G.F.TaylorsImp@IroningMachine.

No. 121,908.

Patented Dec. 12, 1871.

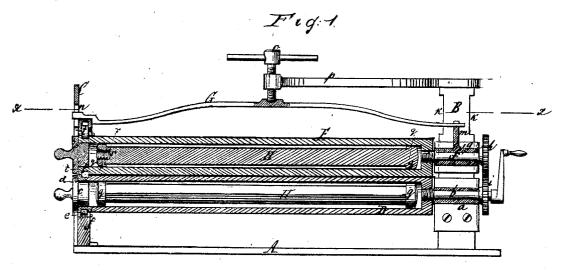


Fig. 2.

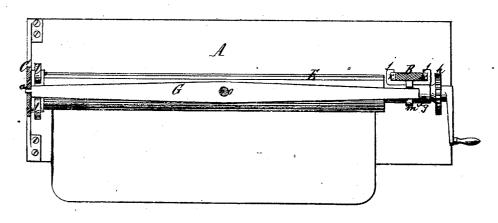
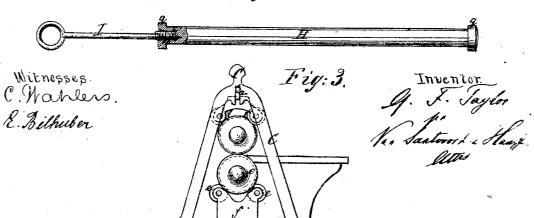


Fig.4.



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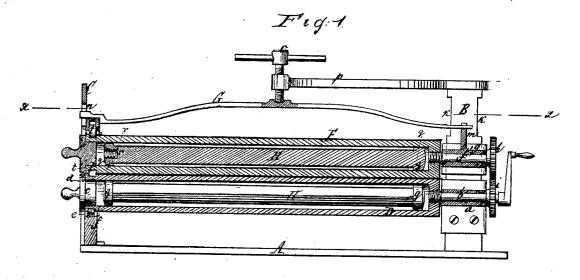


Fig. 2.

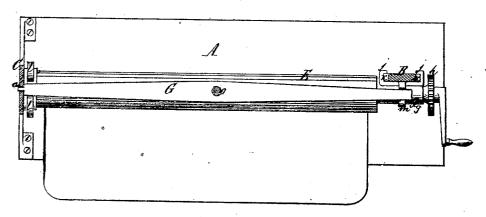
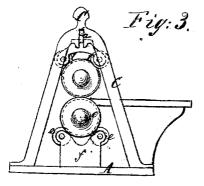


Fig.4.



Witnesses C. Wahlers. E. Bilhuber



Inventor.

J. Jaylor

No. Santon de Stange

UNITED STATES PATENT OFFICE.

GILBERT F. TAYLOR, OF NEW YORK, N. Y.

IMPROVEMENT IN IRONING-MACHINES.

Specification forming part of Letters Patent No. 121,908, dated December 12, 1871.

To all whom it may concern:

Be it known that I, GILBERT F. TAYLOR, of the city, county, and State of New York, have invented a new and Improved Ironing-Machine; and I do hereby declare the following to be a full, clear, and exact description of the same, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which drawing—

Figure 1 represents a sectional front view of this invention. Fig, 2 is a horizontal section of the same, the line xx, Fig. 1, indicating the plane of section. Fig. 3 is an end view of the same. Fig. 4 is a detached view of one of the heating-

plugs and the screw-lifter.

Similar letters indicate corresponding parts. This invention relates to an ironing-machine ${\bf composed\ of\ two\ smooth\ rollers\ which\ are\ geared}$ together so as to revolve in opposite directions, and which are bored out to receive heating-plugs, so that, by passing a shirt or other garment or any piece of cloth or other textile material through between said rollers, the process of ironing is performed with ease and facility. The heating-plugs are provided with raised flanges at their ends, so as to prevent them from coming in direct contact throughout their whole length with the pressingrollers, and to form a heating-chamber, whereby the heat of the pressing-roller is equalized and scorching of the material passed through between the rollers is avoided. The lower pressing-roller is supported at its outer end by guide-rollers catching in an annular groove in the pressing-roller. The upper pressing-roller is held down upon the lower pressing-roller by an arched spring supported at one end in a grooved lug rising from the journal-box of said roller, while its other end forms the bearings for two guide-rollers, which catch in an annular groove in the pressing-roller and serve to keep said pressing-roller steady and in the proper relation toward the lower pressing-roller. The outer end of the spring is guided in a slotted standard. The journal-box of the upper pressing-roller slides up and down on a standard rising from the bed-plate of the machine, whereby the construction of the whole is materially simplified. heating-plugs are tapped at their ends to receive a screw-lifter for the purpose of facilitating the operation of removing said heating-plugs from the pressing-rollers or inserting them therein.

