

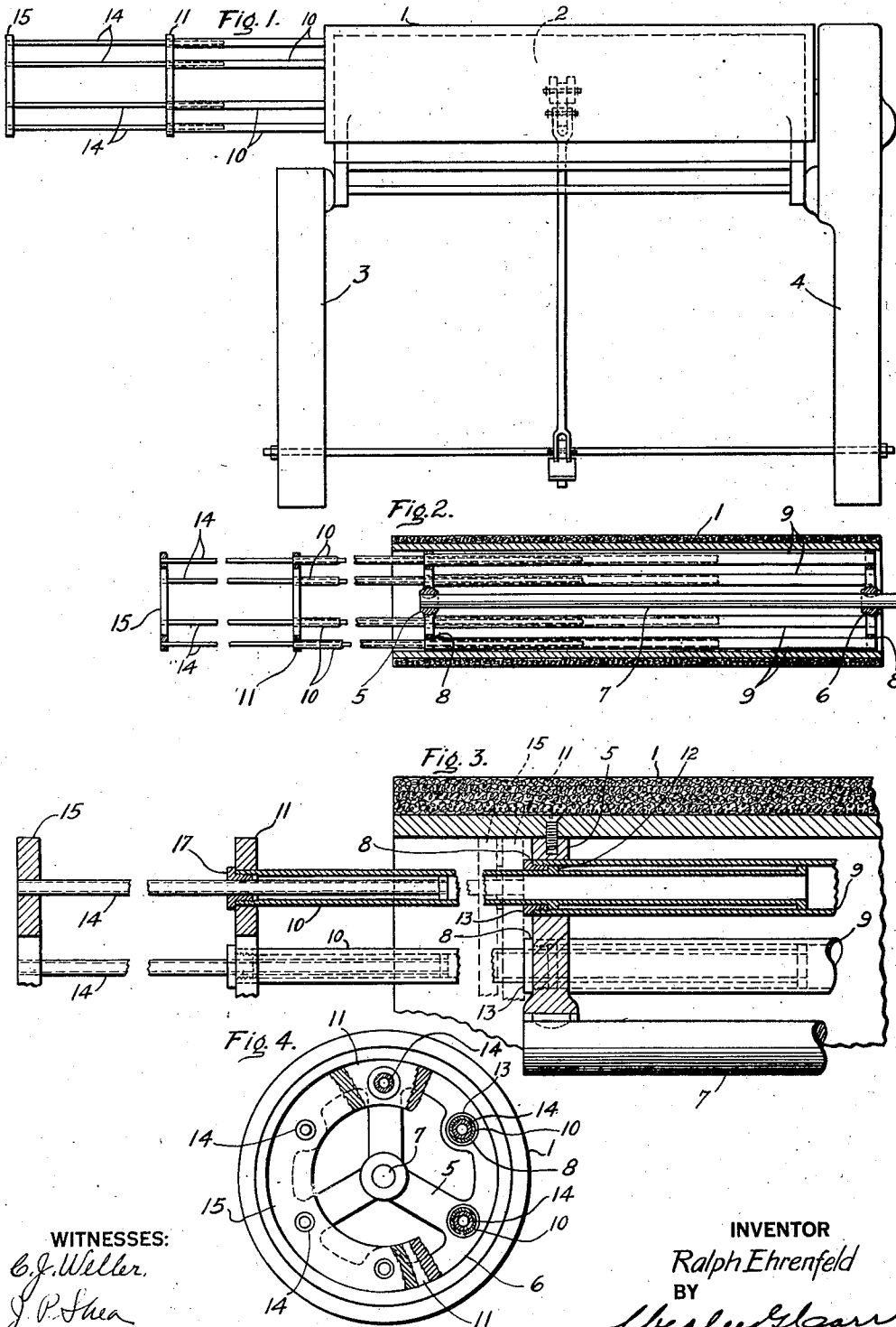
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IRONING MACHINE

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UNITED STATES PATENT OFFICE.

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IRONING MACHINE.

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My invention relates to ironing machines and it has special relation to ironing machines of the domestic type.

An object of my invention is to provide a device that shall make convenient the ironing of large pieces on small ironing machines.

A further object of my invention is to provide a device adapted for use in the ironing of large pieces in an ironing machine, for supporting and advancing that portion of an article to be ironed which extends beyond the end of the machine, in correspondence with the advancement of that part of the article which is being ironed.

Other objects of my invention will appear as the description proceeds.

Referring to the drawing:

Figure 1 is a rear elevational view of an ironing machine with my invention applied thereto.

Fig. 2 is a longitudinal central sectional view of the roll shown in Fig. 1.

