(No Model.) 2 Sheets—Sheet 1.

I. H. COX.

APPARATUS FOR CLEANING SOLDERING IRONS.

No. 381,761. Patented Apr. 24, 1888.

Fig. 1.

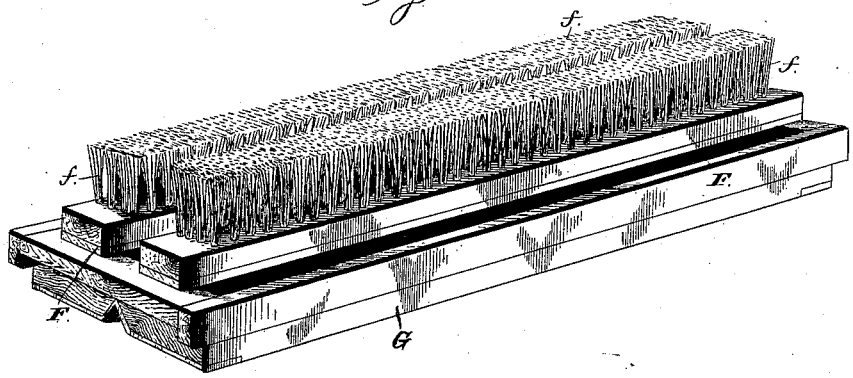
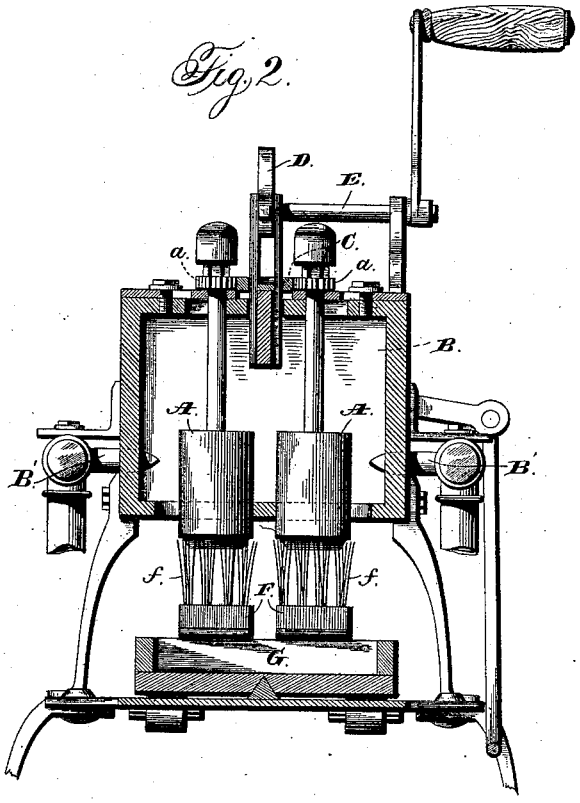


Fig. 2.



Witnessies:
Jas. E. Hutchinson.
Henry C. Hazard.

Inventor.
I. H. Cox, by
Prindle & Russell, his Attys

(No Model.) 2 Sheets—Sheet 2.

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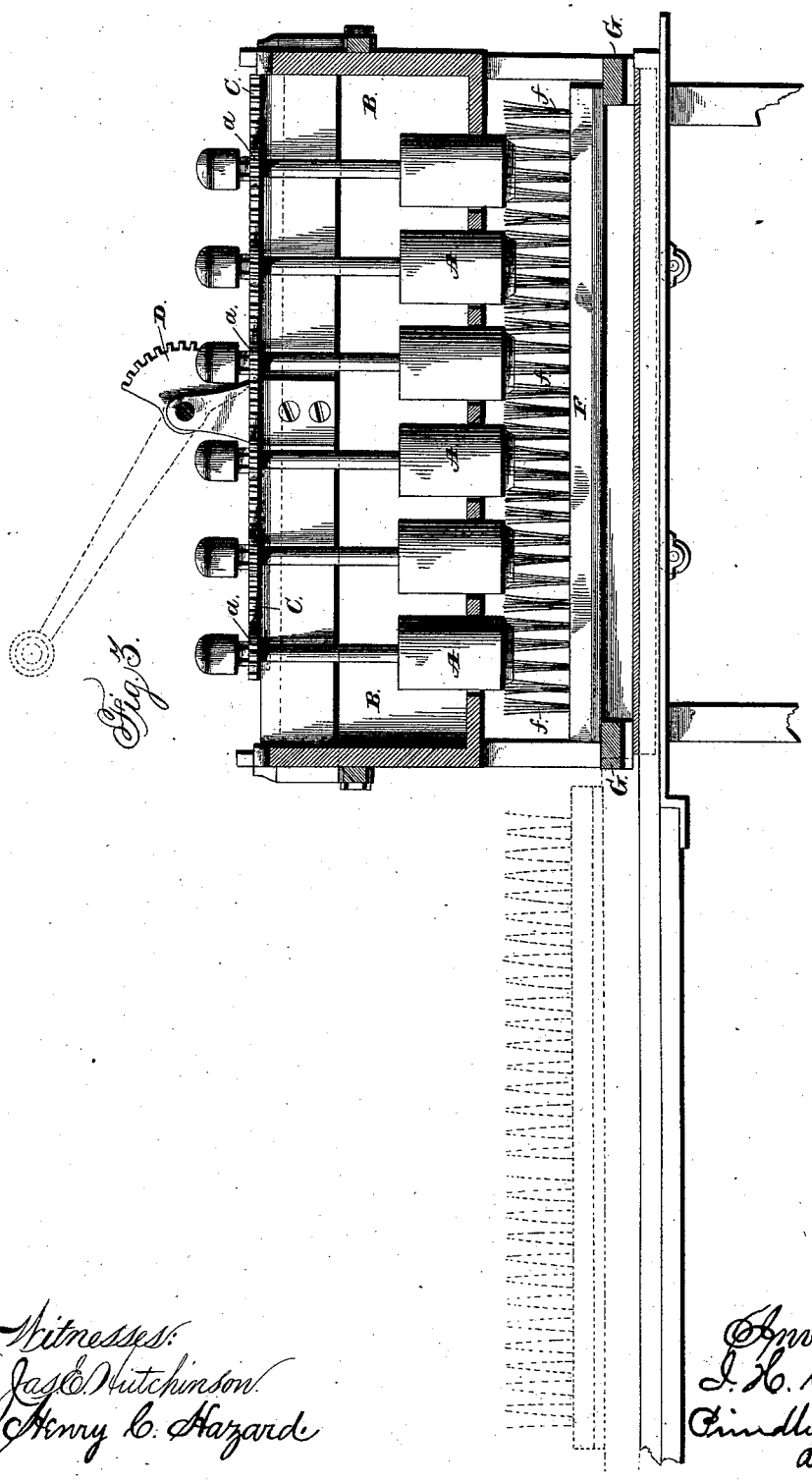