In the drawing, A designates the bed-plate of my ironing-machine. From one end of this bed-plate rises a standard, B, while its other end forms the support for the standard C. To the standard B is secured a journal-box, a, which forms the bearings for the arbor b of the lower pressingroller D; and in practice said journal-box will be attached to the standard by set-screws, so that it can be adjusted up or down, as may be required. The pressing-roller D is hollow, but it is closed at its inner end and tapped to receive the arbor b; or said arbor may be connected to the head of the pressing-roller in any desirable manner. The outer open end of the pressing-roller can be closed by a cap, c, and it is provided with an annular groove, d, to engage with supporting guide-rollers e, which are mounted in lugs f rising from the bed-plate A. The upper pressing-roller E is constructed similar to the lower pressing-roller, its inner end being supported by an arbor, f', which has its bearing in a journal-box, g, and which is geared, together with the arbor b of the lower pressing-roller, by cog-wheels h i. The base or supporting-plate of the journal-box g is made with lips or flanges j (see Fig. 2) which overlap the rear edge of the standard B, so that said box is free to move up or down; and the upper part of the standard is provided with recesses k, (see Fig. 1,) so that the box g, when moved up to said recesses, can be taken off together with its pressing-roller without the necessity of removing any screws and without loss of time. The upper pressing-roller E rests upon the lower pressing-roller D, and its outer end is provided with an annular groove, t, to receive guide-rollers l, which are mounted in arms projecting from the sides of a spring, G, that serves to hold the upper pressing-roller down with a yielding pressure. The inner end of said spring rests in a lug, m, which rises from the journal-box g, while its outer end catches in a guide-slot n in the standard C. A hand-screw, o, which is tapped in an arm, p, extending from the standard B, serves to regulate the tension of the spring G, and by the combined action of the guide-slot n and of the guide-rollers l the outer end of the upper pressing-roller is kept steady and prevented from being thrown out of line with the lower pressing-roller. The pressing-rollers are heated by plugs H, which are provided at their ends with projecting flanges q, equal in diameter, or nearly so, to the bore of the pressingroller, so that if one of the plugs is inserted in [one of the pressing-rollers it is in contact with said roller only at its ends, while the space between the flanges q forms a heating-chamber, whereby the heat throughout the entire pressing-roller is equalized. If the heating-plugs should be allowed to come in contact with the inner surfaces of the pressing-rollers throughout their whole length some portions of the pressingroller would be liable to become overheated, and the cloth or other material exposed to the action of the pressing-rollers would be scorehed. The heating-plugs are provided in one end with screwsockets r to receive the lifter I, (see Fig. 4,) so that the operation of removing the plugs from and inserting them in the pressing rollers is materially facilitated. By giving to the pressing-rollers a differential motion the effect of an ordinary sadiron is closely imitated.

What I claim as new, and desire to secure by Letters Patent, is—

1. The end of the spring G arranged in the slot n, and provided with guide-rollers l engaging with the annular groove in the pressing-roller E, substantially as set forth.

2. The smooth pressing-rollers D E, heatingplugs H H, slotted standard C, guide-rollers land e, with the slide-box g upon the standard B, combined arranged, and operating substantially

as and for the purpose set forth.

3. The rollers l e operating in the grooves of the rollers d e, as described, in combination with the slotted standard C, spring G, slide-box g, and standard B, all constructed and operating substantially as described.

Witnesses: G. F. TAYLOR.

W. HAUFF, E. A. Ellsworth.

(91)