H. J. NOTT.

IRONING APPARATUS.

No. 182,130. Patented Sept. 12, 1876.

Fig. 1

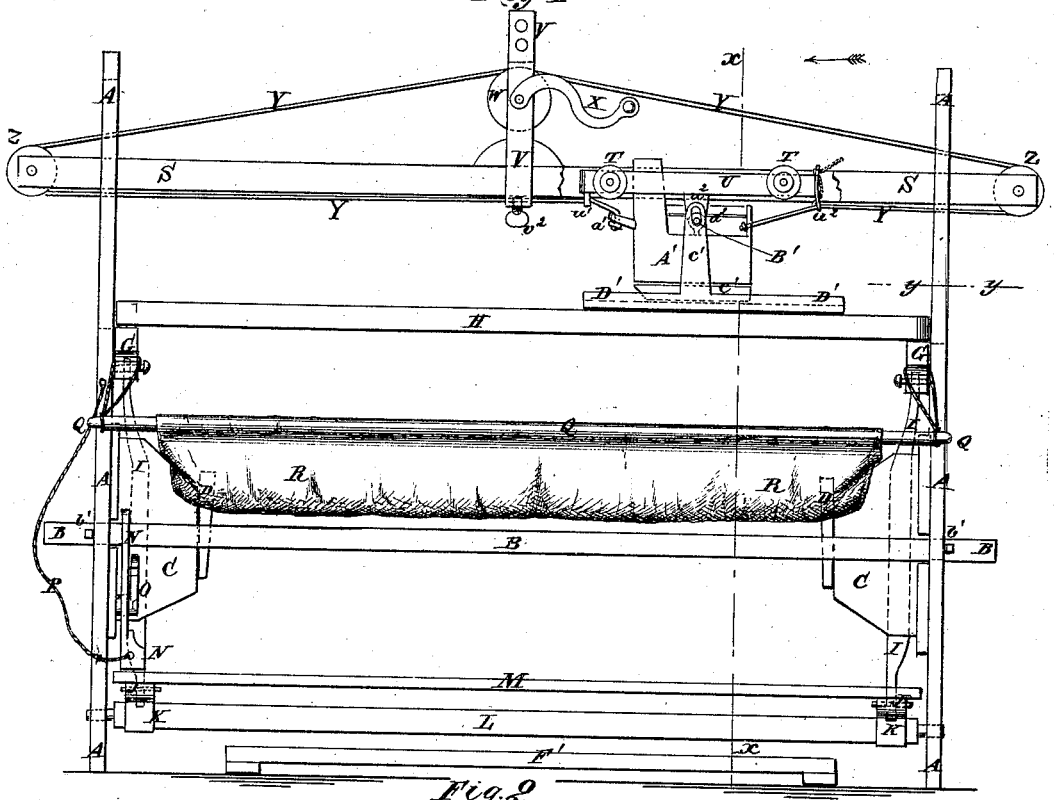


Fig. 2

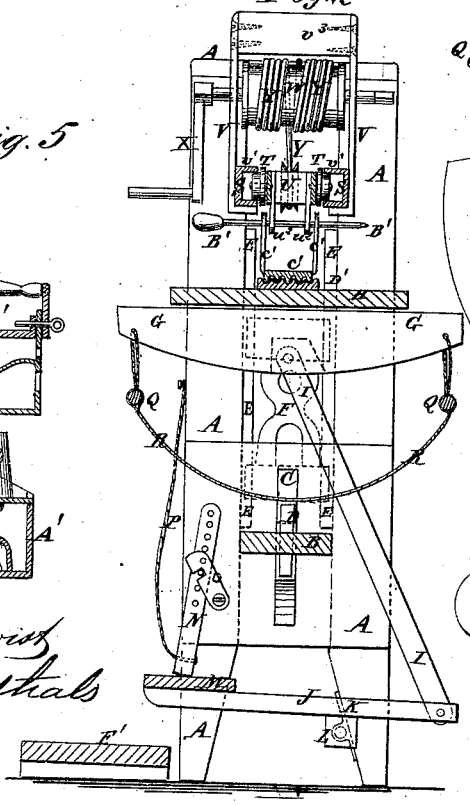


Fig. 3

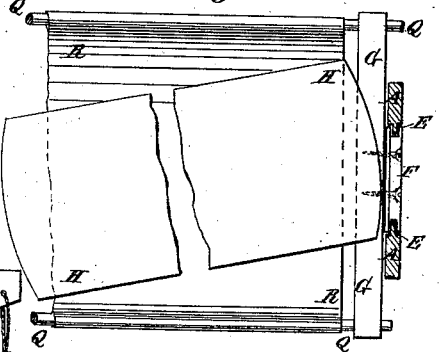


Fig. 5

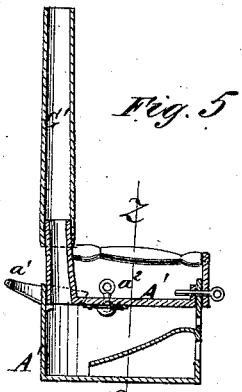


Fig. 6

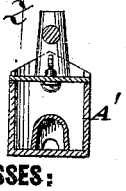
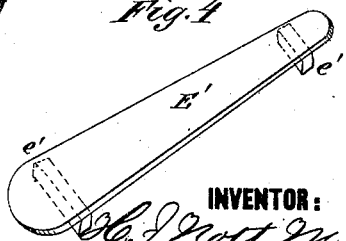


Fig. 4



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UNITED STATES PATENT OFFICE.

