J. W. LINQUIST.

APPLIANCE FOR BENDING OR FOLDING SHEET METAL.

APPLICATION FILED OCT. 11, 1915.

1,206,449. Patented Nov. 28, 1916.

Fig. 1.

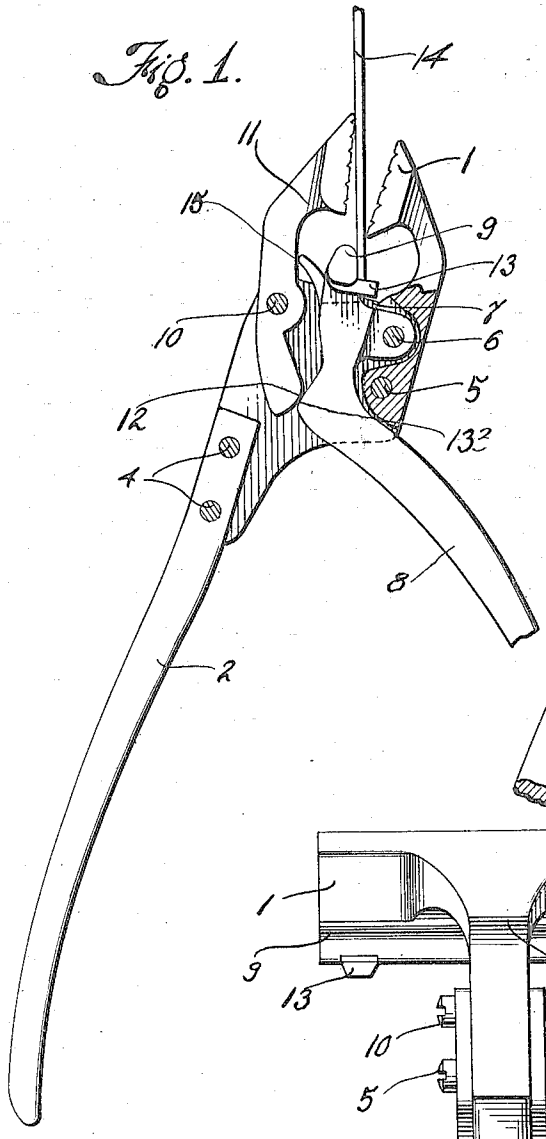
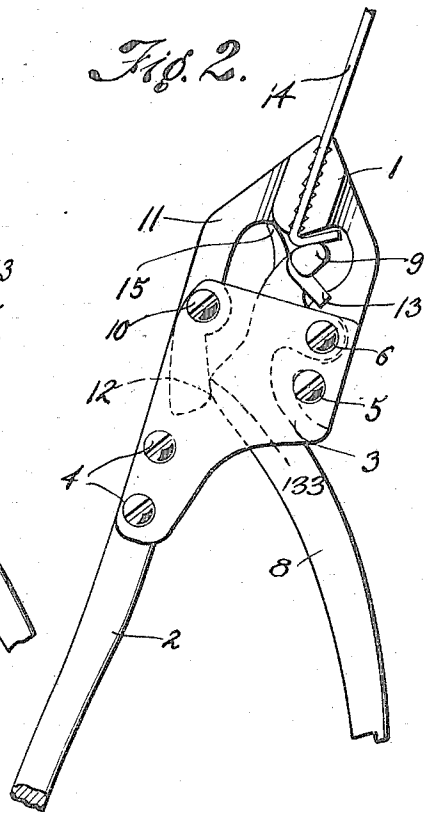


Fig. 2.



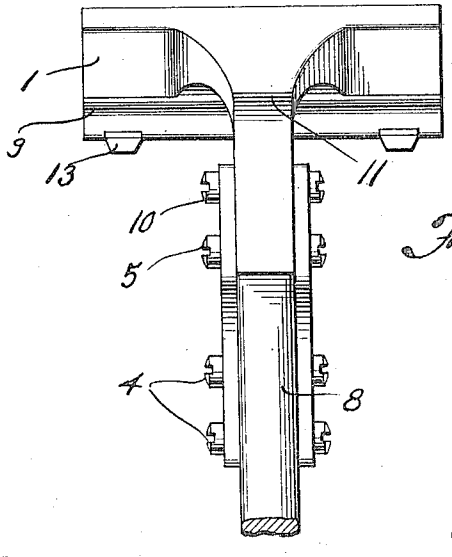


Fig. 3.

Witnesses

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APPLIANCE FOR BENDING OR FOLDING SHEET METAL.

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To all whom it may concern:

Be it known that I, JESSE W. LINQUIST, a citizen of the United States, residing at 3531 Forty-ninth avenue, S. E., Portland, in the county of Multnomah and State of Oregon, have invented new and useful Improvements in Appliances for Bending or Folding Sheet Metal, of which the following is a specification.

