

[54] MANUALLY OPERATED CORNER BENDING DEVICE	2,279,654	4/1942	Carter.....	72/319
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[52] U.S. Cl. 72/319

[51] Int. Cl. B21d 11/20

[58] Field of Search 72/319, 310, 298, 387, 72/379

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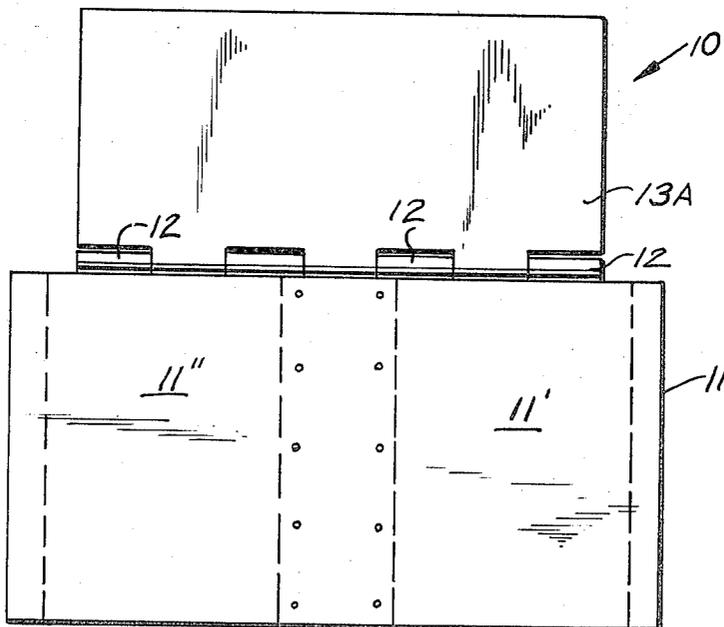
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[57] ABSTRACT

A hand operated bending device consisting primarily of a pair of hinged plates of hardened metal. This device serves to form 90° bends on sheet metal and may be used equally well by right or left handed persons.