Fig. 3.

Witnesses:
Jas. E. Hutchinson
Henry C. Hazard

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I. H. Cox, by
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attorneys.

UNITED STATES PATENT OFFICE.

ISAAC H. COX, OF BRIDGETON, NEW JERSEY.

APPARATUS FOR CLEANING SOLDERING-IRONS.

SPECIFICATION forming part of Letters Patent No. 381,761, dated April 24, 1888.

Application filed October 6, 1887. Serial No. 251,599. (No model.)

To all whom it may concern:

Be it known that I, ISAAC H. COX, of Bridgeton, in the county of Cumberland, and in the State of New Jersey, have invented certain new and useful Improvements in Apparatus for Cleaning Soldering-Irons; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of the brushes as arranged for use in connection with my capping-machine. Fig. 2 is a cross-section of said machine with said brushes in position for cleaning the soldering-irons, and Fig. 3 is a longitudinal section of the same.

Letters of like name and kind refer to like parts in each of the figures.

The design of my invention is to enable the soldering-irons of can-soldering machines to be easily and thoroughly cleaned without rendering necessary their removal from the machine, to which end such invention consists in the mechanism employed, substantially as and for the purpose hereinafter specified.

The brush is intended, principally, for use with the can-soldering machine shown, in which two rows of cylindrical soldering-irons, A and A, are journaled vertically within a suitable frame, B, between two rows of gas-burners, B′ and B′, and are adapted to be rotated in opposite directions by means of a pinion, *a*, attached to the upper end of each journal, a horizontal toothed rack-bar, C, that is arranged to engage with said pinions, and a toothed segment, D, which is secured upon a horizontally-journaled shaft, E, and engages with said rack-bar, so that by a partial rotation of said shaft in opposite directions said rack-bar will be reciprocated longitudinally and said soldering-irons corresponingly rotated. Provision is also made for lowering and raising said soldering-irons, so as to bring their lower ends into and remove the same from contact with the upper ends of cans; but it is not necessary for the purposes of this invention to further describe such mechanism.

In the use of the machine, when the soldering-irons A and A need to be cleaned, I employ for each row a brush that is composed of a back or body, F, into which are secured brushes of bristles *f* and *f*, that are preferably formed from flat steel wire that has a thickness of about one sixty-fourth of an inch and a width of about one-twentieth of an inch.

The brushes described are secured upon a bed, G, which is adapted to be moved longitudinally beneath the machine in a line with the soldering-irons, and has such height with relation to the latter as to cause the bristles *f* and *f* to have contact with the lower ends of said soldering-irons. As thus arranged, the brushes are moved inward and outward beneath the machine and the soldering-irons simultaneously rotated, when, by the action of the sharp bristles, every portion of the lower ends of said soldering-irons will be thoroughly cleaned. It is intended that the brushes shall be thus used while the soldering-irons are hot; but they may be used, if desired, after said irons have cooled.

It will be obvious that the operation of the brushes will be the same in principle, whatever the special construction of the machine, and that iron, brass, or other metal or composition may be employed in place of steel for the construction of the brushes without departure from the spirit of my invention.

Having thus described my invention, what I claim is—

1. As an improvement in mechanism for capping cans, in combination with revoluble soldering-irons, a metal-bristle brush which is mounted upon a bed that is adapted to slide beneath said soldering-irons, and thereby bring the bristles of said brush into contact with the operative ends of the same, substantially as and for the purpose specified.

2. As an improvement in mechanism for capping cans, a machine in which is combined cylindrical soldering-irons that are journaled within a frame and adapted to be rotated upon vertical axes, mechanism, substantially as shown, whereby said soldering-irons may be simultaneously rotated within their bearings, a metal-bristle brush, and a frame or carrier which is adapted to support such brush and to permit it to be moved beneath said soldering-irons with its bristles in contact with the operative ends of the same, substantially as and for the purpose set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 23d day of September, 1887.

ISAAC H. COX.

Witnesses:
JOSEPH H. PUTNAM,
JAMES D. COX.