F. M. SANDERSON.

IRONING APPARATUS.

No. 194,267. Patented Aug. 14, 1877.

FIG. 1.

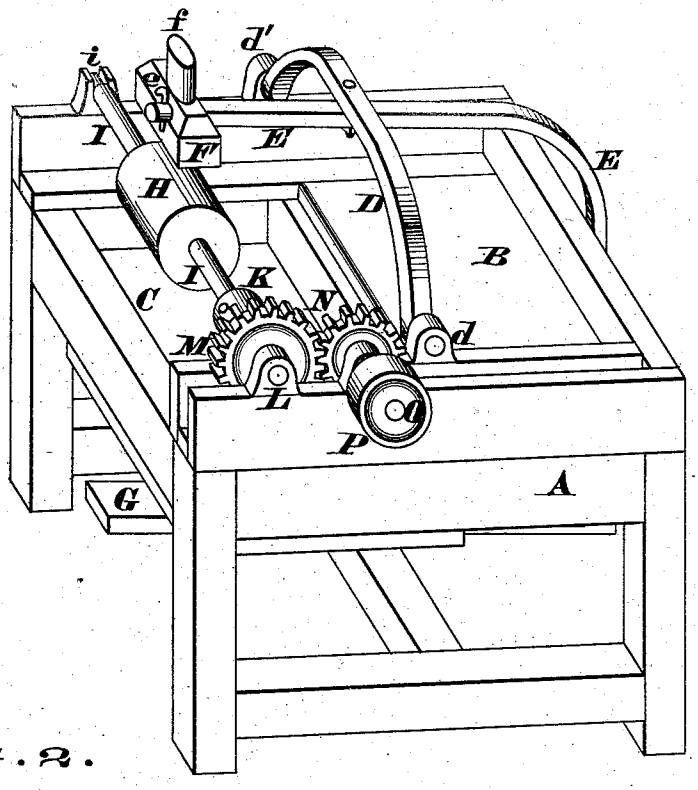



FIG. 2.

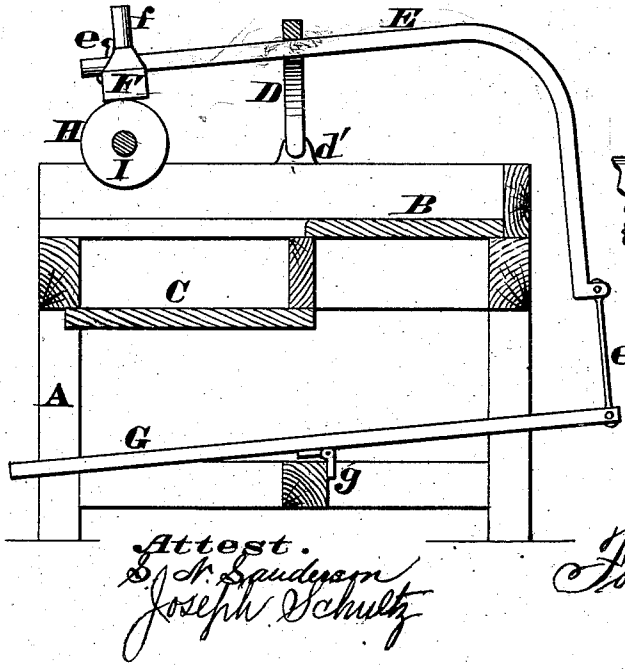
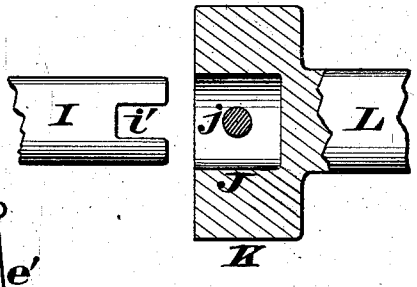



FIG. 3.




Attest.

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# UNITED STATES PATENT OFFICE.

FOSTER M. SANDERSON, OF CINCINNATI, OHIO, ASSIGNOR TO SARAH N. SANDERSON, OF SAME PLACE.

