

(No Model.)

2 Sheets—Sheet 1.

J. GOULD, Jr.
CAN CRIMPING MACHINE.

No. 542,441.

Patented July 9, 1895.

Fig. 1

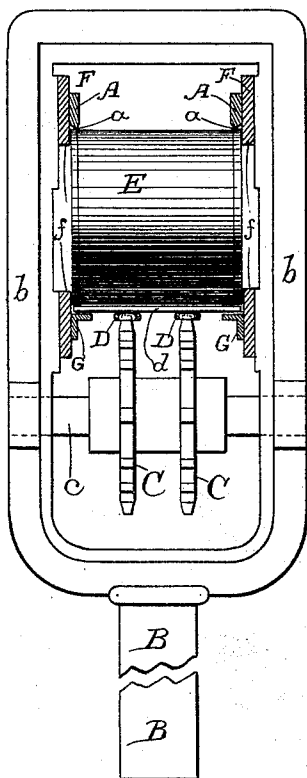
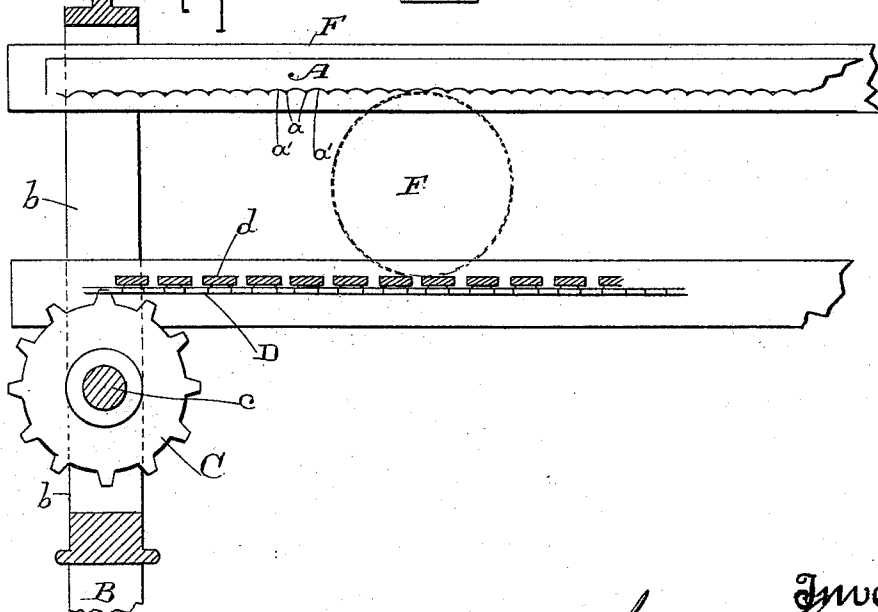


Fig. 2



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By Dewey & Co
attys

(No Model.)

2 Sheets—Sheet 2,

J. GOULD, Jr.
CAN CRIMPING MACHINE.

No. 542,441.

Patented July 9, 1895.

Fig. 3

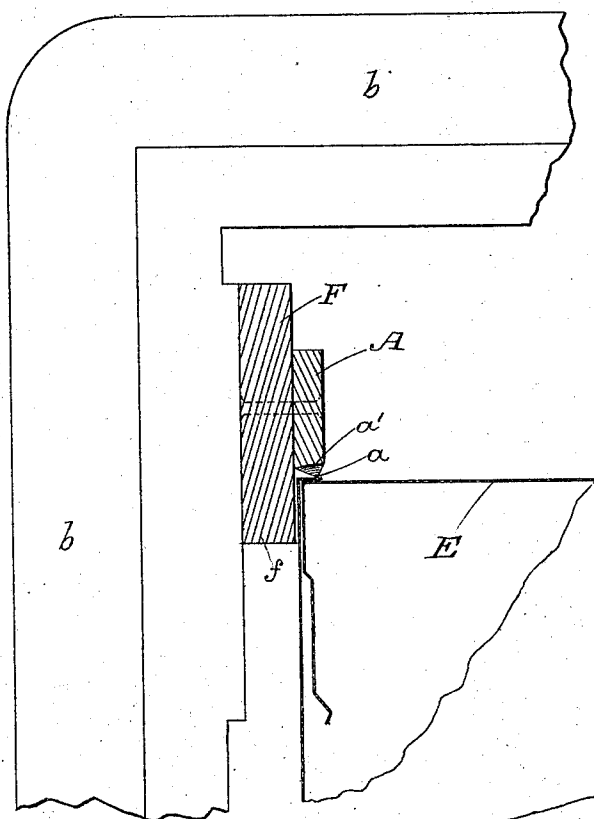
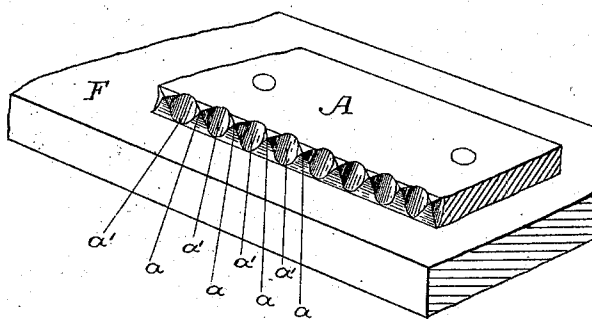


Fig. 4



Witnesses,
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Inventor,
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UNITED STATES PATENT OFFICE.

