M. E. HAYMAN.

MARKING DEVICE.

APPLICATION FILED FEB. 12, 1919. RENEWED MAY 10, 1922.

1,431,522. Patented Oct. 10, 1922.

Fig. 1.

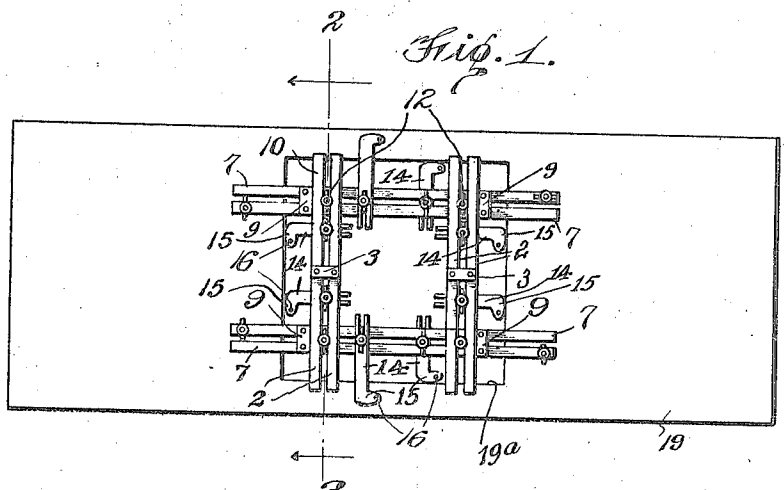


Fig. 2.

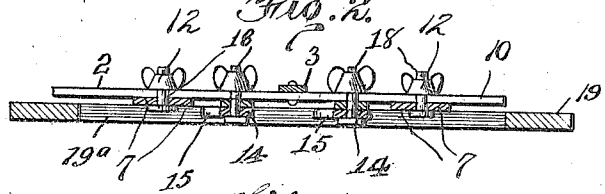


Fig. 3.

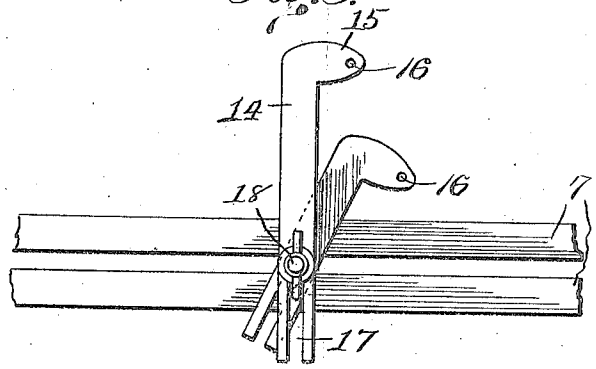
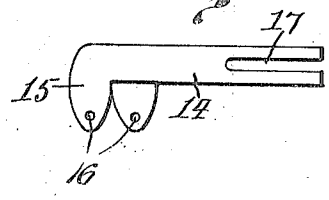


Fig. 4.



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UNITED STATES PATENT OFFICE.

MARTIN E. HAYMAN, OF MILWAUKEE, OREGON.

MARKING DEVICE.

Application filed February 12, 1919, Serial No. 276,689. Renewed May 10, 1922. Serial No. 559,898.

To all whom it may concern:

Be it known that I, MARTIN E. HAYMAN, a citizen of the United States, residing at Milwaukee, in the county of Clackamas and State of Oregon, have invented certain new and useful Improvements in Marking Devices, of which the following is a specification.

This invention relates to marking devices and it consists in the novel features hereinafter described and claimed.

An object of the invention is to provide a device of the character stated in the form of a frame which is of simple and durable structure and having its parts so arranged and connected with each other that they may be readily adjusted so that arms which are adjustably mounted on the frame may be properly positioned to guide a punch for making the punch marks upon pieces of metal, wood or other material preparatory to drilling the same to form bolt or rivet openings.

