R. H. GARDNER.

Ironing Apparatus.

No. 169,250. Patented Oct. 26, 1875.

Fig. 2.

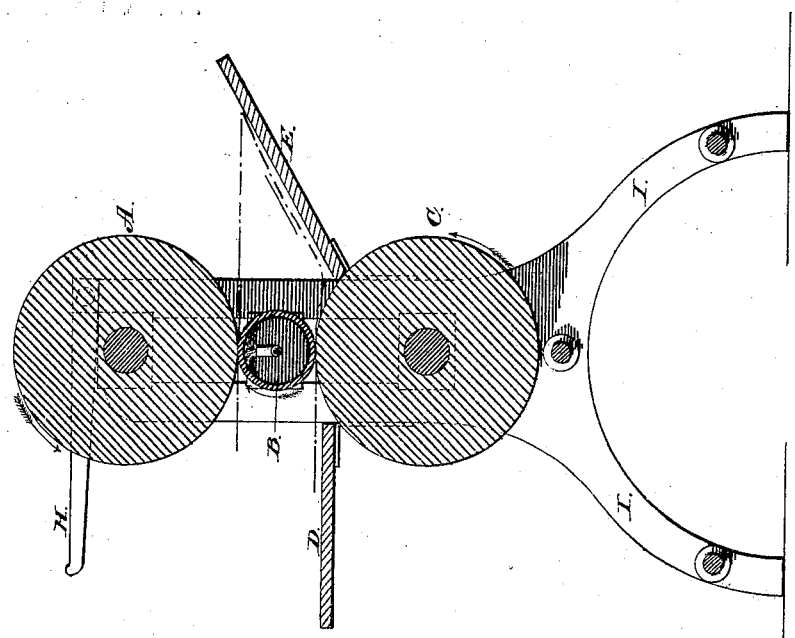
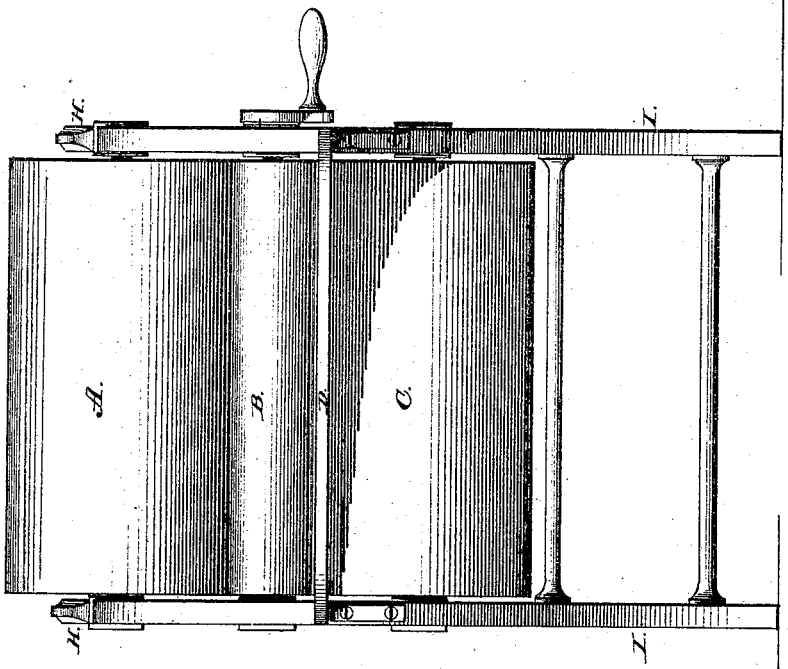


Fig. 1.



Attest:
W. St. Shirland
S. F. Nichols.

Inventor:
Richard H. Gardner
by A. Davenport his atty

UNITED STATES PATENT OFFICE.

RICHARD H. GARDNER, OF TROY, NEW YORK.

IMPROVEMENT IN IRONING APPARATUS.

Specification forming part of Letters Patent No. **169,250**, dated October 26, 1875; application filed August 21, 1875.

To all whom it may concern:

Be it known that I, RICHARD H. GARDNER, of the city of Troy, county of Rensselaer and State of New York, have invented certain new and useful Improvements in Ironing-Machines, of which the following is a full and clear description, reference being had to the accompanying drawings which form a part of this specification.

Figure 1 is a front elevation of the machine. Fig. 2 is a sectional elevation, showing sections of the three rolls and the improvements therein.

It is well known to laundrymen that at least two heats are required to properly dry and iron collars and cuffs. To effect this they are passed under two or more hot-rolls.

The object of this invention is to simplify the machine, and at the same time increase its capacity by a construction and arrangement of the rolls in such manner that both sides of the fabric will be ironed by the same heated roll, thereby reducing the number of rolls to three, and making it necessary to heat only one; also, to make it automatic to such an extent that the fabric, after once passing between the rolls, will return between the rolls to the operator without rehandling.

I is the frame, constructed in the usual manner. A and C are large rolls covered with cloth or other suitable material in the ordinary manner. Between these rolls is the hollow roll B, heated by gas carried through the journals, or in any of the ordinary methods.

The rolls may be geared together at one or both ends, and the gearing so constructed and arranged that the rolls can be adjusted in such manner that they will revolve with equal rapidity, and there be no friction between the goods and the rolls, producing what is known to the trade as the domestic finish, or the rolls can be so adjusted that they will revolve with unequal rapidity, thereby creating friction between the goods and the heated roll, and producing what is known to the trade as a gloss-finish.

E is an inclined plane, made of wood or other material and of same length as rolls, which acts as a guard. It is located behind the rolls, and with its lower edge so near the top of the roll C that the fabric passing out from between the rolls A and B will drop onto the incline E and slide down to and be caught between the rolls B and C. D is an apron in front of the operator, and located parallel with and near the top of the roll C, upon which the collars or other goods are placed for ironing, and upon which they are deposited after passing between A and B and returned between B and C. H is a lever, upon which a weight is hung for obtaining the required pressure upon the rolls, the journals of one or more of which are movable in the frame, or the necessary pressure may be obtained in any other known method.

Power is conveyed to the rolls in the usual manner.

In operation, the article to be ironed is placed by the operator between the rolls A and B, and it passes between them ironed on its lower side, which came in contact with the hot-roll B, and drops upon the incline E. It then immediately slides down the incline and is caught by the rolls B and C, and carried back between them with the upper side of the fabric ironed, because, on this return, the upper side came in contact with the heated roll B. It then drops upon the apron in front of the operator finished.

Thus it will be seen that by this arrangement of the rolls both sides of the article are ironed by the same heated roll without rehandling, which economizes time, labor, and fuel.

When it is desirable to iron the fabric on one side only, the incline plane may be removed or lowered, so that the fabric will not return automatically to the operator, but may be placed between the rolls B and C with same side exposed to the heated roll B, or it may be so directed as to follow the heated roll one whole revolution, and then be removed by the operator.

It is obvious that rolls A and C may be converted into heating-rollers and roll B into a covered roll, and I do not, therefore, intend to limit myself to a single heated roll, nor to the particular position the rolls occupy with reference to each other.

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

1. In combination with the rolls A, B, and

C, the inclined plane E, for the purpose of automatically feeding the fabric between the rolls B and C, substantially as described.

2. The combination of the shelf or table D, the rolls A, B, and C, and the inclined table E, all arranged to operate substantially as described.

Witness my hand this 10th day of August, 1875.

RICHARD H. GARDNER.

Witnesses:
N. DAVENPORT,
E. H. G. CLARK.