Fig. 3 is a detail sectional view of the roll and cooperating parts, portions being broken away, and

Fig. 4 is a view of the right end of the roll, parts being broken away to facilitate illustration.

An ironing machine embodying my invention comprises a roll 1, a shoe 2 and standards 3 and 4 for supporting the roll and the shoe. Instead of the shoe, a heated roll may be used if desired.

The ends of the roll 1 are mounted on a pair of spiders 5 and 6 that are secured to a longitudinal shaft 7. The end of the roll at which the spider 5 is provided, has no immediate support other than the spider 5 and the shaft 7. It is of the type commonly referred to in the art as "open."

Each of the spiders 5 and 6 is provided with a plurality of holes 8, each hole of one spider being connected to a corresponding hole of the other by an elongated tube 9. The tubes 9 may be of any desired number and are adapted to receive slidable tubes 10 which are secured to a head 11.

Outward movement of the tubes 10 is limited by stops 12 thereon which engage detachable stops 13 in the tubes 9.

Tubes 14 rigid with a head 15, are slidable in the tubes 10 but limited in their outward

movement by stops 16 which engage detachable stops 17 in the tubes 10.

When small pieces are being ironed, the tubes 10 and 14 are positioned interiorly of the roll 1, being completely enclosed thereby, as indicated by dotted lines in Fig. 3. When comparatively wide pieces are being ironed, the heads are drawn outwardly to the position shown in full lines in Figs. 1, 2 and 3. The articles are then passed between the roll 1 and the shoe 2 and those portions of the articles which are not subjected immediately to an ironing action by the shoe 2 are supported and carried by the tubes 10 and 14.

When an article is draped over the tubes 10 and 14, it is given a semi-cylindrical shape conforming substantially to the shape imparted to that portion of an article which is on the roll. It is not necessary in order to impart a semi-cylindrical shape that the tubes 10 and 14 should be of the specific number illustrated. It is apparent, therefore, that wrinkling of that part of the article which is beyond the end of the roll is avoided.

In addition to preventing wrinkling, the tubes facilitate the feeding of large pieces by reason of the fact that no special care need be taken of those portions of the pieces which are beyond the end of the roll, since they are carried by the tubes and advanced in correspondence with the portions that are on the roll.

If desired, the tubes 14 need not be moved outwardly with respect to the tubes 10 but the tubes 10 only may be utilized as a support for articles being ironed. Again, if desired, the tubes 10 and 14 and heads 11 and 15 may be dispensed with altogether, as the detachability of the stops 13 and 17 permits their removal.

In the case of an 18" roll, the tubes 10, in their extended positions, may be made to project 12" beyond the end of the roll 1, 4" of them being received in the tubes 9 for properly aligning the head 11 with the roll 1 and preventing wobbling of the head 11 and tubes 10 during the rotation of the roll. In a machine of these dimensions, the tubes 14 may have a corresponding and proportional length with respect to the tubes 10. In the case of an ironing machine having a 30" roll, the tubes 10 only are necessary, as sup-

ports for the articles being ironed. The dimensions mentioned above are merely illustrative, wide variations therefrom being feasible.

5 The invention is not limited to the specific details of construction of the machine illustrated and described, which may be extensively modified and varied without departing from the spirit of the invention. For
10 instance, instead of the extensible tubes, any support may be used that is adapted to rotate with and telescope in, the roll. Again, a support may be used which does not telescope with the roll but is attached thereto and
15 removable therefrom. A substantial range of equivalents is contemplated within the scope of the appended claims.

I claim as my invention:

20 1. In an ironing machine, in combination, an ironing roller and a work support carried by the roll, said work support being disposed in telescopic relation with the roll.

25 2. The combination of a heated ironing member, a roll having an open end, and extensible means projecting from the open end of said roll, and movable therewith for supporting and advancing an article to be ironed, said means being operative to sup-

port said article in substantially the same shape as that portion of the article between said member and said roll.

3. The combination of a heated ironing member, a roll, and extensible means on said roll for supporting and advancing an article to be ironed.

4. The combination with a heated ironing member and a roll cooperative to perform ironing operations, of means movable to be completely enclosed by said roll and extensible to project beyond said roll for supporting that portion of said article which is not immediately subjected to ironing action.

5. In an ironing machine, the combination with the heated ironing member and a roll cooperative to perform ironing operations, of a member extensible with respect to said roll and an additional member extensible with respect to the first mentioned extensible member, the two last mentioned members being adapted to support that portion of said article which is not immediately subjected to ironing action.

In testimony whereof, I have hereunto subscribed my name this 2nd day of August, 1924.

RALPH EHRENFELD.