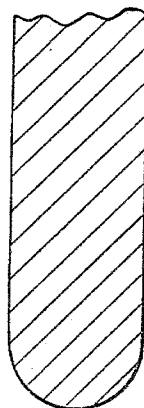
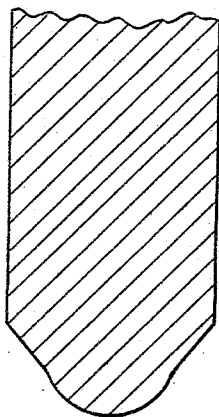
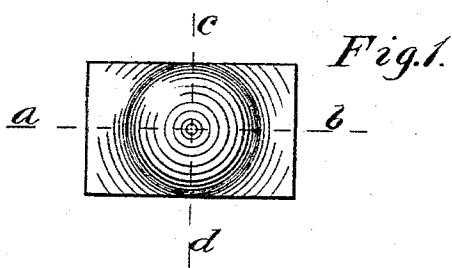


(No Model.)

W. A. SWEET.
BILLET FOR ROLLING WIRE.

No. 321,658.

Patented July 7, 1885.



Witnesses
F. G. Tallman
J. H. Remondy

Inventor
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UNITED STATES PATENT OFFICE.

WILLIAM A. SWEET, OF SYRACUSE, NEW YORK.

BILLET FOR ROLLING WIRE.

SPECIFICATION forming part of Letters Patent No. 321,658, dated July 7, 1885.

Application filed June 12, 1884. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM A. SWEET, of the city of Syracuse, Onondaga county, State of New York, have invented certain new and useful Improvements in Preparing the Ends of Billets for Wire-Rolling, of which the following is a specification.

My invention relates to so shaping the ends of billets intended to be run through a series of rollers to reduce them to a small diameter to prevent their being led to either side, doubled or split, during the process of reduction, a difficulty that has heretofore been found very objectionable, and that has been greatly increased by the high speed employed by me in rolling wire. I attain this object by the device herein stated, and shown in the drawings illustrated in Figures 1, 2, and 3.

Fig. 1 is an end projection of a billet prepared for rolling; Fig. 2, a section on line *a b*; Fig. 3, a section on line *c d*.

The billet is of the usual oblong, square, or rectangular prismatic form; but instead of the end being cut off, as is usual, with shears, so that one or more of its corners slightly projects, by which the billet when leaving the rolls is caused to incline to one side in its passage through them, or causing the long corner

to overlap the shorter one, so that as the rod is reduced to a small size it becomes split more or less from the end, I form the ends of the billet in a semi-spherical, pyramidal, or conical shape, truncated or otherwise; but preferably semi-spherical, substantially as shown in the drawings. I have found that a billet thus formed leaves the rolls true and enters the guides practically perfect, and is guided through the repeaters without difficulty at any velocity I choose to roll it at, running perfectly at the highest velocity I have attained, and rolling the rod centrally and truly until reduced to the smallest diameter, the end retaining its convex form throughout, an effect, so far as I am aware, never before attained.

Having thus described my improvement, I claim—

The end or ends of a billet for rolling into small rods or wire formed of a convex shape, substantially as and for the purposes specified.

WM. A. SWEET.

Witnesses:

MATT CUNNINGHAM,
HENRY BABCOCK.