

Sept. 18, 1951

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IRONER PERMITTING REMOVAL OF WORK AT INPUT END

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2 Sheets-Sheet 1

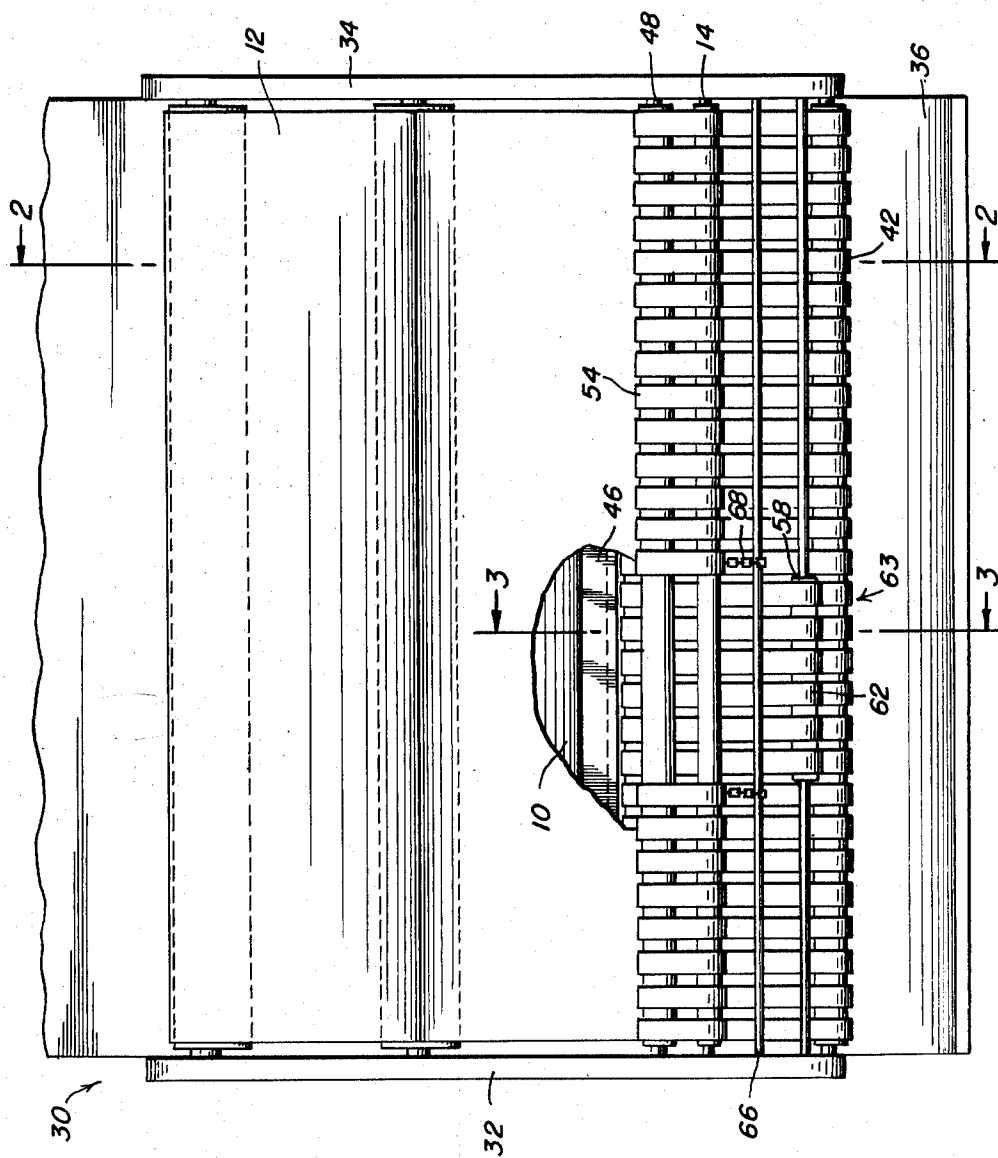


Fig. 1.

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Fig. 2.

