

Oct. 1, 1946.

C. L. BEARD

2,408,595

POINT MARKER

Filed June 6, 1944

FIG. 1.

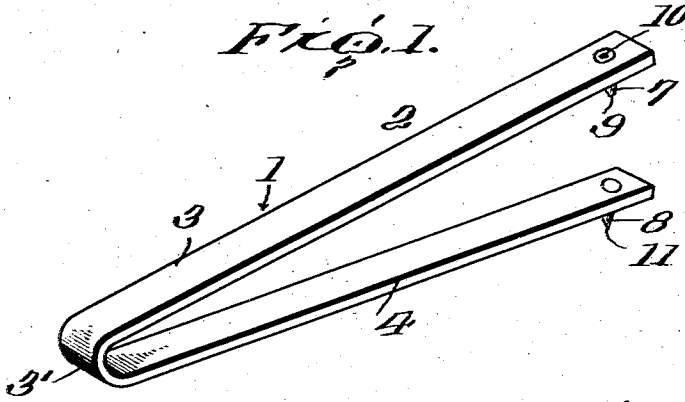


FIG. 2.

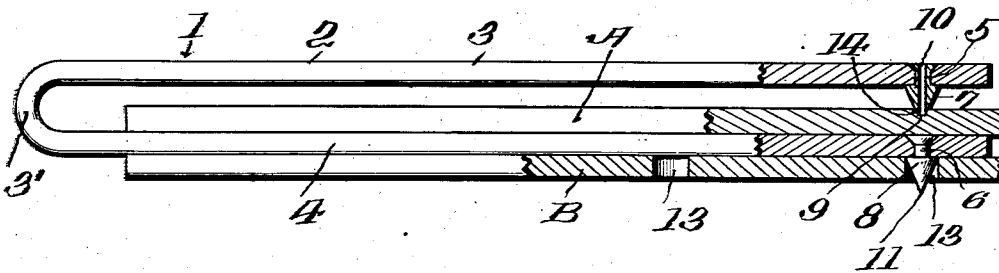
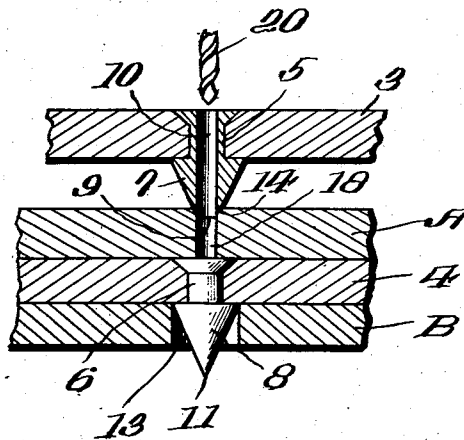


FIG. 3.



Inventor
Charles L. Beard
Percy H. Moore
Attorney

UNITED STATES PATENT OFFICE

2,408,595

POINT MARKER

Charles L. Beard, Lancaster, Pa.

Application June 6, 1944, Serial No. 538,915

1 Claim. (Cl. 33—189)

1

This invention relates to tools for point marking sheet material.

It frequently happens that a metal worker has occasion to drill openings in a sheet of metal to line up or register with openings previously drilled in a second metal sheet whereby the two sheets can be joined together at the desired place or places by means of rivets, bolts or other suitable fastening means.

One of the principal objects of my invention is to provide a simply constructed and easily manipulated tool whereby the openings in the previously drilled sheet can be readily located and thereafter corresponding registering holes formed in the first sheet.

Other objects and advantages will be apparent as this specification is read in connection with the accompanying drawing, in which:

Figure 1 is a perspective view of my improved tool with the arms in their open or separated positions;

Figure 2 is a side view partly in section showing the tool in the marking position with the lower arm thereof between two superposed sheets of metal; and

Figure 3 is an enlarged sectional view showing the parts in the position assumed after the marking operation and with the drill in position to drill a hole in the marked upper sheet.

Referring more particularly to the drawing 1 denotes my improved tool of any suitable material but preferably formed from a strip 2 of slightly resilient sheet metal. The metal strip 2 is bent intermediate its ends, as at 3, to provide upper and lower resilient arms 3 and 4 respectively, which are thus connected at their rear ends or portions.

The forward or free ends of the arms 3 and 4 are provided with registering circular openings 5 and 6 in which are suitably secured, what may be termed, a marker 7 and a finder 8 respectively, preferably of solid metal construction. The marker 7 tapers downwardly toward its lower end 9 and is preferably provided with a concentrically disposed drill opening 10 terminating in the point 9. The finder 8, like the marker 7, is round and tapers downwardly toward its lower end 11. The upper faces of the members 7 and 8 are preferably flat.

Where the workman is desirous of securing a metal sheet A at certain points to a sheet B, which has previously been formed with openings 13, designating such points of attachment, and which may form part of an airplane or other assembly, the sheet A is placed over the sheet B

2

and the arm 4 is placed between the two sheets, as best illustrated in Figure 2 of the drawing.

Suitable manipulation of the tool causes the finder point 11 to locate the hidden hole 13, and it will be seen that this operation is greatly facilitated due to the conical shape of the finder, which readily centers itself in the hole, thus providing an accurate guide for locating a corresponding hole in sheet A. All the operator need now do, in order to provide the sheet A with a mark 14, corresponding to the drilled hole in sheet B, is to force the leg 3 downwardly with a blow of the hand. During this marking operation the upper flat face of the finder point 8 serves as an anvil like support for the sheet A, thus offering effective solid resistance to the impact of the member 8.

The drill opening 10 in the marker 7 enables the workman to drill a desired guide hole 18 in the metal sheet A by merely inserting a drill of the proper size through the drill opening without the necessity of marking the location of the hole, by forcing the marker point 9 against the sheet A, as previously described. It will be understood that when the sheet A is seated on the finder 8 and the lower tapered ends of the members 7 and 8 are engaging the respective sheets A and B, the tapered ends 9 and 11 will be coaxially disposed with respect to each other.

In Figure 3 the upper and lower metal sheets A and B are shown with a drill 20 in withdrawn position after the small guide hole 18 has been drilled thereby in sheet A. Thereafter the operator will employ a larger drill, not shown, in enlarging the guide hole 18 to correspond in size with the hole 13 previously formed in sheet B.

Having thus described my invention, what I claim is:

A tool for marking sheet metal comprising a strip of resilient material bent intermediate its ends to form lower and upper connected resilient arms, each arm provided with a downwardly tapered member at its free lower end, the upper surface of the tapered member of the lower arm being flat, the free ends of said arms being movable towards each other against the inherent resiliency of said strip whereby said tapered members are adapted respectively for locating a hidden depression or hole in the upper face of a metal sheet and to apply a correspondingly located mark in the upper face of a second metal sheet superimposed on said first mentioned sheet, when said lower arm is inserted between said metal sheets and said upper arm is moved toward said second sheet.

CHARLES L. BEARD.