HENRY J. NOTT, OF ST. MARY'S, TEXAS.

IMPROVEMENT IN IRONING APPARATUS.

Specification forming part of Letters Patent No. **182,130**, dated September 12, 1876; application filed July 11, 1876.

To all whom it may concern:

Be it known that I, HENRY JUNIUS NOTT, M. D., of St. Mary's, in the county of Refugio and State of Texas, have invented a new and useful Improvement in Ironing-Machine, of which the following is a specification:

Figure 1 is a side view of my improved ironing-machine. Fig. 2 is a vertical cross-section of the same, taken through the line *x x*, Fig. 1. Fig. 3 is a detail horizontal section of a part of the same, taken through the line *y y*, Fig. 1. Fig. 4 is a detail perspective view of the ironing-board. Fig. 5 is a detail longitudinal section of the smoothing-iron. Fig. 6 is a detail cross-section of the same, taken through the line *z z*, Fig. 5.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved ironing-machine, which shall be so constructed as to enable clothes to be ironed quicker and better than when ironed by hand, and with very little physical labor.

The invention consists in the frame formed of the end frames, the slotted connecting-board, the bolts, the grooved braces, and the wedge-keys, constructed and combined as hereinafter fully described; in the combination of the tongues, the sliding frames, and the cross-bars with the end frames, to enable the table to be raised and lowered; in the combination of the pitmen, the levers, the rock-shaft, and the connecting-bar with the end frames, and with the table-supporting cross-bars, for raising and lowering the table; in the combination of the grooved bars or rails and the carriage, provided with the downwardly-projecting arms and the pin, with the end frames, for carrying the smoothing-iron back and forth along the table; in the combination of the adjustable frame, the shaft, the crank, the two cords, the pulleys, and the hooks or catches with the grooved bars or rails and the carriage; in the combination of the hook and the swivel with the smoothing-iron, to adapt it to be connected with, and drawn by, the carriage; in the combination of the fluting-iron, provided with the perforated arms, and the fluting-plate with the smoothing-iron, the carriage, and the table; in the combination of the rods and the apron with the ends of the cross-bars that support the table, and in the combination of the adjustable stop, the pivoted guard, and the cord with the end frame and the bar that connects the levers, as hereinafter fully described.

A are the end frames of the machine, each of which consists of two posts connected by cross-pieces. The two end frames A are connected by a board, B, the ends of which pass through the spaces between the posts and cross-pieces of said end frames, and have pins or bolts *b'* passed through them transversely upon the outer sides of said end frames A. The end parts of the connecting-board B are slotted longitudinally, and in said slots, at the inner sides of the end frames A, are placed the upright brace-boards C, which are thicker than the said slots, and are grooved upon their opposite sides, to enable them to be slipped into said slots, and to prevent them from dropping out.

In the inner ends of the slots in the board B, along the inner edges of the braces C, are driven wedges D, binding the frame-work of the machine firmly together.

In the inner edges of the posts of the end frames A are inserted metal tongues E, to serve as ways for the small metal frames F, the downward movement of which is limited by the board B.

To the inner side of the upper ends of the frames F are attached the cross-bars G, for the ends of the table H to rest upon. The ends of the table H are rounded off upon the arc of a circle having its center at the central point of the said table, so that the said table may be moved out and in without binding.

In mortises in the middle parts of the bars G that support the table H are pivoted the upper ends of the pitmen I, the lower ends of which are pivoted to the rear ends of the levers J. The levers J are passed through the upper loops of the couplings K, where they are secured by wedge-keys. The lower loops of the couplings K are placed upon and secured to the end parts of the rock-shaft L, the journals of which work in bearings attached to the rear posts of the end frames A.

The forward ends of the levers J are connected by a bar, M, upon which the operator places his foot to raise the table against the

smoothing-iron to obtain the necessary pressure.

The downward movement of the table H when the machine is being used is limited by a stop, N, in the upper part of which is formed a number of holes to receive a pin attached to the front post of one of the end frames A, so that the said stop may be adjusted as required.

The stop N is kept in place upon the pin by a guard, O, which is pivoted to the end frame A, and has a notch formed upon its side edge to be turned over the said pin.

When it is necessary to lower the table H farther the stop N is swung outward. For convenience in doing this a cord, P, may be attached to the lower part of the stop N and to the end frame A, the upper end of said cord being attached to the said end frame in such a position that it may be conveniently reached and operated to withdraw said stop.

