L. C. STRAUB.

Improvement in Can Filling and Soldering Apparatus.

No. 116,114.

Patented June 20, 1871.

Fig. 1.

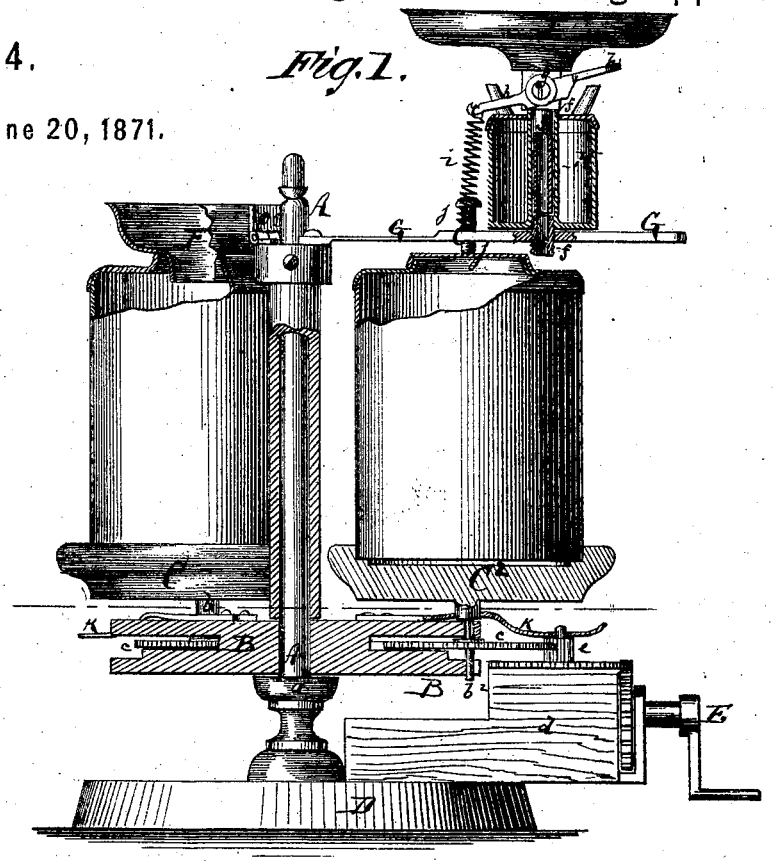
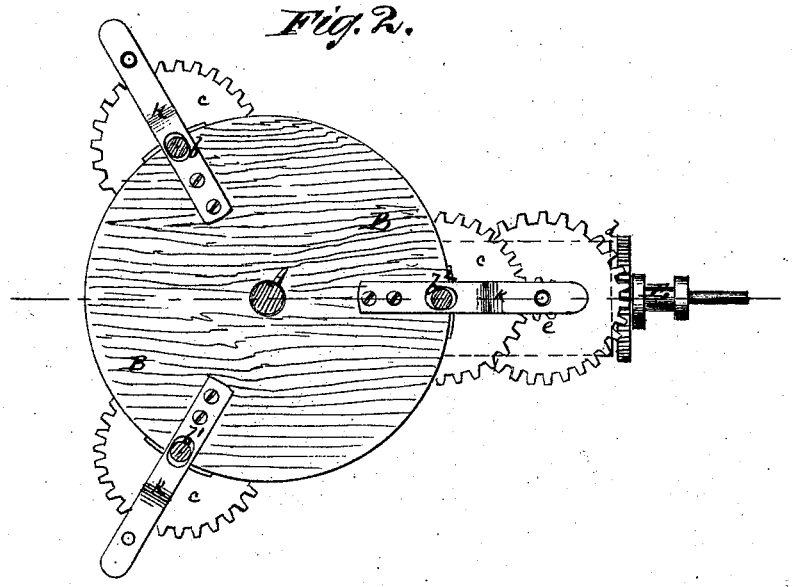


Fig. 2.



Witnesses:

John Becker

Wm. H. C. Smith.

Inventor:

L. C. Straub.

Per Munn & Co.

Attorneys.

UNITED STATES PATENT OFFICE.

LEO CHARLY STRAUB, OF PITTSBURG, PENNSYLVANIA.

