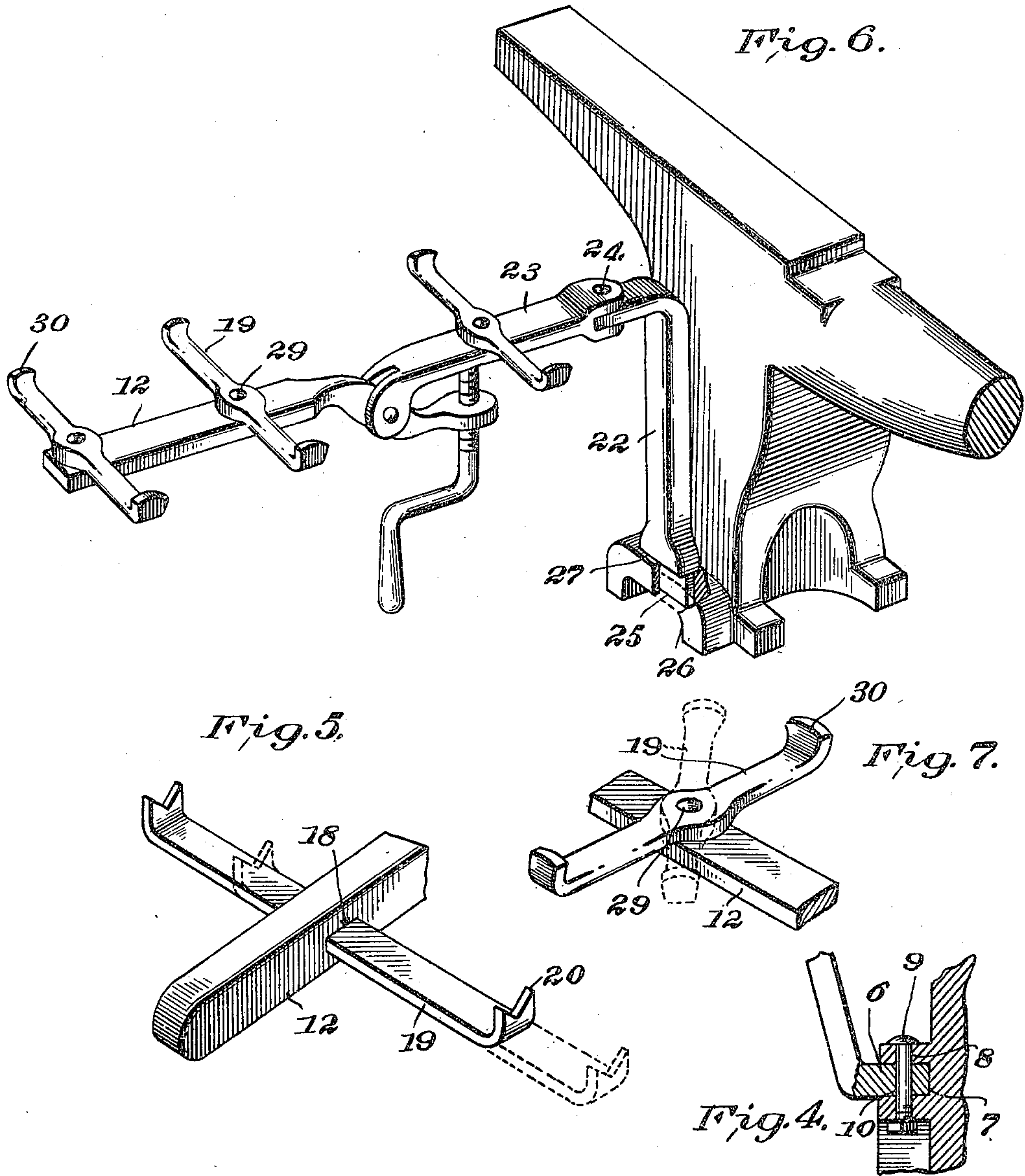


E. SPREEN.
ATTACHMENT FOR ANVILS.
APPLICATION FILED OCT. 19, 1909.

962,478.

Patented June 28, 1910.

2 SHEETS—SHEET 2.



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2 SHEETS—SHEET 1.

Fig. 1.