From the ends of the bars G that support the table H are suspended the ends of two rods, Q, which are passed through the hems of a piece of cloth, R. The cloth R is made wider than the length of the bars G, so that it may bag or hang down in the middle, and is designed to serve as a receptacle for garments.

To the inner side of the upper part of the posts of the end frames A are attached bars S, grooved upon their inner sides to receive the wheels T of the carriage U. The bars S may be made of sheet metal, having their side edges bent over at right angles to form the grooves.

V are two uprights, the lower ends of which are bent inward to rest against the lower side of the rails S, and which have flanges v^1 attached to their inner sides to rest upon the tops of the said rails S.

The uprights V are clamped to the rails S by hand-screws v^2, which pass up through their lower ends, and bear against the lower side of the said rails S. The upper ends of the uprights V are connected by a cross-bar, v^3. To the uprights V is pivoted a shaft, W, to one of the journals of which is attached a crank, X.

To the shaft W are attached the ends of two cords, Y, which are wound in opposite directions around it, so that one of said cords may be unwound and the other wound by turning the crank X. The cords Y are passed around pulleys Z, pivoted to and between the ends of the bars or rails S, and are brought back and passed through hooks w^1 secured to the opposite ends of the carriage U.

A′ is the smoothing-iron, which may be made as described in the Bless and Drake patent, or in any other suitable way.

To the forward end of the smoothing-iron A′ is attached a hook, a^1, to receive the end of the cord Y, and in the lower part of the shank of the handle are formed notches to receive the other cord Y, so that the smoothing-iron may be drawn back and forth by the carriage U. To the top of the smoothing-iron A′ is attached a swivel, a^2, the shank of which passes through a hole in the said top, and has a ball attached to its lower end, working in a socket formed in a plate attached to the inner side of said top. In the swivel a^2 is formed an eye to receive a pin, which also passes through holes in the lower ends of the downwardly-projecting arms w^2 attached to the middle part of the sides of the carriage U.

With this construction, as the smoothing-iron is drawn back and forth it will be drawn by the two cords Y, alternately, and the drawing-cord will slightly raise the end of the said smoothing-iron, so that it may pass over the clothes more readily.

If desired, the cords and windlass need not be used, the smoothing-iron being connected with the carriage by the pin B′ and swivel a^1, and moved back and forth by hand. In this case the pin B′ may be passed through the arms w^2 from the rear side, and the swivel a^2 placed upon the forward end of said pin.

C′ is the fluting iron or shoe, which is placed beneath the bottom of the smoothing-iron A′, and has arms c' attached to the middle part of its side edges, which project upward at the sides of the said smoothing-iron, and have short slots formed in their upper ends to receive the pin B′. D′ is the fluting-plate, which is laid upon the table H, and between which and the shoe C′ the article is fluted, as the said plate D′ is pressed up against the said shoe C′ by the upward movement of the table H. E′ is a narrow board for ironing seams, which is placed upon the table H, and has cross-cleats e' attached to its ends to rest upon the said table. F′ is a small platform, placed at the front of the machine, for the person ironing to stand upon. G′ is a short pipe, placed upon the short pipe of the smoothing-iron, to cause a draft when fire is used for heating said smoothing-iron. The smoothing-iron may be heated by iron slugs, made hot and placed within it.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The frame formed of the end frames A, the slotted connecting-board B, the bolts b', the grooved braces C, and the wedge-keys D, constructed and combined substantially as herein shown and described.

2. The combination of the tongues E, the sliding frames F, and the cross-bars G, with the end frames A, to enable the table H to be raised and lowered, substantially as herein shown and described.

3. The combination of the pitmen I, the levers J, the rock-shaft L, and the connecting-bar M, with the frames A and with the cross-bars G, for raising and lowering the table H, substantially as herein shown and described.

4. The combination of the grooved bars or rails S and the carriage T U, provided with the arms w^2, and the pin B′, with the frames A, for carrying the smoothing-iron A′ back

and forth along the table H, substantially as herein shown and described.

5. The combination of the adjustable frame V v^1 v^2 v^3, the shaft W, the crank X, the two cords Y, the pulleys Z, and the hooks or catches w^1 w^2, with the grooved bars or rails S and the carriage T U, substantially as herein shown and described.

6. The combination of the hook a^1 and swivel a^2 with the smoothing-iron A′, to adapt it to be connected with and drawn by the carriage T U, substantially as herein shown and described.

7. The combination of the fluting-iron C′, provided with the perforated arms c', and the fluting-plate D′, with the smoothing-iron A′, the carriage T U, and the table H, substantially as herein shown and described.

8. The combination of the rods Q and apron R with the ends of the cross-bars G that support the table H, substantially as herein shown and described.

9. The combination of the adjustable stop N, the pivoted guard O, and the cord P, with the end frames A and the bar M that connects the levers J, substantially as herein shown and described.

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Witnesses:
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