

F. EBERHARD.
Smith's Tongs.

No. 211,464.

Patented Jan. 21, 1879.

Fig. 1.

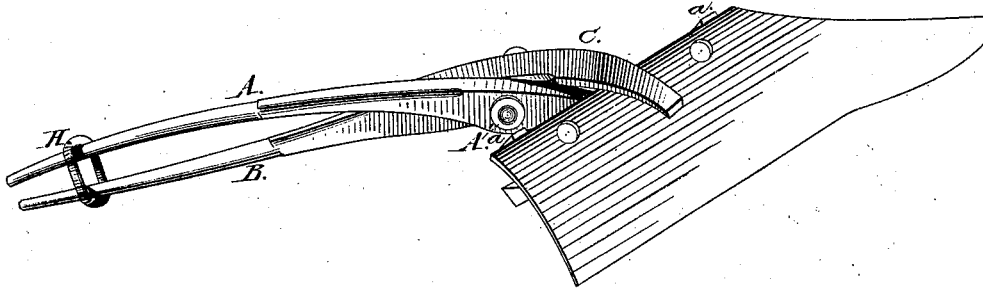


Fig. 2.

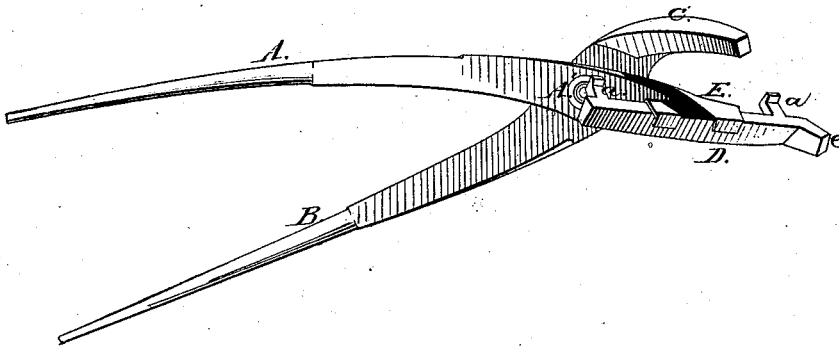
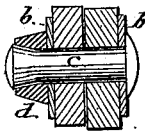


Fig. 3.



Fig. 4.



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UNITED STATES PATENT OFFICE.

FRIEDRICH EBERHARD, OF WHITESVILLE, MISSOURI.

IMPROVEMENT IN SMITHS' TONGS.

Specification forming part of Letters Patent No. **211,464**, dated January 21, 1879; application filed August 5, 1878.

To all whom it may concern:

Be it known that I, FRIEDRICH EBERHARD, of Whitesville, in the county of Andrew and State of Missouri, have invented a new and useful Improvement in a Tongs for Holding a Plowshare while it is being Sharpened, of which the following is a specification:

My invention is an improvement in blacksmiths' tongs adapted to the handling of plowshares during the operation of sharpening.

It consists of a pair of tongs having jaws so formed as to be capable of grasping a plowshare at its joint-edge, and forming a long true bearing and a firm clamp to prevent the warping of said share, while it enables the operator, by the peculiar form of its jaws, to work with ease and facility.

It consists, secondly, in providing a shield, to be placed on the face of the long jaw of the tongs as a protection to said jaw against wear when in use, and form a snug bearing to the share.

In my drawings, Figure 1 is a perspective view of the tongs with the jaws holding a share to be sharpened. Fig. 2 is a perspective view of the tongs in position to be used. Fig. 3 is a top view of the same. Fig. 4 is a section, showing the construction of the joint.

Similar reference-letters indicate like parts in all of the figures.

Referring to drawings, A and B are the arms of the tongs, of the ordinary form, enlarged at their meeting-point to form a joint, A', and extending beyond, after crossing, terminate in the upper and lower jaws, C D. The lower jaw, D, is extended laterally and obliquely to a line in continuation of the direction of the arm A, to form a long bearing or support for a plowshare, and terminating at one end with a curvature, *e*, provided to bear against the inner surface of said plowshare and its flange. The jaw D is also provided with hooks *a a*, for the joint-edge of the share, when grasped, to abut against.

On the inner or face edge of the jaw D is an adjustable plate or guard, E, dovetailed to

said jaw, to serve as a protection to its face against wear, and also form a snug bearing when the joint-edge of the share is curved.

The upper jaw, C, is flattened to form a broad bearing, to clamp and hold firmly the share while it is being operated upon.

The joint A' is formed with washers *b b*, placed on the outsides of the enlarged arms, and a rivet, *c*, provided with a head, which rivet, being placed in a hole in said arms, has its end beaten down against a collar, *d*, which bears against one of said washers. By this construction the wear in the joint is rather against the washers, which have broad bearings, than the rivet, as is usually the case.

In using my tongs, I grasp the plowshare at its joint-edge in such a manner as that the jaw D will form a long bearing for the under side of the share and the curved end *e* come snugly against the flange of the share. The upper jaw, C, is now brought down on the upper surface of the share and the arms A B clamped by the link H.

It will be readily understood that by the use of my tongs, owing to their peculiar construction, the operator, in sharpening plowshares, may work with ease and facility, keeping his holding arm in an easy position, and scarcely ever finding it necessary to lift his fore-arm above a horizontal plane in line with the anvil.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The tongs described, having its lower jaw extended laterally and obliquely to the line of its arm, to form a bearing to the joint-edge of a plowshare, said jaw being provided with hooks, in combination with the upper curved jaw, as and for the purpose set forth.

2. The guard-plate E, in combination with the lower jaw of the tongs, as and for the purpose set forth.

FRIEDRICH EBERHARD.

Witnesses:

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