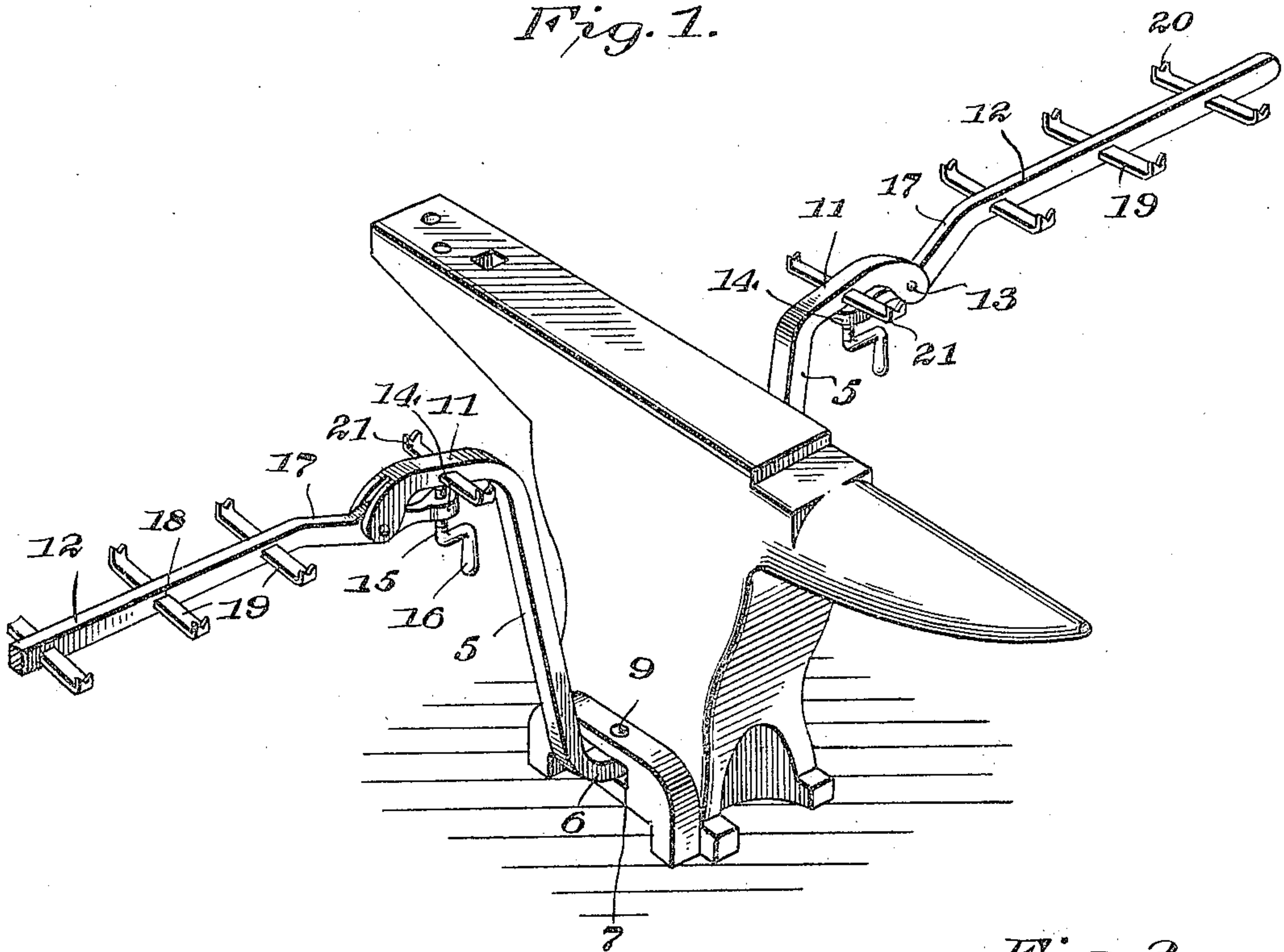


Fig. 2.

