

(No Model.)

H. W. SWEITZER.
CAN SOLDERING MACHINE.

No. 281,648.

Patented July 17, 1883.

Fig. 1.

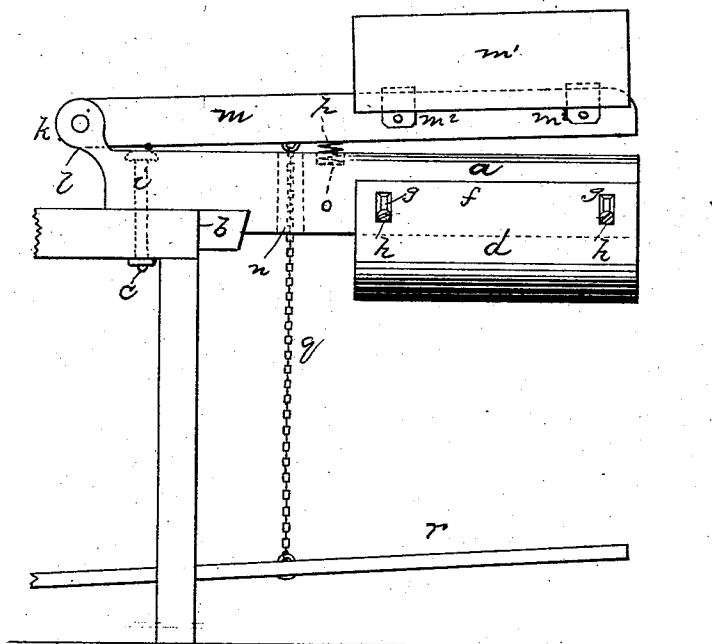
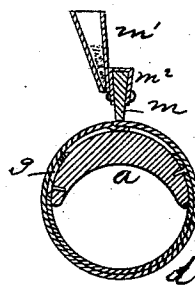


Fig. 2.



WITNESSES

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UNITED STATES PATENT OFFICE.

HARRY W. SWEITZER, OF RURAL VALLEY, PENNSYLVANIA.

CAN-SOLDERING MACHINE.

SPECIFICATION forming part of Letters Patent No. 281,648, dated July 17, 1883.

Application filed May 26, 1883. (No model.)

To all whom it may concern:

Be it known that I, HARRY W. SWEITZER, a citizen of the United States, residing at Rural Valley, in the county of Armstrong and State of Pennsylvania, have invented certain new and useful Improvements in Can-Soldering Machines; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a representation of side elevation of the machine. Fig. 2 is a vertical transverse section through the mandrel.

This invention has relation to a can-soldering machine; and it consists in the construction and novel arrangement of devices, as will be hereinafter fully described, and particularly pointed out in the claims appended.

Referring by letter to the accompanying drawings, *a* designates a semi-cylindrical wooden mandrel, provided with a shoulder, *b*, and a securing-bolt, *c*, by which it is fastened to the work-bench. To the forward end of this semi-cylindrical mandrel *a*, in front of the shoulder *b*, is secured a metallic expander, *d*, of nearly cylindrical form, one edge of which is permanently secured to the wooden mandrel *a*, near its upper vertical longitudinal middle, and the other edge, *f*, is provided with slots *g* and set-screws *h*, by which the latter edge is secured to said wooden mandrel, so that the expander may be made larger or smaller to suit cans of different sizes. The rear end, *i*, of the wooden mandrel is provided with a vertical standard, *k*, having a kerf, *l*, in which a knife or presser bar, *m*, is pivoted and extends forward along the middle of the wooden mandrel *a*, between the edges of the metallic expander. The mandrel *a* is perforated vertically at *n*, and has a seat, *o*, for a spring, *p*. A chain or leather strap, *q*, passes upwardly through this perforation, is connected at its upper end to the knife *m*, its lower end being connected to a treadle, *r*, fulcrumed to the floor in any suitable man-

ner. The knife *m* is provided with a resin-trough, *m'*, perforated along its bottom and secured to the knife a short distance above the back of the knife by the arms *m''*, bolted to the knife and secured to the trough in any convenient manner. The edges of the can-body to be soldered are lapped beneath the knife, which is brought down upon the lap, the pulverized resin in the trough being shaken through the perforations in its bottom upon the lapped portion, and the soldering-iron run along the lap to secure and perfect the same. The treadle is used to operate the knife and resin-trough. The seam rests upon the wood of the mandrel; hence there is no danger of the can being soldered to the mandrel or of the solder cooling too rapidly.

By means of this soldering-machine I am enabled to do the work of five men operating by the old method in the same length of time, and the work will be done perfectly. The fact that the expander is adjustable on the mandrel enables me to solder the seams of cans of all sizes, and the knife or presser holds the seam firmly in place, giving me the use of both hands at all times during the operation. Instead of making the expander in one piece, it may be made in two sections, both of which may be slotted near their upper edges and secured by set-screws to permit their expansion and contraction; but this would not really be a departure from the spirit of my invention, and I prefer the first-described construction. I dispense with the use of the resin-brush, and in this particular save a large amount of time.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a can-soldering machine, the combination, with a semi-cylindrical wooden mandrel having means for securing it to the work-bench, of an adjustable metallic expander, and a pivoted knife or presser for holding the seam upon the wooden surface of the mandrel, and a chain and treadle for operating the same, substantially as specified.

2. The combination, with a wooden mandrel and a metallic expander, of a pivoted knife or presser connected to an operating-

treadle in a position to bring the seam of a can-body in contact with the wooden surface of the mandrel between the edges of the expander, substantially as specified.

- 5 3. The combination, with the pivoted knife, wooden mandrel, and metallic expander, of the perforated resin-trough secured to and above the knife, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

HARRY WHITE SWEITZER.

Witnesses:

WM. KIRKPATRICK,
ADAM WAGLE.