

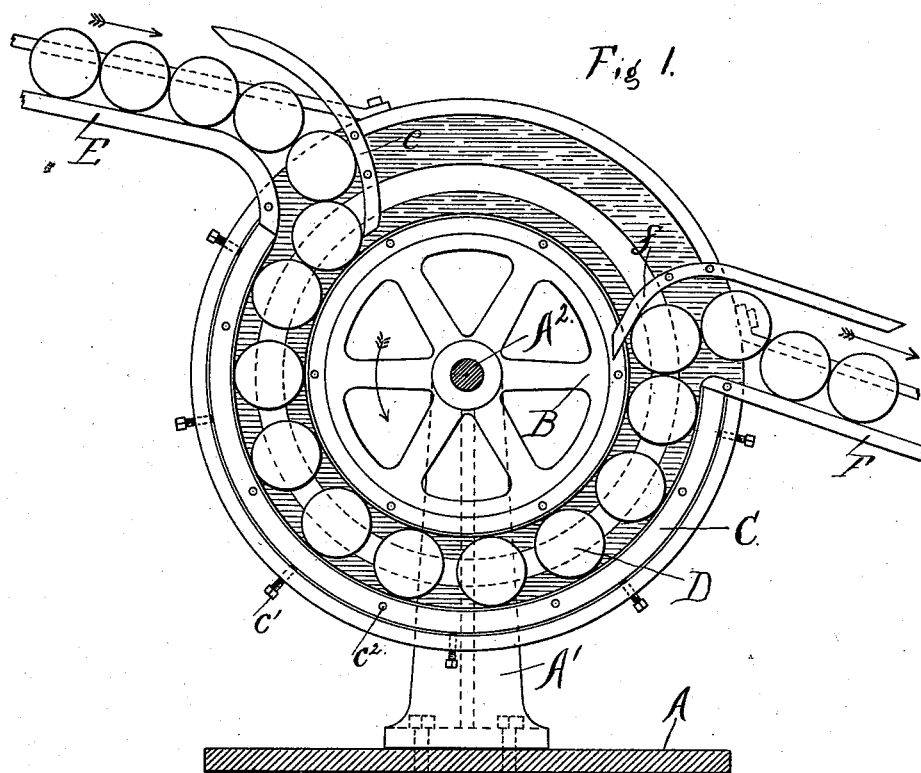
(No Model.)

2 Sheets—Sheet 1.

E. P. HOLDEN.
CAN SEAMING MACHINE.

No. 522,414.

Patented July 3, 1894.



Witnesses
Albert H. Bates.
Thos. G. Grier

Inventor
Edward P. Holden
By his Attorneys
Tillotson & Chamberlain

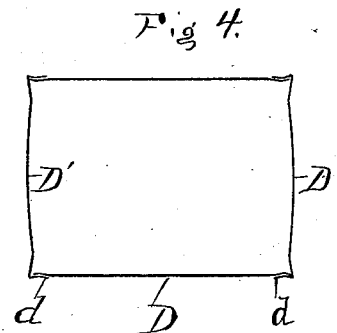
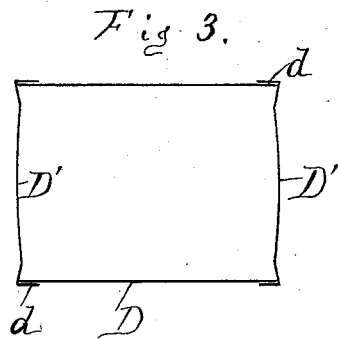
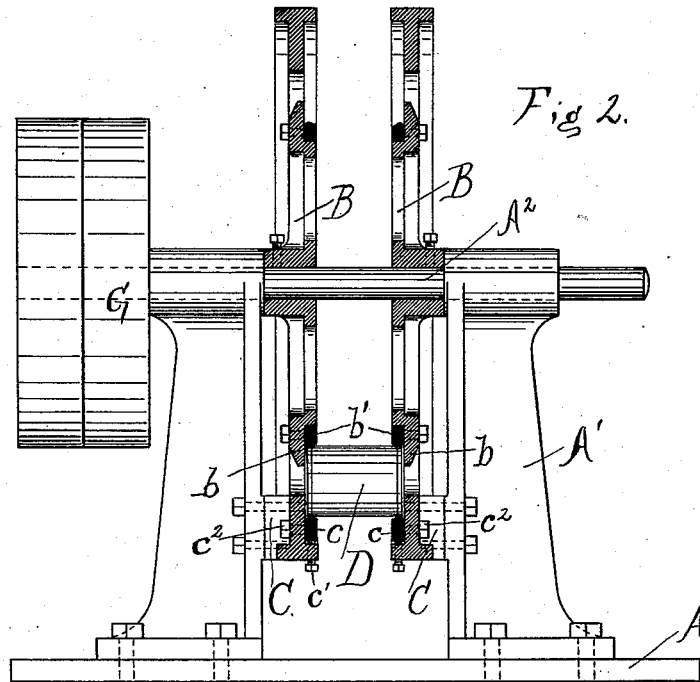
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2 Sheets—Sheet 2.