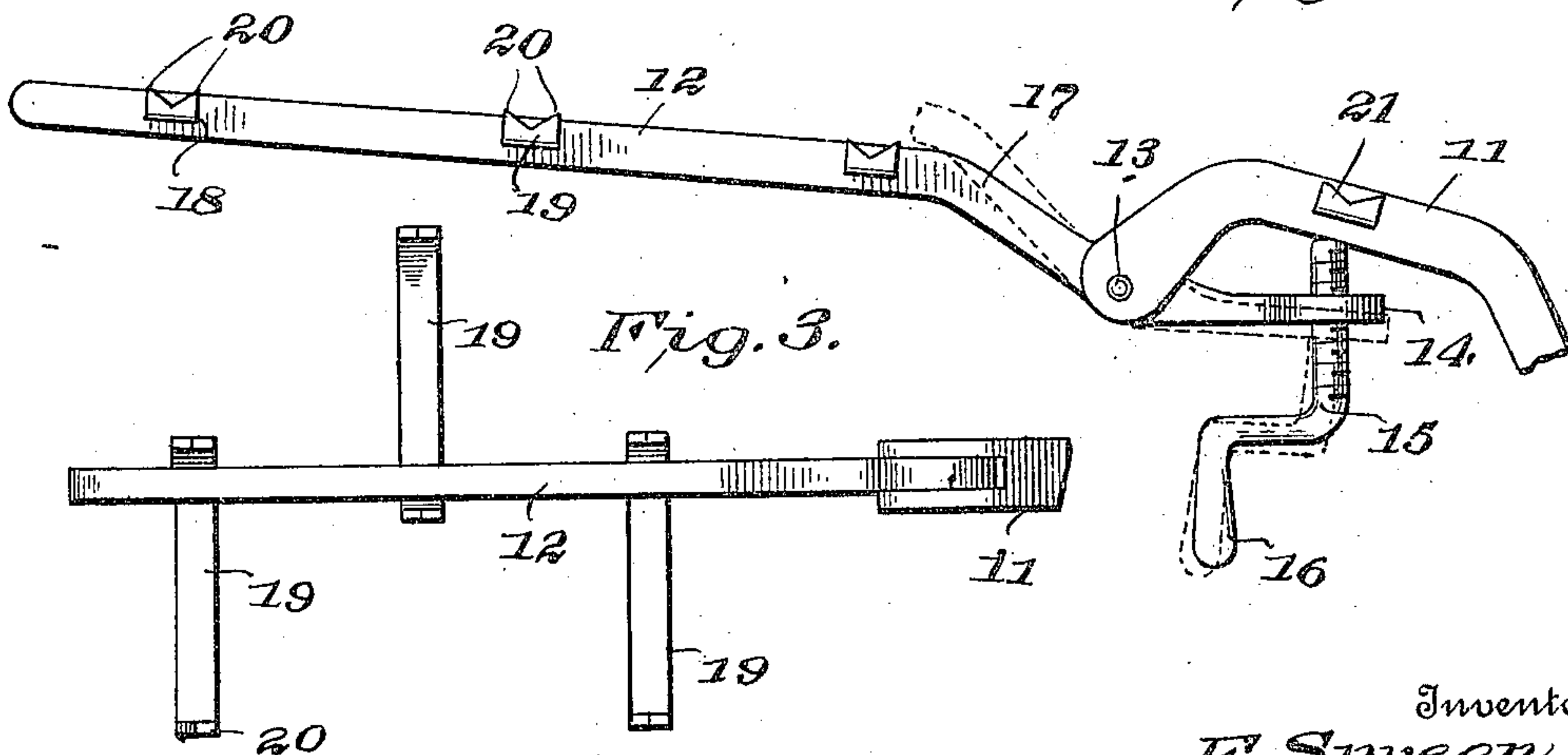