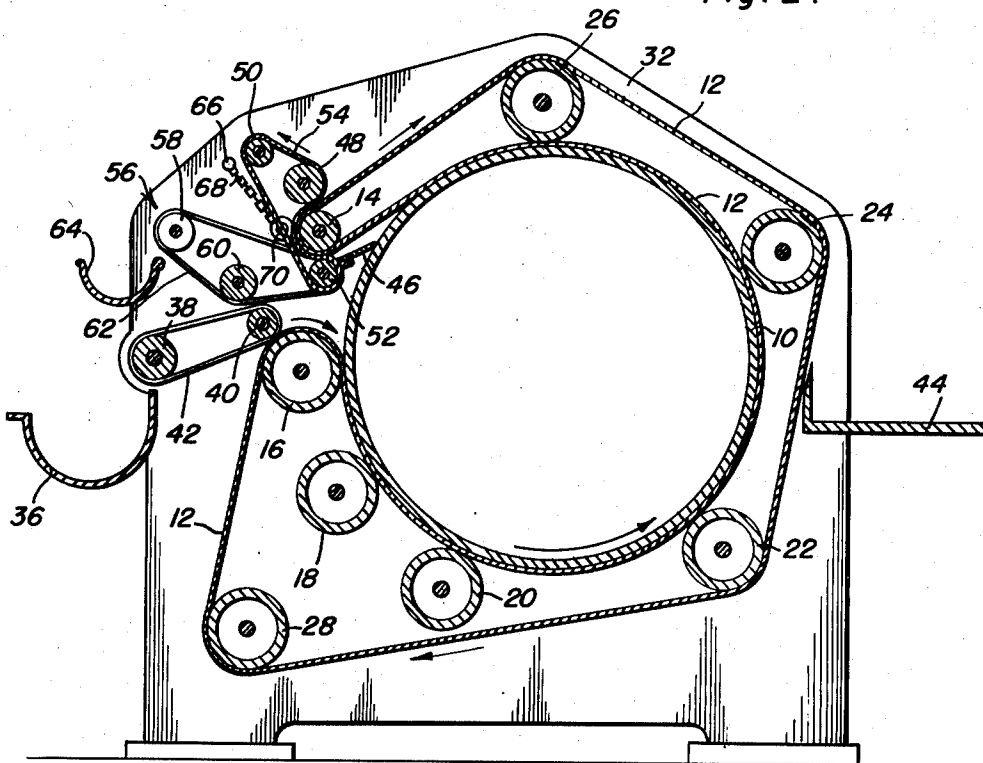
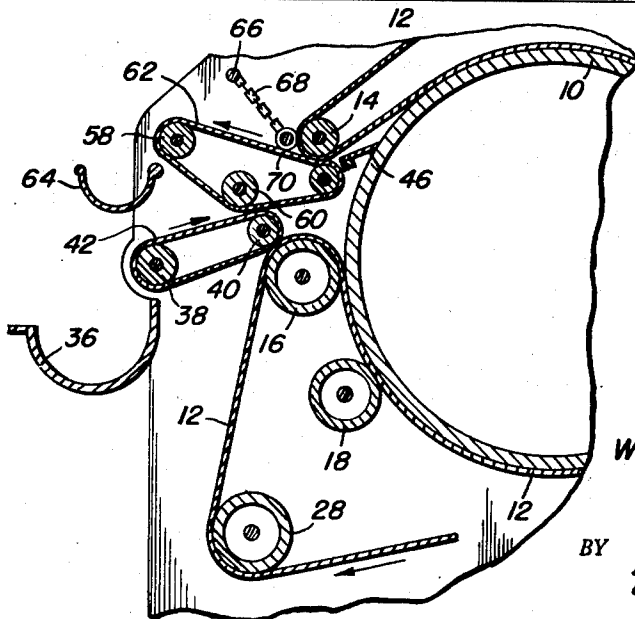


Fig. 3.



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IRONER PERMITTING REMOVAL OF WORK
AT INPUT END

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7 Claims. (Cl. 38—11)

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This invention relates to an attachment for a conventional mangle or ironer and has for its primary object to provide a means for re-running pillow cases, heavy hand towels, roller towels, wash cloths, and the like through the ironer without the necessity of an operator walking from the rear or discharge end of the ironer back to the front or feed end thereof.

Because many laundry items will not completely dry in one pass through the mangle or ironer, these items must be re-run. Since the average laundry bundle always contains one or more of these items, it was heretofore necessary for one operator to walk to the folding side of the machine, gather up the items to be re-run, walk back to the feed side and re-run the work, then a bundle separator (usually a piece of red cloth) was run through and the feeders started work on a new bundle and the entire procedure was repeated with each separate bundle processed. The device of the instant invention is designed to eliminate this uneconomical waste of time and energy.

These, together with various ancillary objects and features of the invention which will later become apparent as the following description proceeds, are attained by the device, a preferred embodiment of which has been illustrated by way of example only in the accompanying drawings, wherein:

Figure 1 is a front elevation of an ironer with the attached device, some parts being broken away;

Figure 2 is a sectional view taken on the plane of line 2—2 of Figure 1; and

Figure 3 is a sectional view taken on the plane of line 3—3 of Figure 1.

Specific reference is now made to the drawings. In the several views in the accompanying drawings and in the following specification similar reference characters indicate corresponding elements throughout. Indicated generally at 10 is a heated cylinder over which is entrained, in a manner well-known in the art, an apron 12 driven by an apron drive roll 14. To guide the apron on the cylinder, padded rolls 16, 18, 20 and 22 are provided as are idler rolls 24, 26 and 28. The housing for these parts is generally indicated at 30 and consists of side members 32 and 34 in which the rolls described hereinabove are rotatably journaled.

