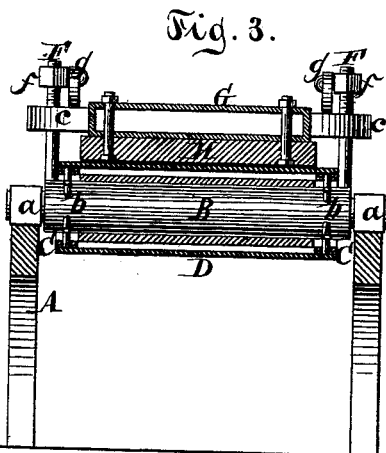
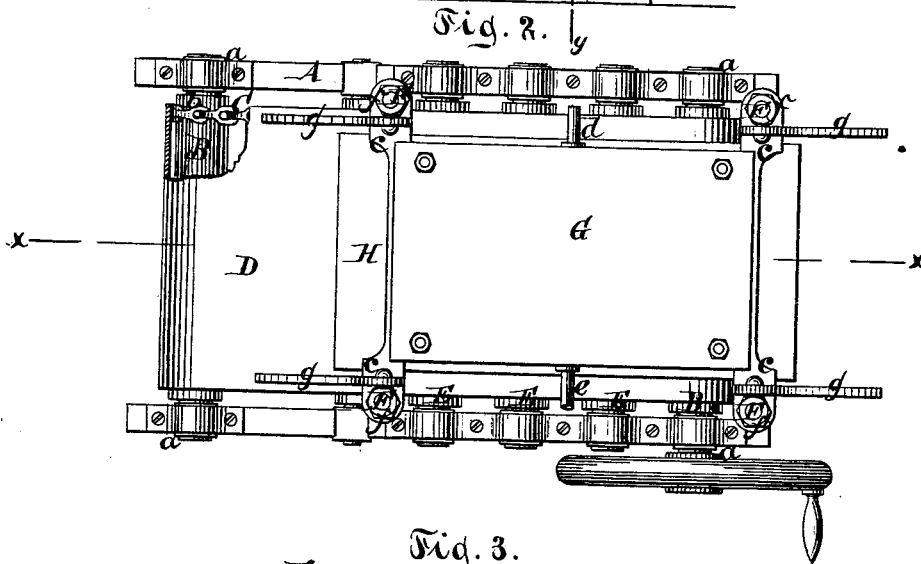
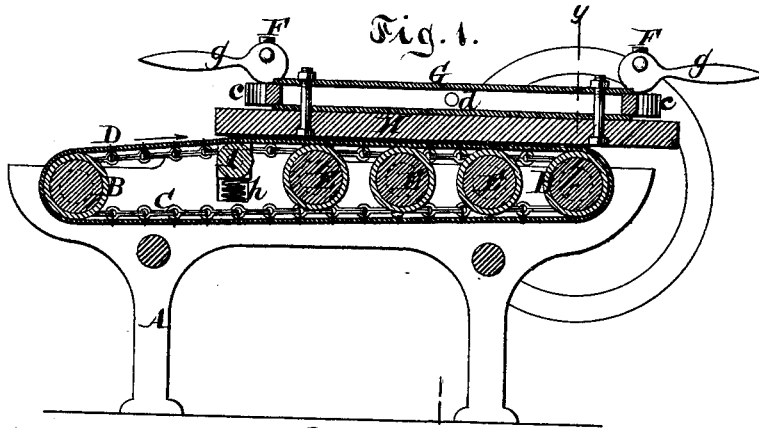


H. E. SMITH.  
 IRONING APPARATUS.

No. 188,686.

Patented March 20, 1877.



Witnesses.  
 Root & Miller  
 Chas. Hahlers.

Inventor.  
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 his atty

# UNITED STATES PATENT OFFICE

HAMILTON E. SMITH, OF NEW YORK, N. Y.

## IMPROVEMENT IN IRONING APPARATUS.

Specification forming part of Letters Patent No. 188,686, dated March 20, 1877; application filed August 26, 1876.