1 Claim, 6 Drawing Figures



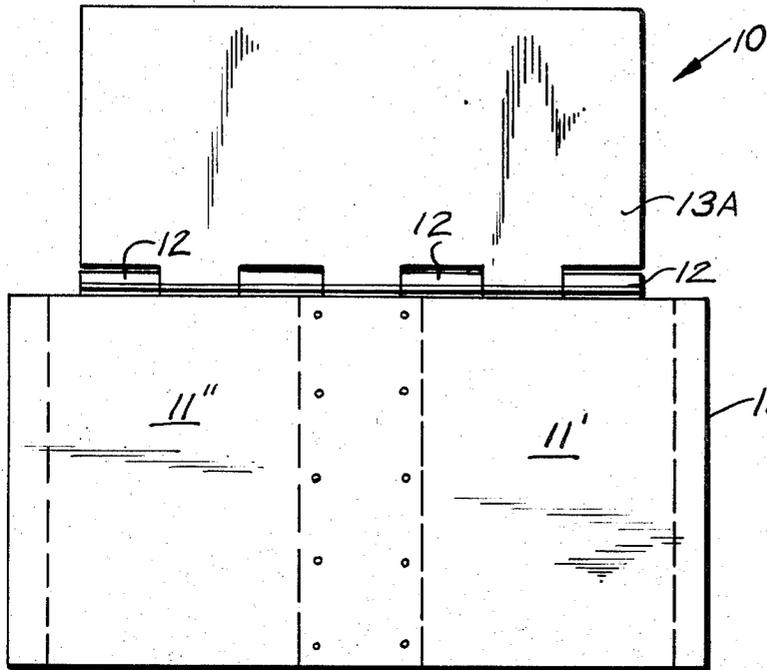


FIG. 1

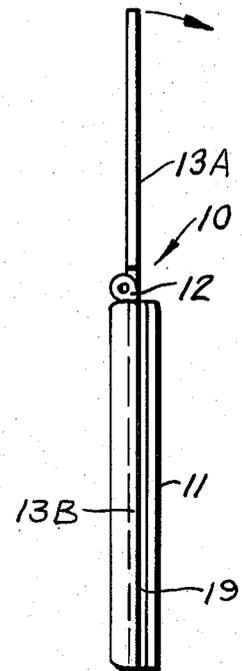


FIG. 2



FIG. 3

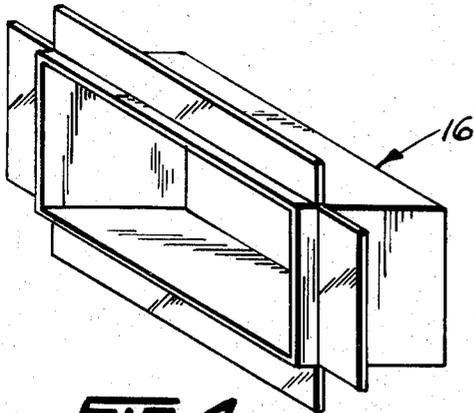


FIG. 4

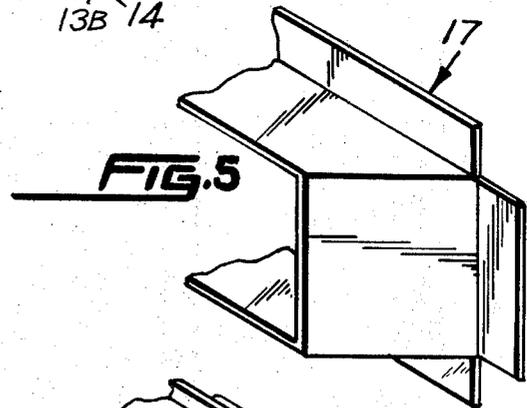


FIG. 5

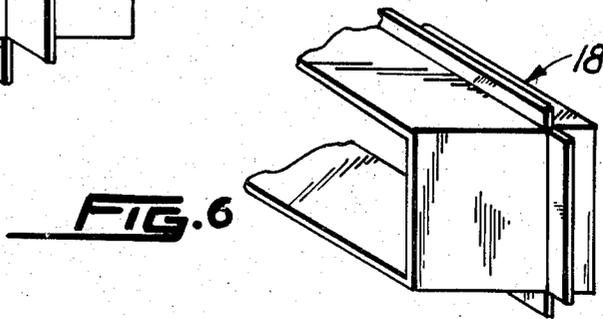


FIG. 6

MANUALLY OPERATED CORNER BENDING DEVICE

This invention relates to bending brakes, and more particularly to a manually operated corner bending device.

It is therefore the primary purpose of this invention to provide a manually operated corner bending device, which will form 90° corners on sheet metal, such as roof flanges and the like.

Another object of this invention is to provide a bending device of the type described, which will include hand metal plates which will be hinged together to form the means of bending the material.

A further object of this invention is to provide a bending device which will enable a worker to form corners on metal frames used as register frames when installing fiber glass duct and the device also serves as a means for forming corners on hammer lock collars for use when installing metal air conditioning and heating ducts.

Other objects of the present invention are to provide a bending device which is simple in design, inexpensive to manufacture, rugged in construction, easy to use and efficient in operation.

These and other objects will be readily evident upon a study of the following specification and the accompanying drawing wherein:

FIG. 1 is a plan view of the present invention;

FIG. 2 is a side view of FIG. 1;

FIG. 3 is an edge-wise view of the invention showing material formed by the device; and

FIGS. 4, 5, and 6 are perspective views showing the corners formed on roof flanges and the like.

According to this invention, a manually operated

corner bending device 10 is shown to include two flat rectangular pieces of hardened material 13A and 13B which incorporates a hinge 12. A thinner piece of flat material 19 is spot welded between the rectangular pieces 13B and 11, which forms a slot into which material may be inserted to be forcibly bent by 13A, to form structures such as 16, 17 and 18 as shown in FIGS. 4, 5 and 6 of the drawings. Lips 14 extend on each end from plate 13B which serve as stop edges for material such as 15 in FIG. 3.

In use, the portion 11' of plate 11, serves for left hand use of the device 10 and the portion 11'' serves for right hand use of device 10. The plate 13B is hinged by hinge 12 to plate 13A as a means of forcibly bending the edges of material 15 to form structures 16, 17, and 18 as shown in FIG. 4, 5, and 6 of the drawing.

What I now claim:

1. A manually operated corner bending device, comprising in combination, a large, rectangular, hardened metal plate, a small rectangular, hard metal plate, and a hinge pivotally securing said plates together so to form and forcibly urge corners into sheet metal, said large rectangular plate including lip means on each end which serve as stop means for said sheet metal being formed, each said lip means comprising a flange turned up at right angle to a flat plane or said large plate, said plates in combination forming a means for abutting and frictionally causing 90° bends to be formed in said sheet metal which may comprise a material such as is used for heating and air conditioning ducts and the like, said small plate being pivotally urged towards said larger plate when said sheet metal is in place so to produce a 90° bend on edges of said sheet metal placed thereon.

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