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Tallie W. Chamberlin

UNITED STATES PATENT OFFICE.

EDWARD P. HOLDEN, OF CHICAGO, ILLINOIS.

CAN-SEAMING MACHINE.

SPECIFICATION forming part of Letters Patent No. 522,414, dated July 3, 1894.

Application filed October 31, 1893. Serial No. 489,595. (No model.)

To all whom it may concern:

Be it known that I, EDWARD P. HOLDEN, a citizen of the United States, residing at Chicago, county of Cook, State of Illinois, have invented a certain new and useful Improvement in Crimping-Machines; and I 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 pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention has for its object the production of a machine for operating on the heads or ends of cans or other sheet metal bodies, in which the action of the machine shall be entirely automatic. The machine is capable of several variations to fit it for the particular class of work for which it is employed. In this case, I have shown a machine adapted to "crimp" the ends of a can onto the body that is, to press the flange on each end or head against the side or body so that the can with its ends can be run through a suitable solder bath and properly soldered.

The invention consists in a combination of devices and appliances hereinafter described and claimed.

In the drawings: Figure 1. is a side elevation of a machine embodying my invention. Fig. 2. is an end elevation with parts in section. Figs. 3. and 4. represent the can before and after crimping.

In carrying out the invention, A represents a suitable base plate and A' the uprights or standards carrying a shaft A² the latter supporting two wheels or disks B. Each of these wheels or disks is partially surrounded by frames C—C.

D is the can to be treated, the ends being shown at D'. Each of the latter is provided with a flange *d* by means of which the end is engaged to the body. This is accomplished by applying pressure to the flange, thus causing it to lie close to and engage the body.

E is a chute preferably inclined in which the cans are placed and down which they roll and F is an outlet for the cans after treatment, there being guards or fenders *e—f* to direct the cans. Each of the wheels B is provided on its periphery with a flange *b* and with a lining *b'* made adjustable as hereinaf-

ter explained. On each frame C is a corresponding lining *c*. These linings *b'—c* are adapted when the can is inserted to bear on the flange *d* of the can end, and said linings are therefore, preferably although not necessarily, slightly convex on their surface so that a corresponding concave finish is given the flange *d*.

The operation is as follows: A can is placed on the chute E and rolls down until it enters the space between the wheels B and the stationary frames C. The wheels are revolved from any suitable source of power as for instance from the band wheels G. The can coming in contact with the revolving wheels is rolled around until it reaches the outlet F. This causes the flange *d* to adhere closely to the body and if desired, to be locked thereby giving it a concave face as shown in Fig. 4. If desired (although it is not necessary) the space between the wheels and the frames C may be narrowed slightly at the discharge end, thus causing the flange *d* to adhere still more closely. To take up the wear, I preferably make the lining *c* adjustable toward or from the wheels B by means of the set screws *c'*. It sometimes happens that where the lining is made convex to indent the flange *d* or "crimp" it as it is known in the trade, it is desirable, if the flange is a wide one, to crimp it at another point than is the case with a narrow flange. To accomplish this, I provide the set screws *c'* whereby the lining can be adjusted along the can.

