

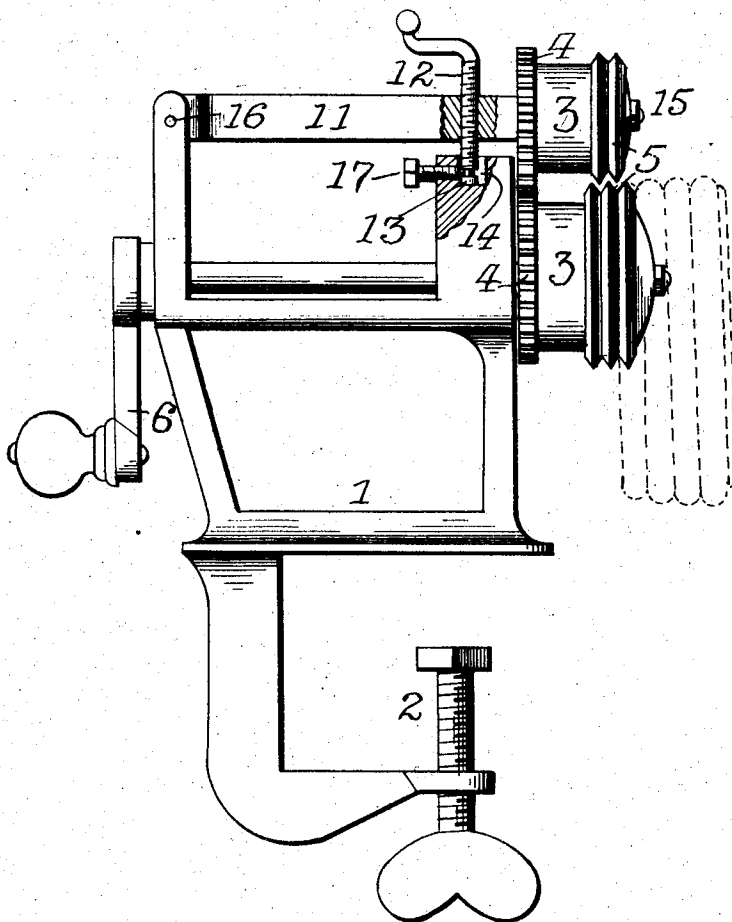
No. 778,158.

PATENTED DEC. 20, 1904.

J. H. VAN DERBILT.  
METAL BENDER.

APPLICATION FILED SEPT. 16, 1904.

NO MODEL.



Witnesses:  
Berlin & Brown  
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# UNITED STATES PATENT OFFICE.

JAMES H. VAN DERBILT, OF FAIRVILLE, NEW YORK.

## METAL-BENDER.

SPECIFICATION forming part of Letters Patent No. 778,158, dated December 20, 1904.

Application filed September 16, 1904. Serial No. 224,635.

*To all whom it may concern:*

Be it known that I, JAMES H. VAN DERBILT, a citizen of the United States, and a resident of Fairville, Wayne county, State of New York, have invented certain new and useful Improvements in Metal-Benders; and my preferred manner of carrying out the invention is set forth in the following full, clear, and exact description, terminating with a claim particularly specifying the novelty.

This invention relates to metal-working machines, and more especially to those which are used for forming threads on sheet metal; and the object of the same is to produce a machine which will strengthen or deepen the threads in sheet-metal caps or covers such as are usually employed for closing jars which contain preserves and the like. These caps are frequently made of such light material that long or continued use partially flattens out their threads, so that they no longer screw tightly onto the threads of the neck of the jar, and it is my purpose to produce a cheap machine for use whereby the threads of the caps can be deepened when it becomes necessary.

To this end the invention consists in the construction described below and illustrated in the drawing.

Referring to the drawing, 1 designates a casting constituting the framework of this machine, and 2 is a set-screw in the lower arm of the same by which the device may be mounted on the edge of a table, as well understood.

3 3 represent a pair of rolls connected by intermeshing gears 4, and the outer ends of these rolls bear ribs 5, alternating with each other, as shown. The lowermost roll is mounted on the main driving-shaft, which is journaled in the framework, and 6 is a crank-handle for rotating this shaft, and thereby driving both the rolls.

The upper roll is mounted on a stub-shaft 15, formed at the outer end of a bar 11, which is pivoted at 16 to the rear portion of the casting, by which construction the upper roll

can be lifted entirely out of engagement with the lower roll for the insertion or removal of the caps or the material being worked on. Obviously such lifting of the pivoted bar 11 disengages the gears 4. Through said bar is threaded a screw 12 with a knob or crank-handle at its upper end and a knob or head 13 at its lower end, which end enters an upright socket 14 in the framework. Threaded through the latter in a horizontal position is a set-screw 17, having a reduced point or tip which enters the groove in the screw 12 above its head 13.

To insert the jar-cap, the set-screw 17 may be retracted until it disengages the screw 12, and the upper roll is lifted, the cap inserted, and the roll brought again down into place. When the tip of the screw 17 engages the groove in the screw 12, it is obvious that by turning the latter through the pivoted bar the upper roll can be adjusted to the proper degree of tension.

It will be noticed that the socket 14 is made rather wide, so that there is considerable play for the head 13 in a direction away from the tip of the screw 17. This is intentional, and it serves the double purpose of permitting adjustment and also of permitting the head 13 to disengage the tip of the screw 17 when the adjusting-screw 12 is turned so far downward that the upward movement of the bar 11 swings the head 13 to the right.

The parts are preferably entirely of metal, finished and ornamented as desired.

I do not limit myself to the specific use of the machine above described, nor, in fact, to the use of the ribs 5 at all, because if they were omitted the rolls 3 might cooperate with each other to perform a variety of services.

What is claimed as new is—

In a machine of the type described, the combination with a framework having an upright socket, a power-shaft journaled through the framework, and a roll and a gear on said shaft; of a bar pivoted at its rear end in the framework and having a stub-shaft at its front end, a roll and a gear journaled on said

stub-shaft, an adjusting-screw threaded  
through this bar and having a head at its  
lower end adapted to enter said socket, and  
a set-screw threaded into the casting at an  
5 angle to said adjusting-screw with its tip en-  
gaging above the head of the latter, all as and  
for the purpose set forth.

In testimony whereof I have hereunto sub-  
scribed my signature this the 8th day of Sep-  
tember, A. D. 1904.

JAMES H. VAN DERBILT.

Witnesses:

EMORY G. STREETER,  
MARY E. WHITMAN.