

H. E. SMITH.  
Apron for Ironing-Machine.

No. 223,180.

Patented Dec. 30, 1879.

Fig. 1.

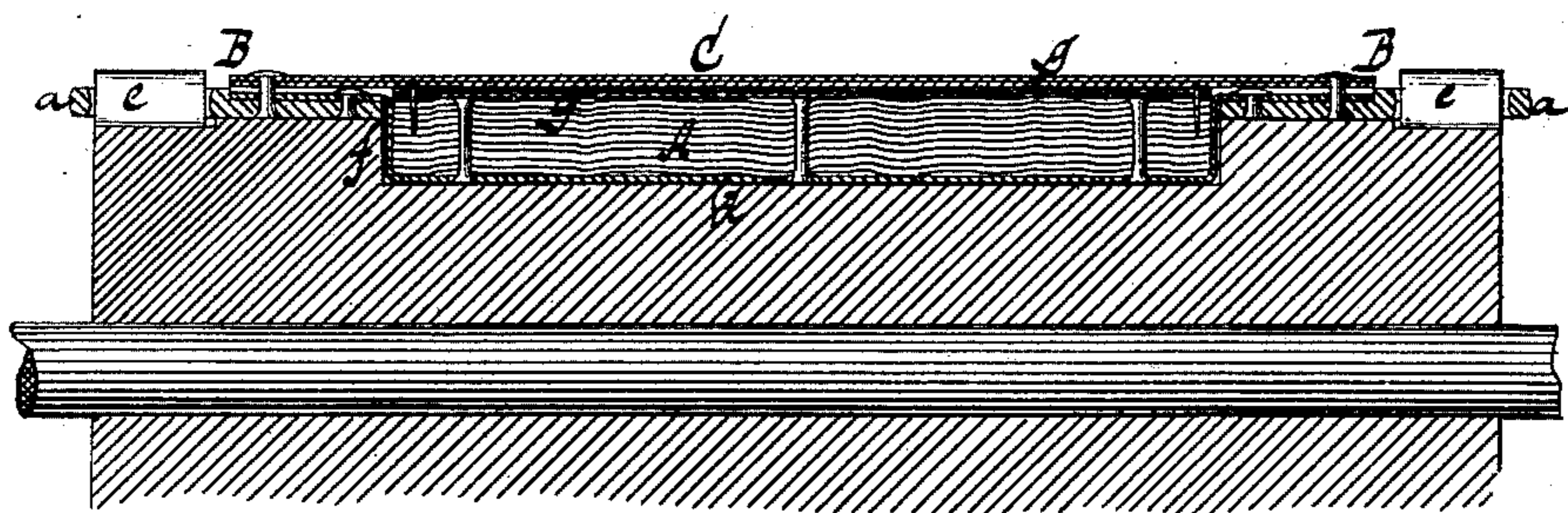


Fig. 2.

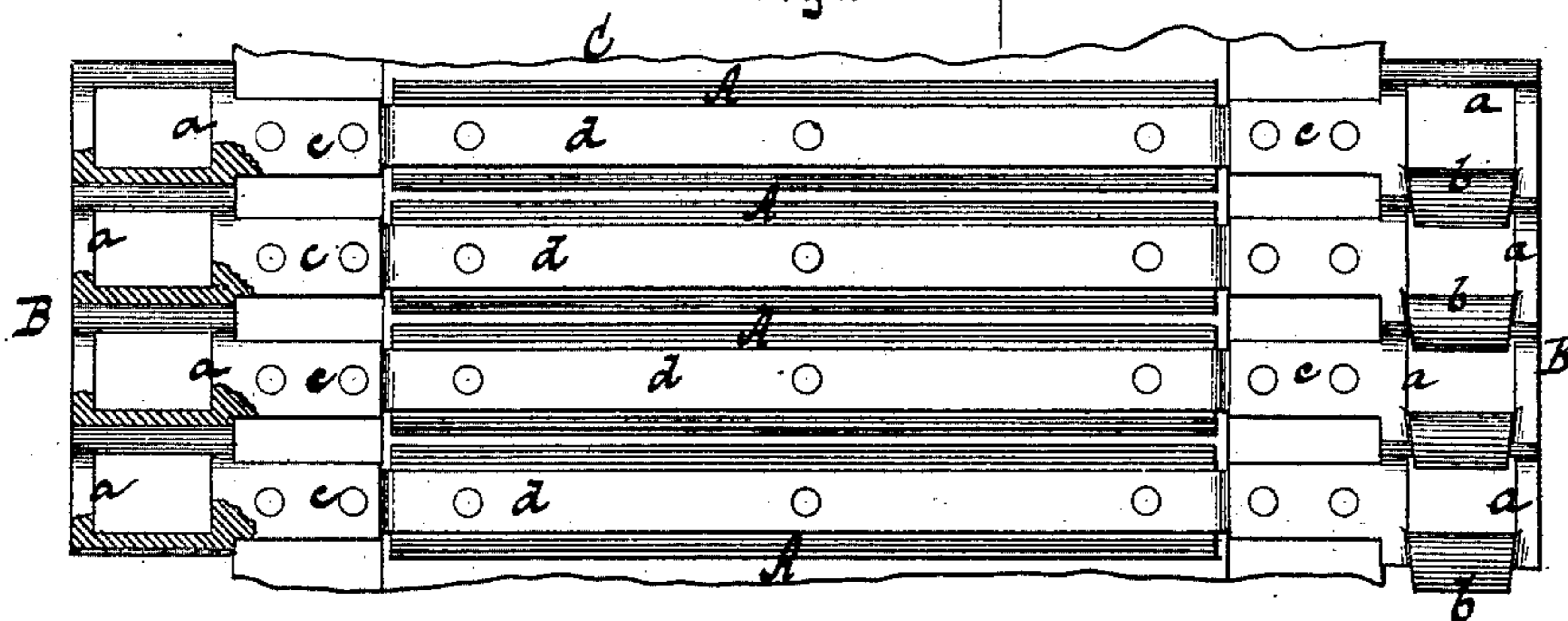


Fig. 3.