## IMPROVEMENT IN IRONING APPARATUS.

Specification forming part of Letters Patent No. **194,267**, dated August 14, 1877; application filed April 14, 1877.

*To all whom it may concern:*

Be it known that I, FOSTER M. SANDERSON, of Cincinnati, Hamilton county, State of Ohio, have invented certain new and useful Improvements in Ironing and Polishing Machines, of which the following is a specification:

My improvement consists, first, in a removable feed-drum, provided with a shaft having a neck at one end and a cut at the other end, and a driving-shaft provided with a socket head and pin, said cut being of such a size as to permit it to engage with the pin, as hereinafter described.

My improvement consists, secondly, in combining with said drum and driving-shaft a solid removable iron, constructed with a stem and perforation, and a key-piece, for securing said iron to a lever.

In the annexed drawings, Figure 1 is a perspective view of my improved combined adjustable ironing and polishing machine, the iron proper being shown elevated above the cylinder or drum. Fig. 2 is a vertical section in the plane of the vibrating lever, the iron being shown in contact with the drum. Fig. 3 is an enlarged section through the clutch of the drum-shaft.

A represents any suitable frame for supporting a table, B, and trough or drawer C, into which the ironed or polished goods descend as rapidly as they are operated on by the smoothing devices. Journaled in this frame, at *d d'*, is a yoke, D, having secured to it a vibrating lever, E, whose front end carries the iron F, said iron being retained in position with a pin or screw, *e*. *f* is a stem for the more convenient handling of iron F.

Pivoted to the frame at *g* is a treadle, G, whose rear end is connected to the vibrating lever E by means of a rod, *e'*, and, if preferred, this end of said treadle may be loaded or furnished with a suitable spring, so as to keep the iron F out of contact with drum H. This drum may be made of wood or any other suitable material, and should be covered or wrapped with several thicknesses of blankets, so as to afford a slightly elastic bearing for the goods to be operated on. Said cylinder or drum H is mounted upon a shaft, I, having at one end a reduced neck, *i*, that is journaled in a suitable box or bearing, while the other end of said shaft is adapted to enter the socket J of head K, the latter being secured to countershaft L.

Shaft I is nicked at *i'*, to engage with pin *i* of the clutch, so as to compel said shaft to rotate in unison with the piece L.

Mounted upon shaft L is a wheel, M, that gears with the pinion N of driving-shaft O, which latter may be operated by a belt passed around pulley P, or it may be set in motion with a crank.

The operation of my machine is as follows: The heated iron F is first applied to the front end of lever E, and shaft O is then rotated in such a manner as to cause drum H to feed the goods into the machine, which goods are spread along the upper surface of said drum. The attendant then depresses the front end of treadle G, thereby bringing the hot iron F firmly down upon the goods supported upon the drum H, and it will be readily understood that the rotation of this drum will feed into the machine any article that is capable of being ironed or polished. If a seam or button or any unusual thickness of goods should be encountered, the attendant has only to relax his pressure upon treadle G sufficiently to elevate iron F far enough to clear such an impediment, and the iron is then again brought to bear firmly upon the drum H.

To iron or polish goods of any unusual width, a longer drum must be employed, the one previously in use being readily disengaged from the machine by lifting neck *i* out of its box, and then unshipping the opposite end of shaft I *i'* from the clutch J *j* K, after which act the long cylinder is adjusted in position by simply reversing the above-described operations.

Two, three, or more cylinders of various lengths may be employed in this machine, it being understood that each drum is to be provided with its special iron. These irons should be about of the same length as the drums with which they are to be used. For polishing, the short drums and irons are preferable.

I claim as my invention—

1. In an ironing apparatus, the combination of the removable feed-drum H, shaft I, formed with neck *i* and cut *i'*, and a driving-shaft, L, provided with socket-head K and pin *j*, all constructed and arranged substantially as set forth.

2. The solid removable iron F, having stem *f* and the key-piece *e*, in combination with the drum H, having shaft I *i i'*, and shaft L, having socket-head K and pin *j*, as and for the purpose set forth.

In testimony of which invention I hereunto set my hand.

FOSTER M. SANDERSON.

Attest:
S. N. SANDERSON,
A. LOUGINOTTI.