IMPROVEMENT IN CAN-FILLING AND SOLDERING APPARATUS.

Specification forming part of Letters Patent No. 116,114, dated June 20, 1871.

To all whom it may concern:

Be it known that I, LEO CHARLY STRAUB, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and Improved Can-Filling and Soldering Apparatus; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which—

Figure 1 represents a sectional side view of my improved can-soldering apparatus. Fig. 2 is a top view, partly in section, of the same.

Similar letters of reference indicate corresponding parts.

This invention relates to a new apparatus for filling and closing the cans; and has for its object to economize time and material during the operation and produce satisfactory workmanship. The invention consists, first, in the arrangement, on a rotary frame, of a series of swivel-disks, on which three or more cans can at once be supported, one to be filled, one closed, and the third soldered. The invention also consists in the application to said rotary frame of certain gearing and spring-catches, whereby the can which is being soldered can be rotated under the soldering apparatus to receive the binding material around the cover. The invention consists also in the use of a hinged hopper for filling one can; and also in the new arrangement of the soldering apparatus; all as hereinafter more fully described.

A in the drawing represents a vertical post, which constitutes the support and holder of my new apparatus. B is a disk or frame fitted around the post and resting upon a shoulder, *a*, of the same, so that it can be freely revolved. On the edge of the frame B are the bearings of three, more or less, vertical arbors, *b* b^1 b^2, which are preferably equal distances apart. Each of these arbors carries at its upper end, above the frame B, a plate or disk. These disks C C^1 C^2 are of equal size and provided with projecting ledges, so that they will serve to hold and retain the cans for filling, closing, and soldering. Every arbor, *b* b^1 b^2, carries, also, a toothed wheel, *c*. In a frame, *d*, projecting from the bed or base D of the post A is hung a shaft, E, which can be revolved by hand or machinery, and serves to rotate a pinion, *e*. The frame B can be turned to bring either one of the wheels *c* into gear with the pinion *e*, and is then locked by a spring-catch, *k*, which fits over the axle of the pinion, one such spring-catch being applied to B near each arbor *b* b^1 b^2. The wheels *c e* will thereby be retained in gear, so that the plate or disk connected with the rotated gear-wheel will also revolve, and with it the can on its top. To the upper part of the post A is hinged a hopper, F, whose neck or lower part is small enough to enter the aperture in the top of the can. This hopper is used for filling the cans, and prevents, by its partly entering the cans, the soiling of their tops, whereby the soldering process would be seriously interfered with. From the upper part of the post A projects also a spring-bar, G, which sustains a lamp, H, and above said lamp a vessel, I, containing solder or wax. A tube, *f*, extends from the bottom of the vessel I through the lamp H and bar G, and serves to conduct the molten matter to the can. A cock, *g*, opened by means of a lever, *h*, and held closed by a spring, *i*, is arranged within the tube *f* to regulate the outflow. The spring-bar *g* is just above and in line with the shaft E. A screw or pin, *j*, projecting downwardly from the bar G, rests on the center of the can-cover and holds it down by the spring pressure of G. At the same time the can is revolved by the shaft E, as aforesaid, and the lever *h* held open so as to cause the solder or wax to be applied to the junction of can-cover and top, for securely closing the can. On the apparatus, therefore, one can under the hopper is filled, the next receives the cover, and the third is soldered. When one has been soldered the spring-catch *k* under it is released from the axle of the pinion *e*, and the frame B is turned to bring the next can into gear with the shaft E and under the tube *f*, while another can is placed upon the empty disk, the soldered can having been removed under the hopper F for refilling.

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

1. The rotary frame B, carrying the several swivel-disks C C^1 C^2, whereon a number of cans can be supported to be filled, closed, and soldered, as set forth.

2. The shaft E and pinion *e*, combined with

the gear-wheels *c*, arbors *b*, and spring-catches *k*, all arranged to operate substantially as herein shown and described.

3. The hopper F hinged to the post A, which carries the rotating swivel-disks C, C^1, and C^2, to be used for filling cans, as set forth.

4. The spring-bar G, carrying the lamp H, vessel I, and tube *f*, to constitute a soldering apparatus, as specified.

LEO CHARLY STRAUB.

Witnesses:
FIDEL WEISS,
FREDERICK BEST.