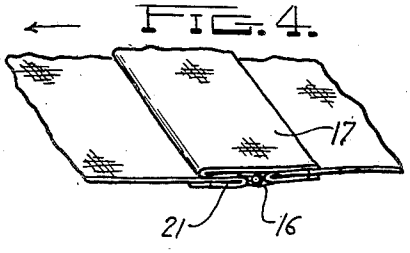
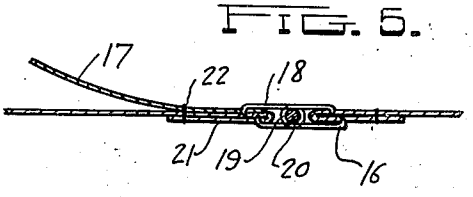


FIG. 5.



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APRON FOR FLATWORK IRONERS

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Application July 21, 1937, Serial No. 154,864

1 Claim. (Cl. 24—33)

This invention relates to flat work ironers but more particularly to belts used in connection with such machines and with which the goods are in contact.

Belts of this character are usually endless and are frequently made from strips of canvas which are connected together at their ends. One form of connection consists of a wire staple arrangement which has provision for simple and convenient detachment. For many reasons a metal connection of this character is most desirable but in order to militate against the wires forming impressions in the goods during ironing, it is important that a covering be employed. For that purpose, flaps have been used and these have been attached to the body of the belt by a sewn seam. However, after a short time the seam has given way, owing particularly to the heat, and the flap has fallen off. Although endeavor has been made to overcome this difficulty, no one has, so far as I know, produced a flap of this character which can be readily, conveniently and inexpensively attached to the belt and accomplishes the desired result over an extended period of time.

For purposes of illustration but not of limitation, an embodiment of the invention is shown on the accompanying drawing in which

Figure 1 is a diagrammatic view of a flat work ironer showing endless belts or aprons for conveying the goods;

Fig. 2 is a fragmentary enlarged perspective of one of the aprons showing the manner in which the ends are connected together and the flap arrangement;

Fig. 3 is a view somewhat similar to Fig. 2 showing the flap partially folded rearwardly to cover the metallic connecting device;

Fig. 4 is a fragmentary perspective of the belt with the flap folded over upon the connecting device; and

Fig. 5 is an enlarged transverse sectional view on the line 5—5 of Fig. 2.

The illustrated embodiment of the invention comprises a flat work ironer diagrammatically shown in Fig. 1, having a relatively large heated cylinder 10 with which a plurality of smaller heated rolls 11 cooperate. Goods are first fed to the cylinder 10 by a feeding device 12 and thence passed between the cylinder 10 and the rolls 11. After the goods leave the last roll 11, they enter between a conveyor apron 13 and the cylinder 10. The conveyor apron 13 is in the form of an endless canvas belt trained about guide rollers 14. The apron 13 cooperating with the cylinder 10 carries the goods to another conveyor apron or belt 15, which may also be of canvas and the upper side of which contacts with the underside of a portion of the belt 13, thereby carrying the goods to the side of the cylinder 10 opposite from the feeding device 12.

The aprons 13 and 15 may be similarly constructed and in accordance with the present invention, the aprons are in the form of a strip of material such as canvas, the free ends of which are connected by a separable metallic fastening device 16. The particular form of the metallic connector forms no part of this invention. Suffice it to say that metallic devices of the character shown on the drawing are at present in use and are sufficiently strong and flexible for the purpose intended. However, it is important that the goods being ironed be kept free from contact with the metallic connecting device in order to militate against undesirable impressions being formed in the goods during the ironing operation. To overcome this difficulty, fabric flaps have heretofore been employed, extending over the metallic connector and they have ordinarily been secured in place by a sewn seam. Experience has shown that flaps of this character are soon rendered useless because the heat weakens the stitching and the strain imparted to the flap soon separates it from the belt or apron.

The above difficulties are readily overcome by providing a flap 17 which is preferably co-extensive with the apron in a lateral direction and the free edge of the flap is held in place by the metallic connector 16, the latter in this instance consisting of a plurality of wire staples 18 arranged in staggered relation and providing loops 19 to receive a wire 20 which separably secures the end portions together. The staples 18 on the edge portion of the apron on which the flap 17 is secured not only extend through the doubled end portion 21 of the apron but also through the free edge of the flap 17. In this manner, the edge of the flap 17 is securely and reliably held in position and is not affected by the heat from the cylinder 10 and rolls 11.

In order to insure that the flap 17 will be properly folded over the metallic connecting device 17, a sewn seam 22 extends through the flap 17 and the adjacent portion of the apron as well as the folded portion 21 in relatively close juxtaposition to the staples 18. The flap is connected to the forward end portion of the apron from the standpoint of its direction of movement as indicated by the arrow A, so that as the apron advances, the flap 17 can be folded rearwardly as

indicated in Fig. 3, along a line determined by the sewn seam 22. This properly positions the body of the flap 17 with respect to the metallic staples 18 adequately covering the seam. The crease so formed will serve to keep the flap in the desired position and since the sewn seam 22 is beneath the body of the flap, it is to a certain extent protected from the intense heat, but even assuming that the seam 22 gives way, the flap is still anchored in place by virtue of its connection with the staples 18. It is apparent that in this manner, an exceptionally simple arrangement is provided which is not only foolproof but satisfactorily and efficiently covers the metallic connecting device 16 so as to avoid the liability of clothes becoming objectionably impressed with the projecting portions of the connecting device.

It is to be understood that changes in details of construction, arrangement and choice of materials may be effected without departing from the spirit of the invention especially as defined in the appended claim.

What I claim is:

In a flat work ironer, a textile fabric belt, a metallic device connecting the free ends of the belt, a fabric flap disposed transversely of the belt adjacent said metallic device, and a transversely extending sewn seam securing an end portion of the flap juxtaposed to said metallic device, the metallic connecting device extending through and securing the adjacent end edge of the flap in place, the flap being folded upon itself along said seam and extending over said metallic device and the free end of the flap extending rearwardly of the intended direction of movement of the belt.

CLIFFORD D. FLEMING.