My invention relates to an appliance for bending or folding sheet metal and has as its principal object the provision of a device which shall be comparatively simple in construction but convenient and efficient in operation.

A further object of my invention resides in the particular arrangement and combination of parts hereinafter described.

In the accompanying drawings:—Figure 1 is an elevational view of a device embodying my invention, parts being broken away for purposes of illustration. Fig. 2 is an elevational view of the device shown in Fig. 1, but illustrating the parts in closed position. Fig. 3 is an elevational view of the device shown in Figs. 1 and 2 taken from the right of Fig. 1.

Throughout the separate views the same parts are designated by the same reference characters.

Referring more particularly to the drawings, 1 is a jaw which is rigidly secured to the handle or grip member 2 by means of two plates such as 3—3 which are fixed to the jaw 1 and the member 2 by means of bolts or rivets such as 4—4, 5 and 6, the plates 3—3 being spaced apart by the members 1 and 2 so as to leave a space between the plates. The lower part of the jaw is suspended between the plates and is there mounted to receive a lug 7, the lug 7 being drilled to receive the bolt 6 and thus forming a pivotal support for a second handle or gripping member 8. The upper end of the member 8 is adapted to pass close beneath the lower edge of the jaw 1 and serve as a former for bending the sheet metal, the former being rounded and indicated at 9.

I provide also a bolt 10 at the upper left-hand corner of the plates 3 on which bolt is pivoted a second jaw 11, the lower end of which is rounded to form a cam surface as indicated at 12. Moreover, the side or face of the member 8 opposite the lug 7 projects toward the jaw 11 forming a cam surface 133, adapted to contact with the surface 12 so as to force the jaw 11 closed. It will be evident from the relation of parts that when the members 2 and 8 are open the jaw 11 may swing away from the jaw 1, but when the members 2 and 8 are forced together the jaw 11 is pressed toward the jaw 1 so as to forcibly clamp material therebetween.

At the upper end of the member 8 and just below the forming surface 9 are certain additional lugs. On the right-hand side of the member 8 as viewed in Fig. 1 are two lugs 13 projecting at right angles to the right-hand surface of the former 9 and it will be seen that when the jaws are open the said lugs will be in line with the opening so that a piece of sheet metal such as 14 may be placed between the jaws and rest on the lugs. When the handle members 2 and 8 are now forced together bringing the parts into the position shown in Fig. 2, the metal of the sheet 14 will be forced around the lower edge of the jaw 1, thereby bending the same easily but forcibly so that a permanent bend is given to the sheet metal.

On the opposite side of the former 9 from the lugs 13 is still another lug 15 which is adapted to strike the inner face of the jaw 11 when the member 8 is moved away from the member 2 so as to forcibly open the jaw 11 and hold the same open for the ready insertion of the sheet 14 against the lugs 13. The lower edge of the jaw 11 at its clamping face may be cut away as indicated so that the lug 15 may not interfere with the jaw when the handles 2 and 8 are forced together.

In the use of my device, it will be understood that a metal sheet may be inserted between the two jaws when the handles 2 and 8 have been separated, since when the handles are in this position, the lug 15 forces the jaw 11 away from the jaw 1. Consequently, a sheet such as 14 can be placed so that its edge will rest upon the lug 13. Now as the handle 8 is moved toward the handle 2, the lug 15 first releases the jaw 11 and as the movement continues the jaw 11 begins to lean forward toward the jaw 1 and simultaneously the member 9 begins to turn the sheet 14 around the inner edge of the jaw 1. However, the bending action is relatively fledged until the jaw 11 goes into position where it clamps the sheet 14 against the jaw 1 and thereupon as the movement of the handle 8 continues, the surfaces 133 and 12 continue to force the

11 against the jaw 1 while the member ongly forces the sheet around the inner of the jaw 1 into the position shown ig. 2.

aving thus described my invention, I m:

A metal bending device comprising in bination a pair of side plates, a handle dly secured at one corner of said plates, aw rigidly secured to said plate at the ner diagonally opposite the point of con- tion of said handle, a jaw complemental said first mentioned jaw for clamping metal sheet therebetween, and a former r bending said sheet around the inner edge a jaw rigidly secured to said plate at the corner diagonally opposite the point of connection of said handle, a jaw complemental to said first mentioned jaw for clamping a metal sheet therebetween, and a former for bending said sheet, said complemental jaw being pivoted between the plates, and a handle pivoted between the said plates having means thereon for forcing the complemental jaw against said fixed jaw, said handle having also means for throwing said complemental jaw into the open position.

4. A metal bending device comprising in combination a pair of side plates, a handle rigidly secured at one corner of said plates, a jaw rigidly secured to said plate at the corner diagonally opposite the point of con-