The frame consists of adjustable side members and the arms are slotted longitudinally to receive bolts whereby the arms are secured at adjusted positions upon the side members of the frame. The side members are made up of spaced strips and the said bolts pass through the spaces between the strips. The arms are provided at their outer ends with heads which have openings through which the punch tool may be passed when the punch marks are made in the material.

In the accompanying drawing;

Figure 1, is a plan view of the marking device showing the same in position upon a piece of material.

Figure 2 is a transverse sectional view of the same cut on the line 2—2 of Figure 1.

Figure 3 is a fragmentary plan view on an enlarged scale of parts of the marking device.

Figure 4 is an enlarged plan view of arms used upon the marking device.

As illustrated in the accompanying drawing the marking device consists of side members which are each composed of spaced parallel strips 2 connected together at a point between their ends by a cross bar 3.

The marking device also includes side members each composed of parallel spaced strips 7 connected together at points between their ends by cross bars 9. Bolts 12 pass through the spaces between the bars or strips 2 and the spaces between the strips 7 and are provided with wing nuts which when tightened serve as means for securing or clamping the side members in position with relation to each other.

Arms 14 are provided at their outer ends with heads 15 disposed at an angle to the arms, said heads being provided with openings 16. The said arms are provided at their inner ends with longitudinally disposed slots 17. Bolts 18 pass through the slots 17 and also through the spaces between the strips 2 or between those of strips 7 and serve as means for securing the arms in position upon the side members of the marking device. As shown in the drawings some of the arms are made to serve as locating arms and are employed to hold the device. These locating arms have their heads occupying a different plane than the heads of the marking arms and in Fig. 1, I have shown the device as secured over the opening of the workpiece 19. As many arms 14 may be used or employed as desired or required and when the arms are fixed the marking device is laid in proper position upon a piece of material and a punch is passed through the openings 16 and when struck with a hammer will make punch marks in the material which will indicate the points at which holes are to be bored in the material for the reception of bolts or rivets. Any appropriate means may be employed for properly locating and securing this device on the work to be marked, and one means is illustrated in Figure 1, where the work 19 has an opening 19^a therein. In this instance, certain of the arms 14 are withdrawn from the marking position, that is, from the upper surfaces of the strips 2 and 7, and are placed under these strips so that the portions 15 thereon fit snugly against the inner periphery of the aperture or opening 19^a. This prevents the device from shifting its position on the work 19, while the arms 14 which are on the upper surfaces of the strips 2 and 7 extend over the margin of the aperture 19^a and hold their openings 16 in any desired position, according to where the upper surface of the work is to be marked. Obviously, as illustrated in Figures 4 and 5, each bolt 18 may engage and hold a number of the arms 14, and moreover, a greater or less number of the bolts 18 may be simultaneously engaged with the

strips 2 and 7. After the arms are set in position the marking device may be used upon any number of different pieces of material and hence the punch marks may be located at the same and corresponding points upon all of the pieces of material.

This marking device may be employed in various ways in connection with the workpiece, the object being to locate and mark the points at which bolt and rivet holes are to be drilled in the workpiece. It will be evident that after the locating and marking arms have been properly adjusted and secured in adjusted position, the marking device may be employed in connection with any number of duplicate workpieces without readjustment, thereby saving much time and labor.

The device may be used to advantage in marking material to be used in the building of ships, bridge construction, boiler construction, car building and other structures manufactured or erected.

Having described the invention what is claimed is:

A marking device comprising side members each composed of parallel spaced strips connected together at points between their ends by cross bars, bolts adjustable along the spaces between the said strips, certain of said side members being positioned at right-angles to and engaged across the remaining side members, said bolts extending through the said side members at points of crossing thereof, independently adjustable locating and marking arms for each side member, said arms being slotted longitudinally and having right-angled perforated outer ends, and supporting screws and clamp nuts for said arms, said screws being adjustable along the spaces of said side members, said arms being adjustable angularly and radially on said screws.

In testimony whereof I affix my signature.

MARTIN E. HAYMAN.