(No Model.)

J. W. BRADSHAW.

PROCESS OF UNSOLDERING AND CLEANING TIN CANS.

No. 344,561. Patented June 29, 1886.

Fig. 1.

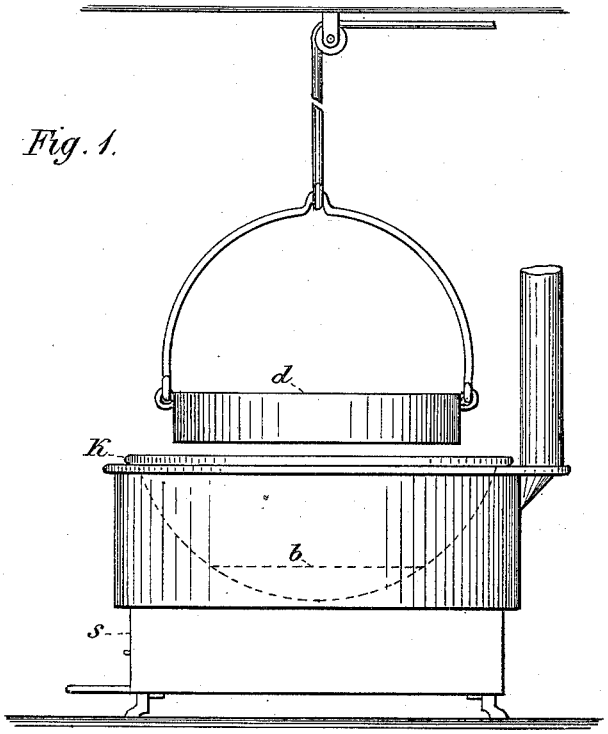
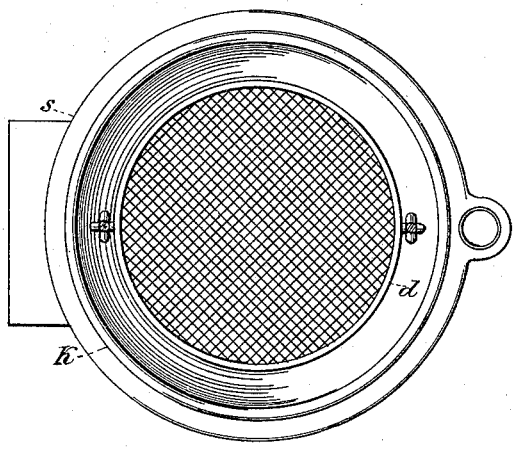


Fig. 2.



WITNESSES.

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UNITED STATES PATENT OFFICE.

JOHN W. BRADSHAW, OF INDIANAPOLIS, INDIANA.

PROCESS OF UNSOLDERING AND CLEANING TIN CANS.

SPECIFICATION forming part of Letters Patent No. 344,561, dated June 29, 1886.

Application filed May 8, 1886. Serial No. 201,508. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. BRADSHAW, a resident of Indianapolis, Marion county, Indiana, have made certain new and useful Improvements in Processes for Unsoldering and Cleaning Tin Cans, a description of which is set forth in the following specification, reference being made to the accompanying drawings, in the several figures of which like letters represent like parts.

My invention consists in a new method of unsoldering and separating the parts and cleaning the bodies of common tin cans used for putting up fruit, removing all the surplus materials—such as paper and solder—thoroughly cleaning the body-sheet of which the can is composed, so that it may be made as available as new tin for other purposes, and will be understood from the following description.

In the drawings I show the mechanism or apparatus by which my process is carried out.

Figure 1 represents a side view of the stove in which the kettle for heating the material is set, and above it, suspended by a rope which passes over a pulley, is the dipper in which the cans are set for immersion in the hot liquid. The dotted line across the kettle near the bottom indicates the false bottom or strainer, which is intended to catch the solder, and which is easily removed when desired. Fig. 2 is a top view of the dipper, showing its sieve-bottom.

In detail, *s* is a stove, constructed to receive an iron kettle, *k*, provided with a false bottom, *b*, fitting the kettle a short distance above the real bottom. This false bottom is made of gauze or wires, and is intended to catch the solder, and be removed when it is necessary to separate the solder. The kettle is partly filled with lard or oil, and a fire being kindled in the stove, the liquid is heated as hot as may be required. It is preferable while heating the material to place a cover over it, as the oil heats quicker with the cover on than off. When the liquid is heated sufficiently, the ordinary empty cans are deposited in the dipper *d*, the bottom of which is also constructed of gauze or wires, forming a strainer or sieve, and when filled the dipper is lowered into the hot liquid so as to completely immerse the cans, and they are kept there until the solder is completely melted and the paste with which the labels are put on is dissolved, when the cans will come apart, the labels fall off, and the melted solder from the seams and ends will drop by gravity through the oil upon the false bottom below, and the dipper is then lifted out and the material which falls from the cans removed.

It is found by experiment that it is not the heat alone which melts the solder, but the oil acts in some way as a sort of flux, and operates conjointly with the heat in producing the desired result. If the oil be heated to a proper degree, and the cans be submerged for a sufficient length of time, it will be found that when the dipper is drawn out nearly all the solder has fallen down upon the false bottom of the kettle; besides all the labels and dirt of every kind have been removed from the sheet of tin forming the can, and it is left bright and clean, and quite equal, for many uses, to a similar piece of new sheet-tin. The sheets are easily straightened by rolls, and are packed away for use. They are adapted to be cut into a variety of articles—such as collars, thimbles, and other small wares usually made of tin. By these means a double saving is made, inasmuch as the tin procured is almost, if not quite, equal to new tin, and large quantities of solder are saved during the process, as hereinbefore described.

Any other fatty substance may be used, as well as lard, which is perhaps preferable.

I do not claim as my invention any of the mechanism used in producing the result at which I have arrived; but

What I do claim, and desire to secure by Letters Patent, is the following:

The process of treating tin cans so as to separate the parts and cleanse the body of the tin and adapt it for other uses, which consists in immersing the cans in a hot bath of oil or other fatty liquid, substantially as described.

In witness whereof I hereunto set my hand this 6th day of May, 1886.

JOHN W. BRADSHAW.

Witnesses:
C. P. JACOBS,
HATTIE MURRY.