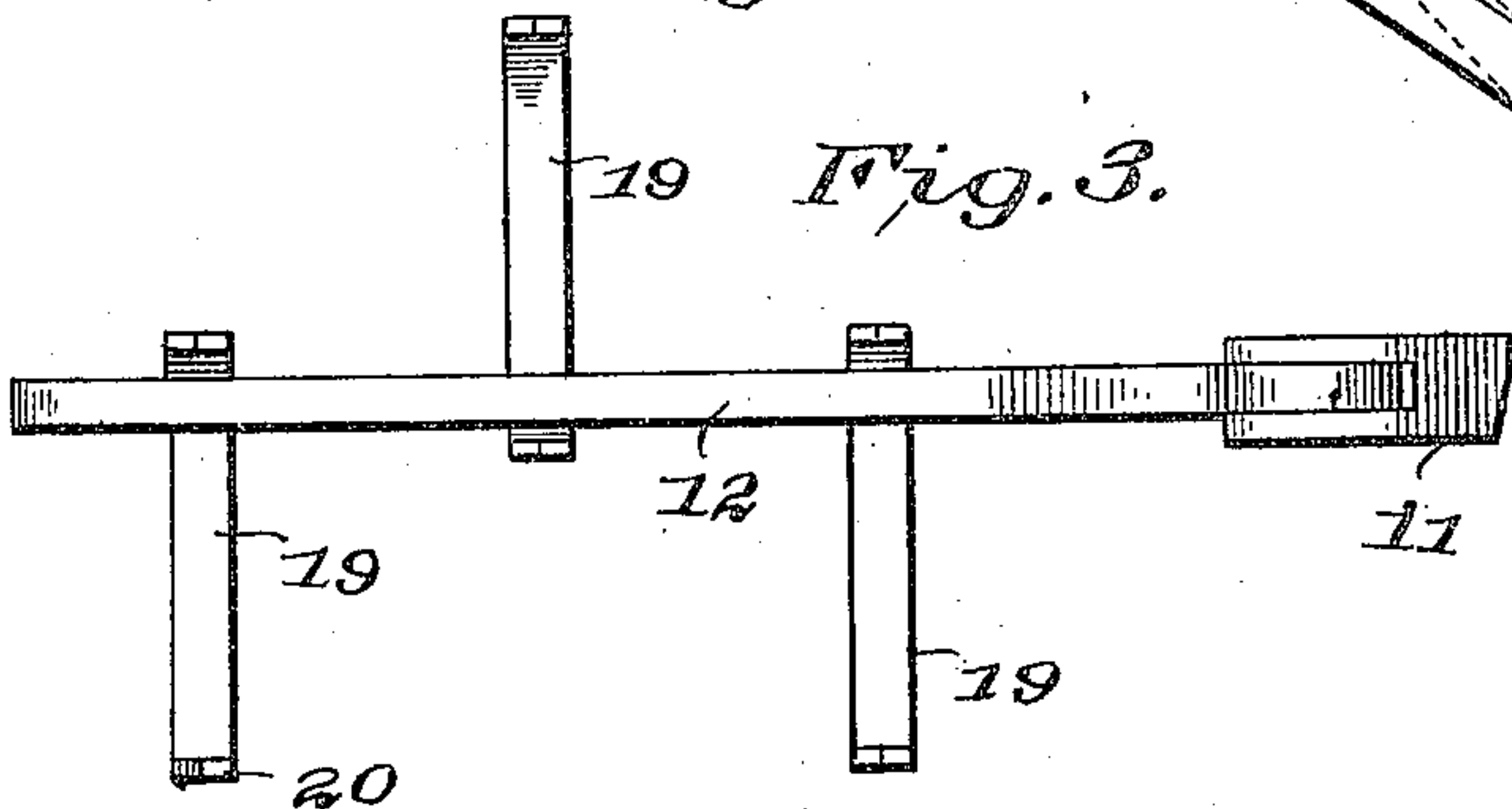


