J. SCHINNELLER & L. FITZPATRICK.

DIES FOR WELDING CHAIN LINKS.

No. 188,545. Patented March 20, 1877.

Fig. 1.

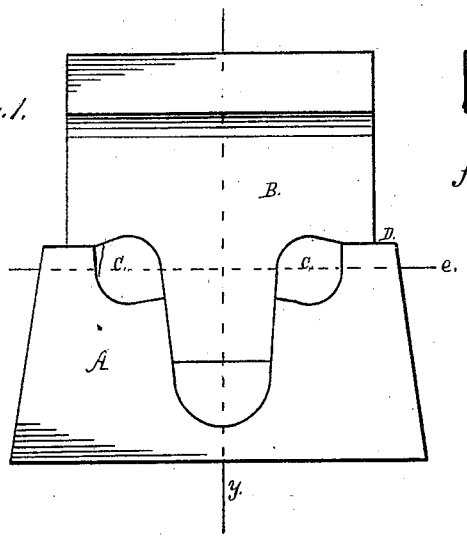


Fig. 2.

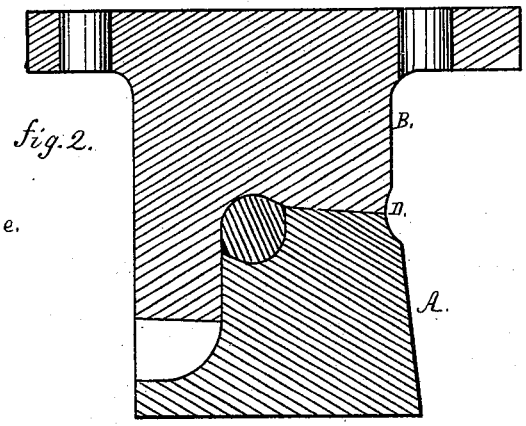


Fig. 3.

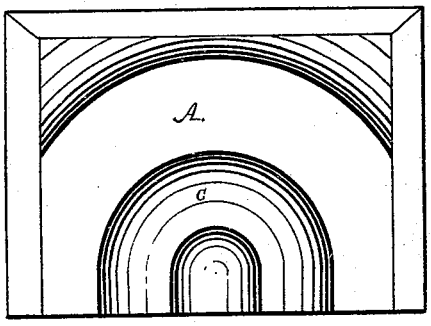
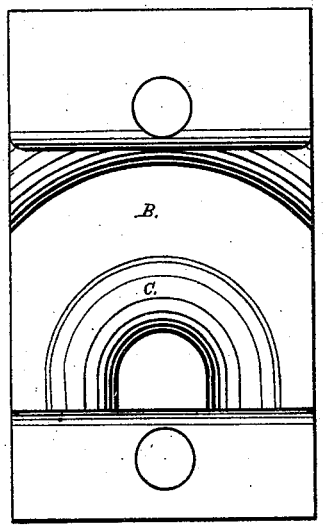


Fig. 4.



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UNITED STATES PATENT OFFICE.

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IMPROVEMENT IN DIES FOR WELDING CHAIN-LINKS.

Specification forming part of Letters Patent No. **188,545**, dated March 20, 1877; application filed October 18, 1875.

To all whom it may concern:

Be it known that we, JACOB SCHINNELLER, of Pittsburg, in the county of Allegheny and State of Pennsylvania, and LUKE FITZPATRICK, of Benwood, in the county of Marshall and State of West Virginia, have invented a new and useful Improvement in Dies for Link-Welding Machines; and we do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Our invention relates to an improvement in dies for link-welding machines; and consists in so constructing the cavity in the dies with relation to the line of parting that the fin formed at the line of said parting shall be worked into the body of the link by turning it (the link) so as to bring the fin in contact with the walls of the cavity of the dies distant from the line of parting.

To enable others skilled in the art to make and use our invention, we will proceed to describe its construction and operation.

In the accompanying drawings, which form part of our specification, Figure 1 is an end view of the dies when closed together. Fig. 2 is a vertical section of the same at line *y* of Fig. 1, representing a section of a link in the cavities of the dies. Fig. 3 is a top view or plan of the lower or female die. Fig. 4 is a face view of the upper or male die.

In the drawings, A represents the female die, and B the male die, the cavity C being greater in depth in the female die than in the male die, so that when they are placed together, as represented in Fig. 1, the line of parting at D will be distant from the center or axis of the cavity, as indicated by the line *e*. In other respects the dies are of ordinary construction, and are operated in the usual manner, excepting that the link is turned in the die, so that the fin which is formed at the line, D, of parting will be brought below said line of parting, whereby such fin will be brought in contact with the solid portion of the female die, and be forced into the body of the link, thereby welding a link free from fins or ragged projections; but the skilled mechanic will readily understand the line, D, of parting of the dies may be arranged at different points and the same result accomplished, the gist of our invention being so parting the dies that the fin formed at the line of parting may be worked into the body of the link by turning it in the dies, as herein described.

Having thus described our improvement, what we claim as of our invention is—

The improved die for welding chain-links, consisting of the parts A B, inclosing curved space C, the lines of parting of the parts outside and inside of the curved space being distant from, and respectively on opposite sides of, a plane passing through the center of said space, whereby the fin is worked into the body of the link by turning it in said die, substantially as herein described.

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