Witnesses  
Otto Hufeland  
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# UNITED STATES PATENT OFFICE.

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

## IMPROVEMENT IN APRONS FOR IRONING-MACHINES.

Specification forming part of Letters Patent No. **223,180**, dated December 30, 1879; application filed June 5, 1879.

*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 Clothes-Supporting Aprons for Ironing-Machines, which invention is fully set forth in the following specification, reference being had to the accompanying drawings, in which—

Figure 1 represents a cross-section of my apron and roller. Fig. 2 is an inverted plan view of the apron. Fig. 3 is a longitudinal section of the same.

Similar letters indicate corresponding parts.

My invention is especially adapted to aprons for that class of machines for which Letters Patent of the United States were granted to me October 1, 1878, No. 208,643, and at other times.

It consists in an apron constructed of transverse slats, two propelling-chains, and a surface-covering, so organized that, while the slats present a continuous and firm support to the surface-covering, they are adapted to fold together, thus allowing the apron to pass around the rollers in an ironing-machine, and at the same time, if these rollers are arranged to engage the propelling-chains like a chain-wheel, the apron becomes the recipient of a positive motion. I sink the transverse slats below the propelling-chains in order that a bed for the surface-covering may be attached to the slats between the chains without affecting the true level of the covering.

It also consists in an apron for ironing-machines provided with a surface-covering of polished steel or the like, to act, in conjunction with the cylinder of an ironing-machine, to polish both sides of an article, such as a cuff.

In the drawings, the letter A designates the slats, B B the propelling-chains, and C the surface-covering, of my apron.

The slats A are of wood, and extend transversely to the apron, while they are severally tapered crosswise in corresponding directions; as shown in Fig. 3.

The links *a* of the propelling-chains are of metal, and are interlaced by means of hooks *b* formed thereon, while they are provided with flat lateral projections *c*. These projections *c*, in connection with straps *d*, serve to join the slats A with the propelling-chains—that is to

say, the straps *d* are fastened between their ends to the under side of the slats, and fastened at their ends to two opposite projections, as clearly shown. Other means, however, may be employed for joining the slats to the chains.

The surface-covering C may be made of canvas or the like, or of sheet metal, or both, and it is fastened on its opposite edges to the propelling-chains—namely, to their projections *c*. If desired, detachable fastening devices may be used for this purpose, so that the covering is capable of removal.

The slats A are held contiguous and parallel to each other by means of the chains B B, so that they present a surface which is practically continuous and adapted to firmly support the covering C, while, owing to their shapes, the slats are adapted to lie or fold upon each other, so that the apron may pass around a roller with the slats inward.

My apron is thus adapted to the rollers of an ironing-machine, which rollers are intended to be equipped with cogs or spurs to engage the chains B B, thus imparting to the apron a positive motion. A roller of this description is shown in Fig. 1, and, in addition to spurs *e* for engaging the chains, the same is provided with a groove, *f*, of equal length to the slats A, for the reception of the slats.

The slats A are so arranged that their top surfaces are below the top surfaces of the chains B B, as shown in Fig. 1; and in order the more readily to accomplish this object I prefer to join the slats to the chains by means of the straps *d*. By this arrangement I am enabled to form a bed, *g*, beneath the surface-covering C without rendering the latter uneven, the bed being built up on the slats to a level with the top surfaces of the chains B B, and the surface-covering being stretched over the whole. One or more layers of canvas or other similar material, tacked or otherwise fastened to the slats A, constitute the bed *g*.

If it is desired to polish both sides of an article by means of the machine upon which my apron is used, I make the surface-covering C of polished steel or other material which is capable of being polished and adapted to bend with the apron. It follows that the apron may have a polishing action as well as the cylinder of the machine, the desired effect being pro-

duced by running the apron with a different speed from the cylinder.

The polished surface-covering of the apron forms an important feature of my invention.

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

1. An apron for ironing-machines, consisting of transverse slats A, of a tapered form in cross-section, two propelling-chains, B B, and a surface-covering, C, all combined and adapted for use substantially as described.

2. An apron for ironing-machines, consisting of transverse slats A, of a tapered form in cross-section, two propelling-chains, B B, the slats being sunken below these chains, a bed, g, ar-

ranged upon the slats between the chains, and a surface-covering, C, all combined and adapted for use substantially as described.

3. An apron for ironing-machines provided with a surface-covering of polished steel or the like, substantially as and for the purpose described.

In testimony whereof I have hereunto set my hand and seal this 4th day of June, A. D. 1879.

HAMILTON E. SMITH. [L. S.]

Witnesses:

W. HAUFF,

CHAS. WAHLERS.