Fig. 3.



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UNITED STATES PATENT OFFICE.

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ATTACHMENT FOR ANVILS.

962,478.

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Application filed October 19, 1909. Serial No. 523,379.

To all whom it may concern:

Be it known that I, ERNEST SPREEN, citizen of the United States, residing at Minocqua, in the county of Oneida and State of Wisconsin, have invented certain new and useful Improvements in Attachments for Anvils, of which the following is a specification.

This invention relates to anvils and more particularly to an attachment for supporting heavy bars or sections of metal in position on an anvil when welding the same.

The object of the invention is to provide an anvil having supporting arms extending laterally on opposite sides thereof and adapted to support the outer ends of metal bars, while the inner ends thereof are being welded or otherwise united.

A further object is to provide means for adjusting the supporting arms to different angular positions with respect to the anvil, and further to provide means carried by said arms for supporting work of irregular shape.

A still further object of the invention is generally to improve this class of devices so as to increase their utility, durability and efficiency.

Further objects and advantages will appear in the following description, it being understood that various changes in form, proportions and minor details of construction may be resorted to within the scope of the appended claims.

For a full understanding of the invention and the merits thereof and also to acquire a knowledge of the details of construction and the means for effecting the result, reference is to be had to the following description and accompanying drawings, in which:

Figure 1 is a perspective view of an anvil provided with supporting arms constructed in accordance with my invention; Fig. 2 is a side elevation of one of the supporting arms and the adjacent portion of the bracket detached; Fig. 3 is a top plan view showing the manner of adjusting the work supporting fingers to accommodate work of irregular shape; Fig. 4 is a detail vertical sectional view showing the manner of pivoting the arm supporting bracket to the base of the anvil; Fig. 5 is an enlarged detail perspective showing the manner of adjusting the work supporting fingers; Fig. 6 is a perspective view illustrating a modified form of the invention; Fig. 7 is a detail perspective

view of one of the work engaging fingers shown in Fig. 6.

The attachment comprises a pair of brackets 5, each having its lower end bent laterally to form an angularly disposed lip 6 adapted to enter a socket 7 formed in the adjacent side of the anvil at the base thereof, there being vertically disposed openings 8 intersecting the sockets 7 to permit the passage of pivot pins or bolts 9, the latter being extended through perforations 10 in the lip 6 so as to form a pivotal connection between the brackets and the base of said anvil, as shown.

The upper end of each bracket 5 is bent laterally to produce an overhanging extension 11 having its free end bifurcated and pivotally connected with the adjacent end of a supporting arm 12. The inner end of each arm 12 is extended longitudinally beyond the adjacent pivot 13 and provided with a flat circular enlargement 14 having a threaded opening formed therein for the reception of an adjusting screw 15, the latter being provided with a terminal crank 16 so that by rotating the crank, the threaded end of the screw 15 will bear against the overhanging portion 11 of the bracket and thus raise or lower the free end of the supporting arm 12 so as to support said arm at different angular positions with respect to the anvil. Each arm 12 is preferably formed with an offset portion 17 and a series of transverse slots 18 in which are slidably mounted transversely disposed supporting bars or fingers 19. The opposite ends of the fingers 19 are bent upwardly and provided with V-shaped recesses to form upstanding spurs 20 adapted to engage the work and prevent accidental displacement of the same during the welding operation. The overhanging extension 11 of each bracket is also preferably formed with a transverse slot in which is slidably mounted a supporting arm or finger 21, similar in construction to the fingers 19. It will here be noted that when the supporting fingers are arranged in alignment with each other, said fingers may be used for supporting relatively narrow flat bars and when the fingers are disposed in staggered relation, that is to say, with the spurs 20 of some of the fingers bearing against one side of the arms and with the spurs of other of said fingers bearing against the opposite side of the arm, the device may

be used for supporting relatively wide bars or work of irregular shape. Thus it will be seen that by reason of the pivotal connection of the bracket with the base of the anvil, said bracket may be adjusted laterally with respect to the anvil, and by reason of the screws 15, the inner ends of the arms 12 may be adjusted vertically so as to support the inner ends of the bars to be united at an angle or inclination with respect to the surface of the anvil, thereby to facilitate the welding operation. By removing the pivot pins 9, the brackets and their associated parts may be readily detached from the anvil and the latter used in the ordinary manner.

In Figs. 6 and 7 of the drawings, there is illustrated a modified form of the invention, in which the supporting bracket is formed in two sections 22 and 23 pivotally connected at 24, the bracket section 22 being provided with a depending lip or head 25 adapted to enter a vertical slot 26 formed in the base of the anvil, said lip or head defining a transverse shoulder 27 arranged to bear against the anvil for the purpose of limiting the downward movement of said head.

In the modified form of the invention, above referred to, the supporting arms or fingers 28 are pivotally mounted at 29 on the supporting arms, while the terminal stops 30 thereof, instead of being provided with spurs, are made solid, the construction and operation of the device being otherwise similar to that shown in Fig. 1 of the drawings.