JAMES GOULD, JR., OF BERKELEY, CALIFORNIA.

CAN-CRIMPING MACHINE.

SPECIFICATION forming part of Letters Patent No. 542,441, dated July 9, 1895.

Application filed March 19, 1895. Serial No. 542,387. (No model.)

To all whom it may concern:

Be it known that I, JAMES GOULD, JR., a citizen of the United States, residing at Berkeley, Alameda county, State of California, have invented an Improvement in Can-Crimping Machines; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to that class of can-crimping machines in which the crimping is effected by the contact with the flange of the can-head of a crimping bar or surface.

After the heads are put on cans, especially when the operation is performed by hand, the flanges of the head do not fit accurately the body of the can; but inequalities of curvature and small apertures and spaces are left which require to be carefully pressed out by truing up the parts together; otherwise the can will leak. For the larger inequalities of curvature and fit between the can-cover flange and the body of the can it has been found that the straight or smooth surfaced crimping-bar is sufficient in its operation to smooth out these inequalities; but I have found by experience that for the smaller inequalities, those that may be termed "small holes" or "spaces," the smooth-surfaced crimping-bar is not sufficient, as it passes over them without pressing them out, and these holes or spaces will be left, so that even after soldering and the most careful previous crimping the can will leak.

The object of my invention is to provide a crimping-bar adapted for the general operation of crimping and for all inequalities of fit, but particularly adapted for the smaller holes and spaces which the said bar or crimping-surface is capable of fully straightening out and fitting together, so as to prevent leakage, and also especially useful for operation at the lock-seam, so as to press in the head-flange to the body at this point.

To this end my invention consists in a crimping-bar, the operating-surface of which is corrugated, toothed, indented, or serrated, whereby a series of pressing-points is formed, each point being separated by an intervening depression or indentation.

Referring to the accompanying drawings for a more complete explanation of my invention, Figure 1 is an end view of my crimping-machine. Fig. 2 is a side view. Fig. 3 is an

enlarged partial cross-section. Fig. 4 is a perspective of one of my crimping-bars secured to a plate F and laid upon its side.

A is the crimping-bar. It may be in any general shape, but is herein shown as a flat bar intended for use in a machine, the essential parts of which I shall herein describe. The crimping-surface of this bar is formed with a series of distinct pressing-points *a*, which are separated by intervening depressions or indentations *a'*, so that the edge or working surface of this bar may be said to be corrugated, toothed, indented, or serrated. The pressing-points lie in line with each other, and they are adapted to press against the flange of the can-head to crimp the latter and to take in any slack which may be pressed tight to the can-body. This operation may be effected in any suitable manner and in any suitable machine, and I have here shown the invention as applied in a machine of which B represents standards which support yokes *b*, in which are mounted shafts *c*, upon which are sprocket-pulleys C, said sprocket-pulleys carrying an endless carrier, such as the chain D, to the links of which are riveted the cross-bars *d*, which form a traveling platform upon which the cans E are caused to advance and to roll in contact with the crimping-bars A, which are secured above to suitable side plates F. Similar side plates are provided below to direct the cans in their course. The bars of the chain travel over suitable guide-tracks G, whereby they are caused to hold the can up with the proper degree of pressure as it rolls with the flanges of its heads in contact with the pressing-points of the crimping-bars. The length of the course through which the cans pass insures their axial rotation to such an extent that by reason of this, and also of the nearness together of the pressing-points of the crimping-bars, every inequality, space, and hole between the can-body and the can-head flanges will sooner or later be closed up by the contact of that portion of the head-flange with one of the pressing-points, which said points press the material together with accuracy and precision, leaving no space nor hole open. This result cannot possibly be reached by a plain straight bar, which would run over these small holes and indentations and leave them with out the can-head flange

being pressed or crimped down to the uneven surface of the can-body.

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

1. In a can crimping machine, a crimping bar or surface formed with a series of aligned, distinct pressing points, separated by intervening depressions or indentations, and adapted to successively operate upon the can, and means for rolling the can in contact therewith.

2. In a can crimping machine, a fixed crimping bar or surface formed with a series of aligned, distinct pressing points, separated by intervening depressions whereby the contact face of the bar or surface is irregular and broken, in combination with means for rolling the cans in contact with said bar or sur-

face whereby its separated points act successively upon the can.

3. A can crimping machine consisting of a traveling carrier on which the cans are advanced, and on which they roll, suitable guides for the cans while on the carrier and fixed crimping bars above the cans with their working edges irregular or broken and composed of a series of aligned distinct pressing points adapted to bear successively upon the can head flanges, said points being separated by intervening indentations or depressions.

In witness whereof I have hereunto set my hand.

JAMES GOULD, JR.

Witnesses:

HARRY J. LASK,
GREGORY L. WALSH.