Secured to the front of the housing is an appropriate feeding trough 36 above which is rotatably journaled a feed ribbon drive roll 38. Above and in front of the padded roll 16 is rotatably jour-

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naled a driven roll 40 and entrained over the rolls 38 and 40 are endless feed ribbons 42.

At the rear end of the housing is secured a folding table 44 for receiving discharged laundry. Secured to the housing adjacent the top front portion of the cylinder is an elongated knife 46. Rotatably positioned above and adjacent the apron drive roll 14 is an idler roll 48 and two further idler rolls 50 and 52 over which are entrained doffer tapes 54. The laundry items are fed from the trough 36 on the feed ribbons 42 and follow the path of the arrows shown in Figure 2. The items of clothing are separated from the cylinder by the knife 46 from which they are picked up by the doffer tapes 54 and fed to the apron 12 and guided over the rolls 26 and 24 to be discharged on the folding table 44. All of the above is conventional and forms no part of the instant invention.

The instant invention is an attachment generally indicated at 56 and is constructed as follows. As shown clearly in Figure 1, several doffer tapes are removed. Rotatably secured to the sides 32 and 34 of the housing and at the front thereof is a pair of idler rolls 58 and 60 and entrained over these two rolls and the idler roll 52 is a plurality of endless return tapes 62 which in effect replace the removed doffer tapes. It will further be noted that a return lane 63 is provided in place of the removed doffer tapes. Secured to the front of the housing beneath the idler roll 58 is a receiving trough 64. Supported by means of an elongated rod 66 and a flexible member or chain 68 is a roller 70, preferably padded, which rests on and is driven by the return tapes. It covers the gap between the missing doffer tapes, rubs lightly on the apron (traveling in the opposite direction of the apron) and prevents any small pieces from adhering to the apron and allowing them to continue on to the folding table. It removes all small pieces that should be returned to the trough 64 and yet, because of the lack of pressure against the apron, allows the larger pieces, such as sheets and the like to pass through the ironer without interference. The path of travel of small pieces to be re-run in the ironer is indicated by the arrows shown in Figure 3. Thus work fed into the return lane 63 is not picked up by doffer tapes but rather by return tapes 62 and deposited in the trough 64. The work deposited in the trough 64 at the front of the mangle or ironer can be re-run without the need for the operator to walk to the folding table 44 at the rear thereof to retrieve the undried work. At the same time, the construc-

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tion permits the ironer to discharge larger pieces to the folding table 44 in a single run.

In view of the foregoing description taken in conjunction with the accompanying drawings it is believed that a clear understanding of the device will be quite apparent to those skilled in this art. A more detailed description is accordingly deemed unnecessary.

It is to be understood, however, that even though there is herein shown and described a preferred embodiment of the invention the same is susceptible to certain changes fully comprehended by the spirit of the invention as herein described and the scope of the appended claims.

Having described the invention, what is claimed as new is:

1. In combination with an ironer having a cylinder, an apron drive roll, an apron driven by the drive roll, guide rolls to direct the apron to convey goods from the front of the cylinder and return them to the front, a knife disposed transversely of said apron to remove the goods from the front of the cylinder, doffer tapes adjacent said knife to pick up the goods removed thereby, said doffer tapes extending over a portion of the apron less than its width, means including several of said guide rolls for conveying goods picked up by said doffer tapes to the rear of the cylinder; an attachment for withdrawing goods at the front of the cylinder comprising a plurality of spaced rolls interposed between said apron drive roll and one of said guide rolls at the front of the cylinder, endless return tapes entrained over said spaced rolls and occupying the remaining

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portion of the width of the apron, one of said spaced rolls being a common pulley for said return tapes and said doffer tapes, and means for directing the goods over the endless tapes.

2. The combination of claim 1 and a receiving trough beneath one of said spaced rolls.

3. The combination of claim 2 wherein said means includes a bearing element engageable with said endless tapes and means for securing said bearing element to said ironer.

4. The combination of claim 3 wherein said bearing element is a roller and said last-mentioned means includes a flexible member secured at one end to said roller.

5. The combination of claim 4 wherein said endless return tapes are driven in the same direction as the doffer tapes.

6. The combination of claim 5 wherein said spaced rolls are three in number, one of which is disposed beneath said drive roll adjacent the knife.

7. The combination of claim 6 wherein said endless return tapes receive their drive from the apron.

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REFERENCES CITED

The following references are of record in the file of this patent:

FOREIGN PATENTS

Number	Country	Date
506,715	Great Britain	June 2, 1939