The device shown in Fig. 6 is principally designed for use in welding shaft sections or other metal bodies although the same may be used with equally good results for supporting relatively flat bars when welding or otherwise uniting the same.

Having thus described the invention, what is claimed as new is:

1. The combination with an anvil, of an arm connected with the anvil, and a plurality of work supporting devices slidably mounted on the arm and adjustable transversely of said arm to accommodate either straight work or work of irregular shape.

2. The combination with an anvil, of a bracket connected with the base of the anvil, an arm pivotally connected with the bracket, work engaging members loosely mounted on the arm, and means carried by the pivoted end of the arm and engaging the bracket for adjusting the free end of said arm to different angular positions with respect to the anvil.

3. The combination with an anvil, of a bracket detachably secured to the anvil, an arm pivotally connected with the bracket and having an opening formed in the pivoted end thereof, work engaging members

carried by the arm, and an adjusting screw threaded in the opening in said arm and bearing against the bracket for adjusting the arm to different angular positions with respect to the anvil.

4. The combination with an anvil having oppositely disposed sockets formed therein, brackets seated in said sockets, supporting arms pivotally connected with the brackets and provided at their pivoted ends with threaded openings, work engaging members extending transversely of the arms, and adjusting screws threaded in the openings in said arms and bearing against the brackets for supporting the arms in different angular positions with respect to the anvil.

5. The combination with an anvil having oppositely disposed sockets formed therein and intersected by vertical openings, brackets having perforated lips extending in the sockets, pivot pins passing through the vertical openings in the anvil and lips of the adjacent brackets, supporting arms pivotally connected with the brackets and provided with a series of spaced transverse openings, work supporting fingers slidably mounted in said openings, and means carried by the pivoted ends of the arms and bearing against the brackets for adjusting said arms to different angular positions with respect to the anvil.

6. The combination with an anvil, of a bracket detachably secured to the anvil, an arm pivotally connected with the bracket and having a series of transverse openings formed therein, work supporting fingers slidably mounted in the openings and provided with terminal upstanding spurs, and means carried by the pivoted end of the arm and bearing against the bracket for adjusting said arm to different angular positions with respect to the anvil.

7. The combination with an anvil, of a bracket detachably secured to the anvil, an arm pivotally connected with the bracket, a plurality of work supporting devices slidably mounted in the arm and adjustable longitudinally to accommodate either straight work or work of irregular shape, and means carried by the pivoted end of the arm for engagement with the bracket for supporting said arm in different angular positions with respect to the anvil.

8. The combination with an anvil, of a bracket detachably secured to the anvil and provided with an overhanging extension having a transverse slot formed therein, an arm pivotally mounted on the extension of the bracket and also provided with transverse slots, work engaging fingers slidably mounted in the slots of the arm and extension respectively, and an adjusting screw carried by the pivoted end of the arm and bearing against the lower face of the ex-

tension of the bracket for adjusting said arm to different angular positions with respect to the anvil.

5 9. The combination with an anvil, of a bracket detachably secured to the anvil and having its upper portion provided with an overhanging extension, the end of which is bifurcated, an arm pivotally mounted in the bifurcated end of the bracket extension and
10 having its intermediate portion offset and its free end provided with a series of transverse slots, work engaging fingers slidably mounted in said slots and provided with oppositely disposed upstanding spurs, and an
15 adjusting screw threaded in the pivoted end of the arm and bearing against the extension of the bracket for supporting the arm in different positions of angular adjustment with respect to the anvil.

20 10. The combination with an anvil, of a bracket connected with the anvil, an arm

pivotally connected with the bracket, work engaging members loosely mounted on the arm and having their opposite ends extended laterally in a horizontal plane beyond the adjacent longitudinal edges of said arm, and
25 means for adjusting the free end of said arm to different angular positions with respect to the anvil.

11. The combination with an anvil, of an
30 arm supported by the anvil and free to move in both a vertical and horizontal plane, a work supporting member carried by and adjustable transversely of the arm, and
35 means for supporting the arm in different positions of adjustment.

In testimony whereof I affix my signature in presence of two witnesses.

ERNEST SPREEN. [L. S.]

Witnesses:

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