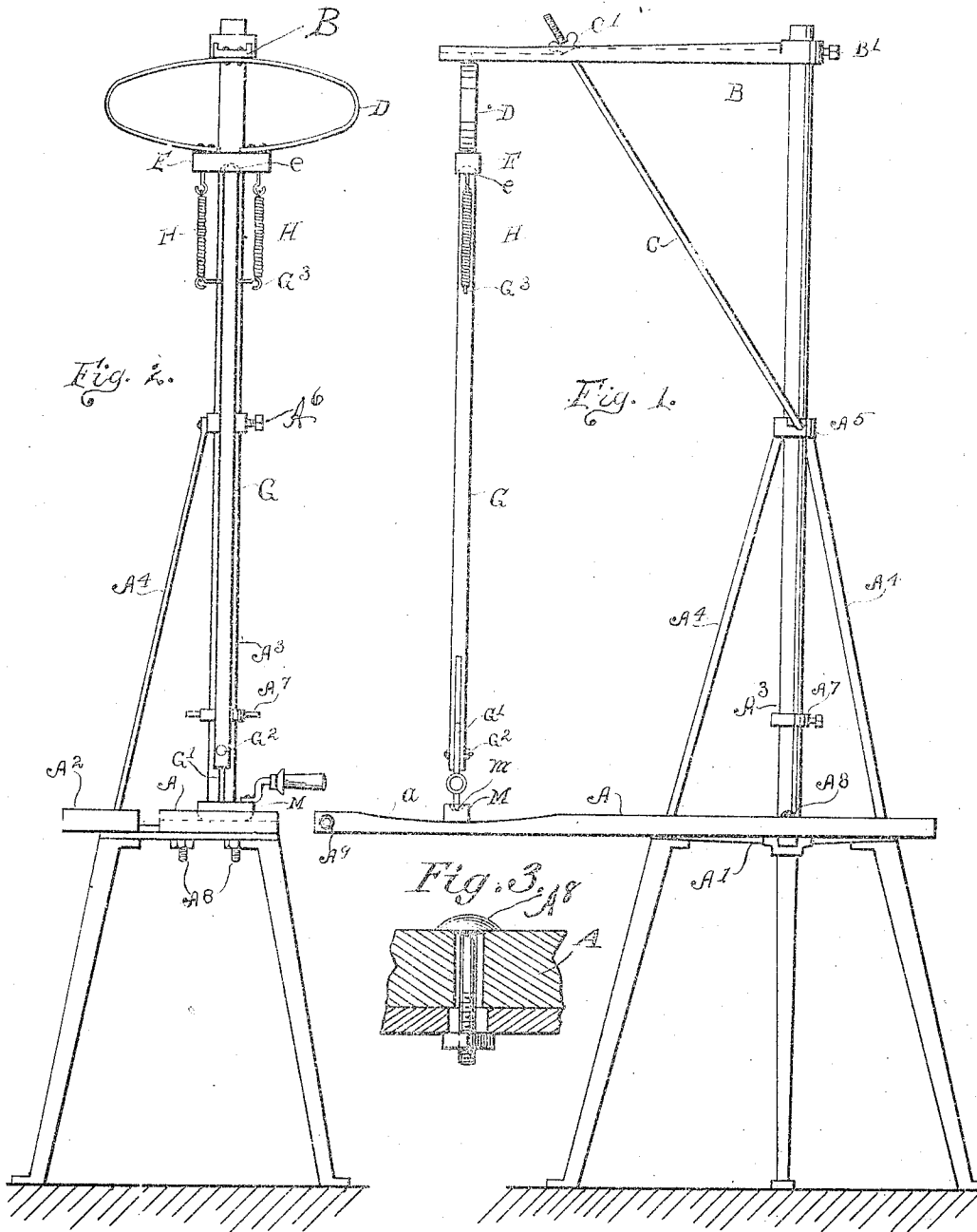


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IRONING MACHINE.
APPLICATION FILED MAY 12, 1908.

934,984.

Patented Sept. 21, 1909.



WITNESSES
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DEK FOON, OF NEW YORK, N. Y.

IRONING-MACHINE.

934,984.

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To all whom it may concern:

Be it known that I, DEK FOON, a subject of the Emperor of China, temporarily residing and doing business in the borough of Manhattan, in the State and city of New York, have invented a certain new and useful Improvement in Ironing-Machines, of which the following is a specification.

One spring of peculiarly simple form exerts the total pressure required. Simple adjusting means are provided. Light spiral springs easily manipulated allow the handling or removal of the bar. The table is specially constructed for lightness and strength; the standard is braced and the whole has less than the usual weight and bulk, while carrying besides the ordinary an auxiliary table for the support at a small distance from the main table of a gas stove for heating the irons and water for sprinkling.

The following is a description of what I consider the best means of carrying out the invention.

The accompanying drawings form a part of the specification.

Figure 1 is a side elevation and Fig. 2 is a corresponding view of a portion at right angles to the view in Fig. 1. Fig. 3 shows in section a portion of the main table and the holding means therefor. It is on a larger scale, for clearness, and shows the relative size of the bolt and the hole through which it passes.

Similar letters of reference indicate like parts in all the figures.

A is the ironing table. I have in my experiments made it from a plank of fine grained wood about 33 in. long, 11 in. wide and 2 in. thick, but these proportions may be varied. On the upper face I operate by a hand-saw or other suitable means to produce a hollow "a". This table is supported on legs and a cross piece A', and accompanied at a little distance alongside by a side table A², which may be termed an auxiliary table supported firmly by the same legs.

