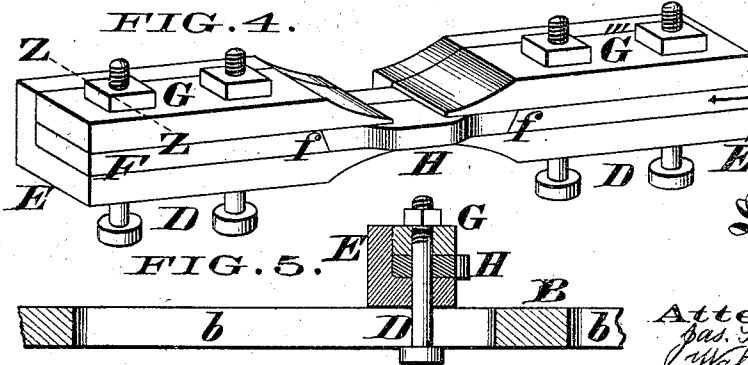
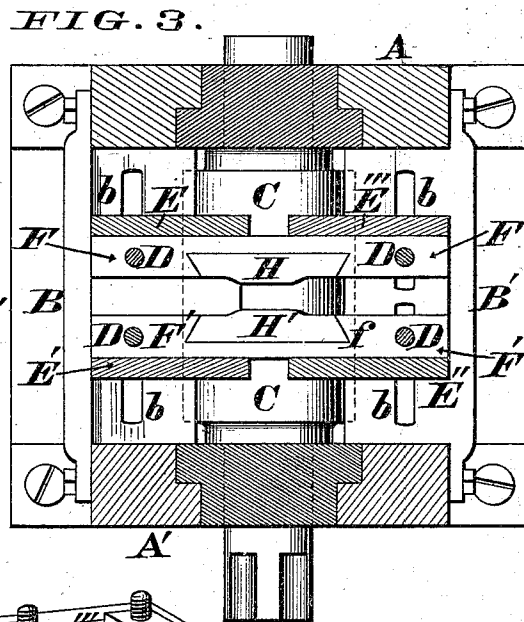
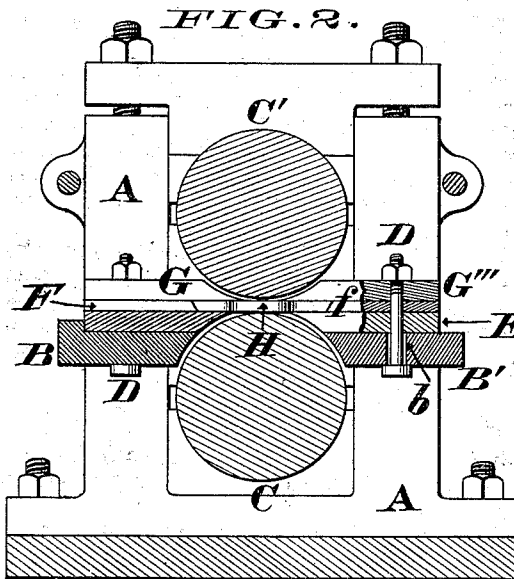
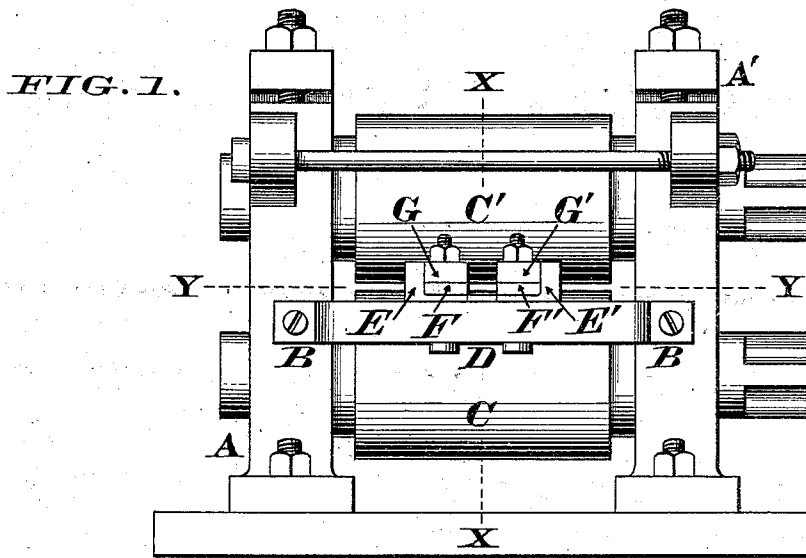


D. HALL.

Mills for Rolling Rectangular Bars of Iron.

No. 147,836.

Patented Feb. 24, 1874.



Daniel Hall
By Knight Bros.
Att'ys.

Attest.
Jas. H. Bayman.
Walter Allen

UNITED STATES PATENT OFFICE.

DANIEL HALL, OF COVINGTON, KENTUCKY.

IMPROVEMENT IN MILLS FOR ROLLING RECTANGULAR BARS OF IRON.

Specification forming part of Letters Patent No. **147,836**, dated February 21, 1874; application filed October 13, 1873.

To all whom it may concern:

Be it known that I, DANIEL HALL, of Covington, Kenton county, Kentucky, have invented a new and useful Edge-Squaring Attachment for Rolls for Making Flat Bars, of which the following is a specification:

My invention consists in the provision of a pair of steel jaws or cheeks, so secured between the rolls as to press and square up the edges of the bar at the same instant that the rolls are giving the proper flat surfaces to the sides of the bar.

In the accompanying drawings, Figure 1 is a front elevation, showing my squaring device attached to a pair of rolls. Fig. 2 is a section on the line *x x*. Fig. 3 is a section on the line *y y*. Fig. 4 shows one of my squaring bars and blocks detached, and on a larger scale. Fig. 5 is a section on the line *z z*. Fig. 6 is a perspective view of one of my cheeks or bits detached.

A A' represent housing; *B B'*, bearing-plates, (feed and delivery plates;) and *C C'*, plain surface (cylindrical) rolls of customary construction. Each bearing-plate is slotted transversely, as at *b*, for bolts *D*, that fasten, at any desired distance from each other, and at any part of the plates, blocks *E E' E'' E'''*, bars *F F'*, and caps *G G' G'' G'''* of said blocks. The said

bars, in their preferred form, have dovetailed indentations *f* for cast-steel or chilled-iron bits or cheeks *H H'*, slightly swelled or convex on their opposing edges, and a little thinner than the bar to be worked.

The operation is as follows: The bars *F F'*, having been furnished with bits *H H'* of proper swell and thickness, and adjusted to the proper distance and desired part of the rolls, are secured by the bolts; and the bar to be worked, being fed in, is, at the instant of pressure upon its sides by the peripheries of the rolls, also pressed on its edges by the bits *H H'*, and thus squared.

It will be seen that if one part of the rolls becomes worn, the squaring-bits can be shifted to another part; or, should the bits themselves become worn or broken, they may be replaced by others. The bits and bars may, however, be welded together in one piece, if desired.

I claim as new and of my invention—

The edge-squaring attachment for bar-rolls, substantially as and for the purpose set forth.

In testimony of which invention I hereunto set my hand.

DANIEL HALL.

Attest:

GEO. H. KNIGHT,
S. B. SPEAR.