It is of course obvious that as many of the wheels B as is desired, may be mounted on the shaft A², thus increasing the capacity to any extent desired. It is also obvious that the machine can be adjusted to various lengths of cans by adjusting one wheel B and its accompanying frame C toward or from the other wheel.

What I claim is—

1. In a machine for engaging the ends to the bodies of sheet metal vessels, the combination of two curved sections movable with respect to each other, the curve of one being substantially conformed to the curve of the other, said sections constructed to engage the same end of and to roll the vessel between them, one or more of the sections being provided with a crimping flange laterally adjustable

on the body of the section, substantially as described.

2. In a machine for engaging the ends to the bodies of sheet metal vessels, the combination
5 of two curved sections movable with respect to each other, the curve of one being substantially conformed to the curve of the other, said sections constructed to engage the same
10 end of and to roll the vessel between them, one or more of the sections being provided with a crimping flange radially adjustable on the body of the section, substantially as described.

3. In a machine for engaging the ends to the
15 bodies of sheet metal vessels, the combination of two curved sections movable with respect to each other, the curve of one being substantially conformed to the curve of the other, said sections constructed to engage the same
20 end of and to roll the vessel between them, one or more of the sections being provided with a crimping flange both laterally and radially adjustable on the body of the section, substantially as described.

4. In a machine for engaging the ends to the
25 bodies of sheet metal vessels, the combination of a revolving wheel section and an outer stationary frame section partially surrounding the wheel and conforming substantially to
30 the curve thereof, said wheel and frame being a distance apart and adapted to engage the same end of and to roll the vessel between them, one or more of the sections being provided with a crimping flange laterally adjustable on the body of the section or sections,
35 substantially as described.

5. In a machine for engaging the ends to the bodies of sheet metal vessels, the combination
40 of a revolving wheel section and an outer stationary frame section partially surrounding the wheel and conforming substantially to the curve thereof, said wheel and frame being a distance apart and adapted to engage the same end of and to roll the vessel between
45 them, one or more of the sections being provided with a crimping flange radially adjustable on the body of the section or sections, substantially as described.

6. In a machine for engaging the ends to the
50 bodies of sheet metal vessels, the combination

of a revolving wheel section and an outer stationary frame section partially surrounding the wheel and conforming substantially to the curve thereof, said wheel and frame being
55 a distance apart and adapted to engage the same end of and to roll the vessel between them, one or more of the sections being provided with a crimping flange laterally and radially adjustable on the body of the section or sections, substantially as described. 60

7. In a machine for engaging the ends to the bodies of sheet metal vessels, the combination with a single shaft of two wheel sections
65 mounted thereon and two stationary frame sections partially surrounding the wheel sections and conforming substantially to the curve thereof, there being one set of wheel and stationary sections for each end of the can, said sections provided with a crimping
70 flange laterally adjustable on the body of the section, substantially as described.

8. In a machine for engaging the ends to the bodies of sheet metal vessels, the combination with a single shaft of two wheel sections
75 mounted thereon and two stationary frame sections partially surrounding the wheel sections, and conforming substantially to the curve thereof, there being one set of wheel and stationary sections for each end of the can, said sections provided with a crimping
80 flange laterally adjustable on the body of the section, and the flanges on the stationary frame being also laterally adjustable, substantially as described.

9. In a machine for engaging the ends to the
85 bodies of sheet metal vessels, the combination of a revolving wheel and a stationary frame partially surrounding the same and located a distance therefrom, thus forming a path through which the vessel is rolled, one of said
90 parts provided with a crimping flange, the discharge path being narrower than the entrance, substantially as described.

In testimony whereof I sign this specification in the presence of two witnesses.

EDWARD P. HOLDEN.

Witnesses:

W. H. CHAMBERLIN,
J. L. BRAND.