A. HOFFMAN. CAN CAPPING MACHINE. APPLICATION FILED JUNE 4, 1904.

HO MODEL.

Inventor

UNITED STATES PATENT OFFICE.

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CAN-CAPPING MACHINE.

SPECIFICATION forming part of Letters Patent No. 776,910, dated December 6, 1904.

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To all whom it may concern:

Be it known that I, Augustus Hoffman, a citizen of the United States, residing at St. Johnsville, in the county of Montgomery and State of New York, have invented certain new and useful Improvements in Can-Capping Machines; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters of reference marked thereon.

The present invention has for its object to provide simple and effective means for hermetically and securely closing the filling-openings in the top of sheet-metal cans, such as the cans used for containing condensed milk, fruits, vegetables, liquids, or any product requiring a perfect sealing of the can after being filled, and the purpose of the invention is to materially simplify and render practical the means employed for securely fastening without the aid of solder the cap to the flanged opening in the can, whereby a perfectly sealed joint is obtained without the danger of the cap becoming loose or accidentally detached.

The invention consists in a can-capping machine constructed substantially as shown in the drawings and hereinafter described and claimed.

Figure 1 of the drawings is an elevation, partly in section, showing so much of a machine embodying my invention; Fig. 2, a detail sectional view of the anvil and the swaging-roller, showing the filling-opening of the can with the cap after it has been secured thereto.

In the accompanying drawings, A represents a portion of the frame of a can-capping machine, which may be of any suitable form and construction and having the usual supporting-arm a for the lifting-spindle b provided with a suitable seat or support c for the can, which latter is shown in dotted lines in Fig. 1 of the drawings, the can being raised or lowered by the means ordinarily employed for this purpose to bring the top of the can in position to be operated upon by the swag-

ing-roller and releasing it after the operation is completed.

The movable spindle with support for the can are the usual means employed in this class of machines, and consequently may be varied or changed as circumstances would require.

A tubular shaft B has its bearing in the 55 arm d, extending from the frame of the machine, and has a pulley e upon its upper end, by which a rotary motion is imparted to the shaft through the medium of a suitable belt, or any other means may be employed to im- 60 part motion to the shaft as found most convenient.

Pivoted at f to the interior of the tubular shaft B is a swaging-lever C of any preferred construction, which has a curved neck g extending through the opening h in the wall of the tubular shaft and has connected thereto a suitable roller h'.

The lower end of the tubular shaft B has its support in a suitable bearing *i*, projecting 70 from the frame of the machine, and upon the under side of this bearing is secured the tubular anvil D in any preferred manner, the bearing-face *j* of the anvil receiving the interlocking flanges of the filling-opening and 75 cap of the can, as indicated at X in Fig. 2 of the drawings, and when in the position therein shown the swaging-roller E is brought against the same.

The swaging-roller E is supported upon a 80 short axle k, held in a socket in the end of the swaging-lever C by means of a set-screw l, the swaging-roller being brought into operative position by means of a tubular cam F, which encircles the shaft B and is adapted to 85 slide thereon through the medium of a suitable clutch-lever G, pivoted at m to the frame of the machine and operated in any suitable manner found most practical.

The end of the clutch-lever is bifurcated, the 90 arms n of which engage the circumferential groove o in the tubular cam, and when the bifurcated end of the clutch-lever is raised it will carry with it the tubular cam, and when the cam-face p strikes the projecting roller 95 h'a farther upward movement of the cam will

throw the upper or curved end of the swaging-lever inwardly and the swaging-roller upon the lower end of said lever will be brought tightly against the interlocking flanges at the top of the can, thereby firmly holding the flanges against the bearing-face of the tubular anvil and at the same time imparting to the tubular shaft a rapid rotary motion which carries with it the swaging-roller.

It is evident that many changes or modifications may be made in the several details of construction without departing from the essential features of the invention, and any such changes as would come within ordinary mechanical judgment may be resorted to without in any manner affecting the general principle upon which the invention operates. Modifications may be resorted to without departing from the spirit of the invention or sacrificing any of its advantages.

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

1. In a can-capping machine, a rotatable tubular shaft, a lever pivoted therein, a swaging-roller upon the lower end of the lever and the upper end thereof projecting through an opening in the side wall of the tubular shaft, means for operating the lever to bring the swaging-roller in operative position, and a

suitable anvil operating in connection with said roller, substantially as and for the purpose set forth.

2. In a can-capping machine, a rotatable tubular shaft, a lever pivoted therein, a swag- 35 ing-roller upon the lower end of the lever, the upper end of the lever extending out through an opening in the side wall of the tubular shaft, and a roller connected thereto, an anvil for coöperation with said seaming-roller, and 40 means for operating the pivoted lever, substantially as and for the purpose described.

3. In a can-capping machine, a rotatable tubular shaft, a pivoted lever located therein, a swaging-roller upon the lower end of the le-45 ver, an anvil for coöperation with the seaming-roller, and means for operating the lever to bring the swaging-roller in operative position consisting of a tubular cam slidable upon the tubular shaft and adapted to be brought 50 in contact with the upper end of the pivoted lever to operate the same, substantially as and for the purpose specified.

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

OHOO OI UVVO WICHOSSOS.

AUGUSTUS HOFFMAN.

Witnesses:

JOHN L. FLETCHER, GEORGE M. BOND.