E. WANSBROUGH.

Machine for Shaping Agricultural Implements.

No. 168,689.

Patented Oct. 11, 1875.

Fig. 1.

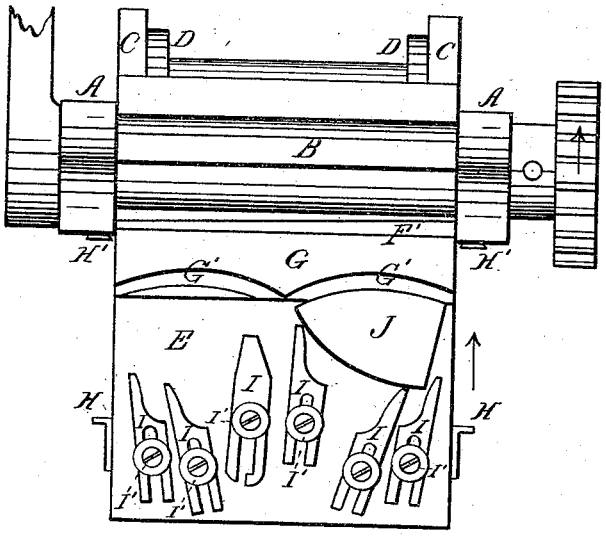
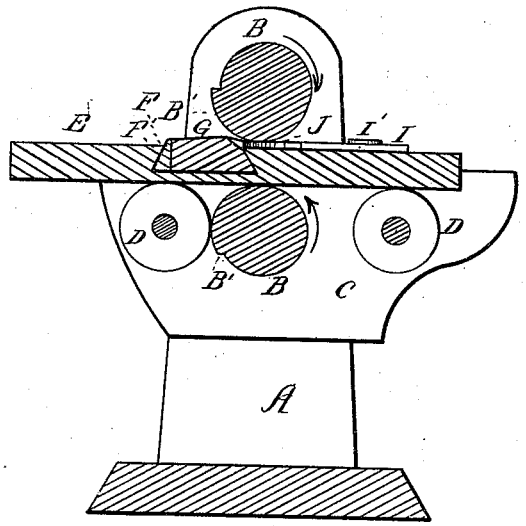


Fig. 2.



WITNESSES

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EDMUND WANSBROUGH, OF PITTSBURG, PENNSYLVANIA, ASSIGNOR TO ALEXANDER SPEER & SONS, OF SAME PLACE.

IMPROVEMENT IN MACHINES FOR SHAPING AGRICULTURAL IMPLEMENTS.

Specification forming part of Letters Patent No. **168,689**, dated October 11, 1875; application filed September 15, 1875.

To all whom it may concern:

Be it known that I, EDMUND WANSBROUGH, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Metal-Working Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to metal-working machines, which consist of a pair of eccentric or cam rollers, between which is a sliding table. Across the face of this table is inserted a die or former, and secured in certain positions on the table are adjustable gages or holders.

The object of my invention is to construct a simple machine for beveling or shaping the edges of agricultural implements, steels, &c.

In the drawings, Figure 1 is a plan view of the machine, showing the blade of an instrument in position on the table and about to be run under the rolls. Fig. 2 is a vertical transverse section, showing the table pushed under the rolls, which are down upon the blade.

A is a support of any suitable construction, within which is mounted two rollers, B B, geared together, and constructed with cam or eccentric portions B′, which face each other. Mounted in a frame, C, secured to the support A, are friction-rollers D, upon which slides a table or platform, E, which passes between the rolls B B. Transversely across the face of this table E is cut a groove or channel, F, within which is secured by wedge F′, or otherwise, a die or former, G. This die or former has curved or any other desired shaped and formed inclined or beveled mouths G′.

These dies may be formed with their cut-away portions or mouths in any desired shape, style, inclination, size, &c., to suit the incline, bevel, or edge desired on the steel to be operated upon. H H′ are stops to limit the movement of the table. Secured in different positions upon the table E are a number of adjustable gages or holding devices I secured by set-screws I′. J is the blade or steel about to be operated upon.

The operation of the machine is as follows: The parts being in the position as represented in Fig. 1, with the table drawn partially out from under the rolls, and the rolls revolving in the direction of the arrow, when the narrow part of the rolls come together, or when the rolls are open the table with the steel placed and secured in position upon it, as shown, is shoved forward under the rolls until the stops H H′ come together. The cam of the rolls now gripe—one the under part of the table, and the other the steel—and press the edge of the steel into the die, thus beveling or forming it. At the same time that the rolls press or roll out the steel they force the table back toward the operator ready to be again inserted under the rolls for another pressure, if necessary. When one side or edge of the steel is formed the steel is then placed in the other side of the die, and a similar operation performed, which forms or bevels each side alike.

The gages may be adjusted to any desired position to suit different configurations, sizes, &c., of different steels.

The rolls may be driven by any motive power desired, and are geared together so as to run in unison. Thus it will be seen that a simple and effective machine is secured for forming or beveling the edges of agricultural and other steels.

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

1. In combination with the eccentric-formed rolls B B′ B B′, the table or platform E sliding between said rolls and adapted to receive pressure therefrom at top and bottom, as and for the purposes described.

2. In combination with the rolls B B′ B B′ and sliding platform or table E, the die G, formed with curved inclined or beveled mouths G′, secured in the face of the table, as and for the purposes described.

3. In combination with the rolls B B′ B B′ and table E, sliding between said rolls and receiving pressure therefrom the stops H H′

for limiting the movement of said table, as described.

4. In combination with the sliding table E and die or former G G′, the adjustable removable gages I and set-screws I′ for holding the steel around its edges in position beneath the rolls while being pressed, as described.

5. The combination of eccentric rolls B B′ B B′, sliding table E, die G G′, and gages I I′, as and for the purposes described.

6. The improved machine for beveling or forming the edges of agricultural steels, consisting of eccentric rolls B B′ B B′, table E, die G G′, stops H H′, and gages I I′, all constructed, arranged, and adapted to operate as and for the purposes described.

In testimony that I claim the foregoing I have hereunto set my hand this 13th day of September, 1875.

EDMUND WANSBROUGH.

Witnesses:
W. A. HERRON,
JOHN S. SPEER.