*To all whom it may concern:*

Be it known that I, HAMILTON E. SMITH, of the city, county, and State of New York, have invented a new and useful Improvement in Machines for Polishing Clothes and other articles, which improvement is fully set forth in the following specification, reference being had to the accompanying drawing, in which—

Figure 1 represents a longitudinal vertical section in the plane *x x*, Fig. 2. Fig. 2 is a plan or top view. Fig. 3 is a transverse section in the plane *y y*, Fig. 1.

Similar letters indicate corresponding parts.

This invention consists in the combination of endless chains with a cloth-carrying apron, with a heating-box shod with a polishing-surface, and with a series of supporting-rollers, so that by the endless chains a positive motion is imparted to the carrying-apron, and the operation of polishing clothes or other articles can be carried on with great rapidity. The shoe of the heating-box is, by preference, made of marble, soap-stone, or other equivalent material. With the guide-bars of the heating-box are combined cam-levers for depressing the shoe of said heating-box upon the clothes to be polished with more or less power. A roller, which has its bearings in spring-supported boxes, co-operates with the carrying-apron and with the heating-box, so as to cause the clothes or other articles placed on said carrying-apron to pass beneath the shoe of the heating-box without fail.

In the drawing, the letter A designates a frame made of cast-iron or other suitable material, in the ends of which are secured journal-boxes *a a*, which form the bearings for two rollers, B B. With each of these rollers are combined two chain-wheels, *b b*, of any suitable construction, and these chain-wheels engage with two endless chains, C C, to the links of which is firmly secured an endless apron, D, so that, by the action of the chains, a positive motion can be imparted to the apron. Between the rollers B B are situated a series of rollers, E, which serve to support the upper branch of the apron during the operation of polishing, as will be presently more fully explained.

From the frame A rise four standards, F, which engage with holes in ears *c* extending

from the edges of the heating-box G. This box is made of cast-iron or other suitable material, and it is provided with a supply-pipe, *d*, and a discharge-pipe, *e*, so that it can be heated with steam, hot air, or hot water, as may be most convenient. The bottom of the heating-box forms a shoe, H, which may be made of metal, but which is, by preference, made of marble, soap-stone, or other equivalent material, which retains the heat for a long time, and which is not liable to corrode, so that all danger of having the articles to be polished soiled during the polishing operation is avoided.

The shoe H is situated between the chains C C, so that when the heating-box is depressed said shoe bears directly upon that portion of the apron, which is supported by the intermediate rollers E.

On the standards F, which form the guides for the heating-box, are secured collars *f*, either by pins passing transversely through said standards, or by nuts, or by any other suitable means, and to these collars are pivoted cam-levers *g*, for the purpose of depressing the heating-box together with its shoe.

The front end of the shoe is rounded, and beneath this front end is situated a roller, I, the bearings of which are supported by springs *h*, so that the articles to be polished, on passing over said roller, are pressed up against the shoe, and said articles are caused to enter between the apron and the polishing-shoe without fail.

By these means the operation of polishing collars, cuffs, shirt-fronts, or other articles can be effected with great ease and rapidity.

The motion of the carrying-apron is produced by hand or by any other suitable power.

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

1. The combination, in a machine for polishing clothes or other articles, of endless chains and chain-wheels with a cloth-carrying apron, with a heating-box shod with a polishing-surface, and with a series of supporting-rollers, substantially as herein shown and described.

2. The combination, with an endless carrying-apron, D, and with a heating-box, G, of a shoe, H, of marble, soap-stone, or other equiv-

alent material, substantially as and for the purpose set forth.

3. The combination, with an endless carrying-apron, D. chains C C. and shoe H, secured to a heating-box, G, of a spring-supported feed-roller, I, substantially as shown and described.

4. The combination, with the heating-box G and its shoe H, and with the carrying-apron D and its supporting-rollers E, of cam-levers *g* for

depressing the shoe upon the apron, substantially as shown and described

In testimony that I claim the foregoing I have hereunto set my hand and seal this 23d day of August, 1876.

HAMILTON E. SMITH. [L. s.]

Witnesses:

J. VAN SANTVOORD,  
E. F. KASTENHUBER.