A³ is a stout upright tube which I term the standard and which I support by fixed braces, A⁴ engaged with a collar A⁵, secured to the standard by a pinching screw A⁶.

The standard carries a bracket B, secured by a pinching screw B'. The bracket may be adjusted by slackening the screw B' and also by shortening and lengthening an inclined brace C, screw-threaded and carrying a

thumb nut C'. The free end of this bracket carries a spring in the form of a partially flattened loop D, secured under the bracket B by rivets and having its cut-open lower side secured to a block E, below. The lower face of this block has a semi spherical, smoothly bottomed recess "e", which serves as a socket for the ball-and-socket joint at the upper end of the presser-rod G. The slight weight of the presser-rod is carried when not in use, by springs H H, which connect block E with hooks G² on the presser-rod, as shown. The lower end of this rod carries a pin G', confined adjustably by a screw G².

I have in my experiments used a form of iron M which has long been used in ironing machines. A smoothly bored socket "m" in the upper face of the iron receives the correspondingly rounded end of the pin G' and transmits its pressure to the working face of the iron, which is moved over the goods. By reason of the simplicity of my machine, its operations may be conducted easily and rapidly, and the result is eminently uniform and perfect.

The force with which the iron is depressed upon the goods is uniform over the whole area of the cavity "a" because the cavity is swept by a proper finishing tool exactly concentric to the ball and socket joint "e" at the top of the presser-rod. If it shall be desired to increase the pressure on the iron the attendant simply gives a partial turn to the thumb nut C'; if the pressure is too great, correction should be made by turning in the reverse direction.

In first setting up the machine, there is liable to be found a greater pressure at one end of the shallow recess "a" than at the other. To remedy this, I shift the table A to the right or left. This may be done with great nicety by making holes which receive the bolts A⁸ larger than the bodies of the bolts, and slackening the nuts below, moving the table to the small extent required and retightening the fastenings.

A⁹ is a rod set transversely in the free end of the table A and equipped with washers or clench-rings sunk into the edges of the plank, and on which the ends of the rod are forcibly riveted. The obvious effect of shortening the rod results when the riveting is increased. Using well seasoned wood for the table A and tightly riveting this slender transverse rod or stout wire, insures

against cracking or warping and produces a table likely to endure indefinitely all the strains and temperatures to which it is exposed.

5 In operating, a shirt is slipped upon the table A so as to bring the bosom over the shallow and smoothly curved recess *a*. The iron M, of the proper temperature, is brought into position. The presser-bar 10 which has been held out of use on a pin A⁷ is liberated and inserted in the back of the iron. Thenceforward the operation proceeds in the ordinary manner and with the ordinary skill of the operator, with the assurance that the pressure is uniform and the action in all respects satisfactory over the whole of the area of the cavity "*a*", or so much of that cavity as is covered by the bosom. When sufficiently treated, it is with- 15 drawn, the iron disengaged, the shirt being rapidly taken off and another supplied. The same iron or another one freshly heated is brought into position and the work proceeds.

25 Modifications may be made without departing from the principle or sacrificing the advantages of the invention. The collar A⁵ may be riveted or otherwise permanently set in a fixed position on the stem, but I prefer it equipped as shown, for the reason, among 30 others, that it allows the braces A⁴ to be adjusted to receive always their proper share of the strain without requiring any great nicety in the construction of the machine. 35 Parts may be added or omitted. In most cases the machine will serve well with only one of the braces.

I attach importance to the construction and mounting of the spring D because it is 40 simple and durable and serves not only for pressing downward with any required degree of force, but also for receiving and resisting the lateral force when in ironing at points distant from the center of the recess *a* the rod G is at an angle.

45 I attach importance to the hollow *a* of the upper face of the table and to the direction of the axis of the hollowing. It is transverse to the bracket B.

50 I claim as my invention:—

1. In an ironing machine, the combination with an ironing table, of a plurality of convergently disposed braces rising therefrom, a collar connected to the convergent ends of 55 the braces, a standard carrying such collar, means for securing the collar on the stand-

ard, an outstanding supporting arm slidable upon the upper portion of the standard, means for fixing the arm against sliding 60 movement and in different positions on said standard, a brace connected to the collar and slidably engaged with the arm, a pressure-varying device engaging the brace and arm, and a yielding presser device hung from the arm and having iron-engaging means at its 65 lower end.

2. In an ironing machine, the combination with an ironing table, of a plurality of convergently disposed braces rising therefrom, a collar connected to the convergent ends of 70 the braces, a standard carrying such collar, means for securing the collar on the standard, an outstanding supporting arm slidable upon the upper portion of the standard, means for fixing the arm against sliding 75 movement and in different positions on said standard, a brace connected to the collar and adjustably engaged with the arm, a pressure-varying device engaging the brace and arm, and a yielding presser device under the 80 arm and having iron-engaging means at its lower end, and an ironing table under the latter having a concavity with the axis of its curvature transverse thereto.

3. In an ironing machine, the combination 85 with an ironing table, of a plurality of convergently disposed braces rising therefrom, a collar connected to the convergent ends of the braces, a standard carrying such collar, means for securing the collar on the stand- 90 ard, an outstanding supporting arm slidable upon the upper portion of the standard, means for fixing the arm against sliding movement and in different positions on said 95 standard, a brace connected to the collar and slidably engaged with the arm, a pressure-varying device engaging the brace and arm, and a yielding presser device extending down from the arm and having iron-engag- 100 ing means at its lower end, an ironing table under the latter having a concavity with the axis of its curvature transverse to the length thereof, and an auxiliary table A² arranged to support the part of the garment not being treated.

Signed at New York city this 8th day of 105 May 1908.

DEK FOON.

Witnesses:

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