

GEORGE G. BURGESS.

Improvement in Machines for Upsetting Rods.

No. 127,146.

Patented May 28, 1872.

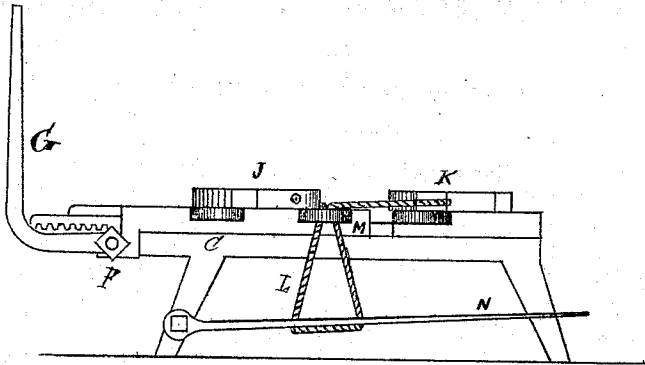


Fig 1

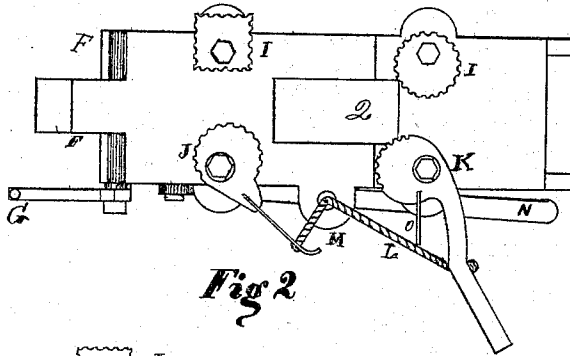
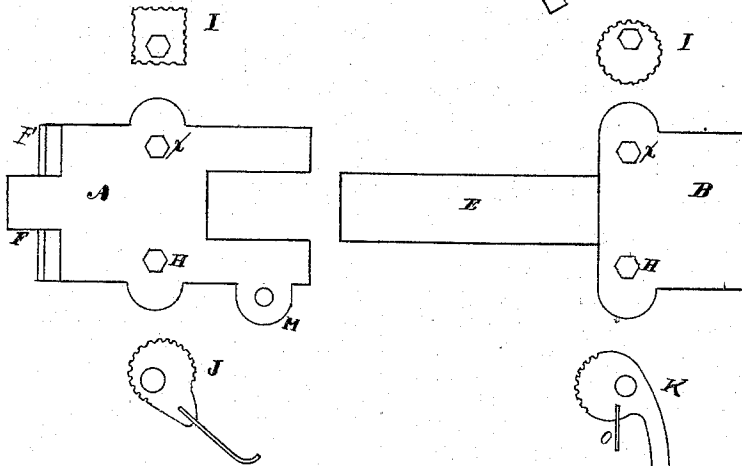


Fig 2



Figs

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H. V. Ziegler

Fig 4

INVENTOR

George J. Burgess

UNITED STATES PATENT OFFICE.

GEORGE G. BURGESS, OF RAWSONVILLE, OHIO.

IMPROVEMENT IN MACHINES FOR UPSETTING RODS.

Specification forming part of Letters Patent No. 127,146, dated May 28, 1872; antedated May 11, 1872.

I, GEORGE G. BURGESS, of Rawsonville, in the county of Lorain and State of Ohio, have invented certain Improvements in Machines for Upsetting Metal Bars or Rods, of which the following is a specification:

The nature of my improvement relates to the construction of a machine adapted to upsetting large or small bars or rods of metal in an easy and expeditious manner, as hereinafter more fully set forth, in which—

Figure 1 is a side elevation view of the machine ready for use, and in the detached plan views, like letters refer to like parts, as on the machine, Fig. 1. Fig. 2 is a plan view.

Parts A and B constitute the bed-plates. Plate A is rigidly secured to and on any suitable bench, C, and at one end of the same is an oblong slot, D, ordinarily about three inches wide and six long, and extends lengthwise through and under the plate, in shape and size to correspond with the tongue E on plate B, the tongue E extending centrally from the bottom of the plate B, and passing through the open slot D, and into and under the plate A to the other end of the same, on which is arranged journal-bearings F F, in which the lever-journal G turns, and connects with the under side of the end of the tongue E by means of gear-teeth on the lever-journal G and on the under side of the end of the tongue E, by which the plates A and B may be drawn together or extended apart, as may be desired. On the tops of the plates A and B, and about four inches from either outer end, and about five inches from each other on each plate, are arranged pins H X, which may be cast upon and form a part of the same; the said pins are usually made eight square to correspond with the holes in the square or round eccentric blocks I I, which may be used on pins X X or h h and in connection with the blocks I I; and on the opposite side of the plates A and B are arranged cam-levers J K, with round holes large enough to permit the said levers to fit on and around the pins on either side of the machine to correspond with the blocks I I. Thus, when a bar or rod requires to be upset the blocks I I are adjusted to the proper width—as between

them and the cam-levers J K, so that when the bar or rod is placed in a heated condition between cam-levers J K and blocks I I it may be firmly clamped and upset by means of the journal-lever G drawing the plates A and B together. L is a cord, one end of which is made fast to cam-lever J; the other end is then passed through the hole M, and then down through or around the foot-lever N and back through the hole M, and is then made fast to the cam-lever K. Thus, as the lever N is pressed with the foot the cord is made to act independently on the cam-levers J K to clamp the bar against the blocks I I. O is a steel strip made fast to the cam K in such manner as to permit the end of the lever J to pass between it and the lever K for the purpose of operating both levers J and K with or without the cord L and by one movement of the hand.

Concentrically between the plates A B is an aperture formed by the slot D, and over the tongue E, within said aperture, may be arranged a center block, Q, with plane concave sides, and may be used either side up, and may also be constructed and used with the sides in any other form desired.

The object of my improvement is to provide an upsetting-machine that may be readily adjusted to any size bar or rod within its largest capacity with equal facility, and so arranged as to be worked upon either side of the machine desired.

What I claim is—

1. The combination of the adjustable round or square blocks I I, which are provided with holes to correspond in shape and size with the pins H X and K X, which pins hold the blocks I I rigidly as adjusted, in combination with the plates A B and center plate Q, as and for the purpose set forth.

2. The arrangement and combination of the cord L with the cam-levers J K and foot-lever N, substantially in the manner and for the purpose set forth.

GEORGE G. BURGESS.

Witnesses:

A. D. SMITH,
C. A. FOWLER.