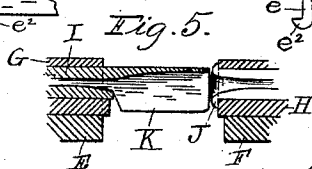
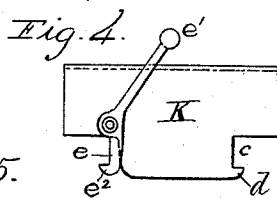
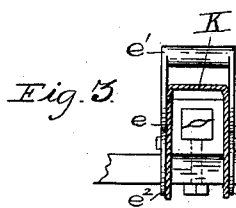
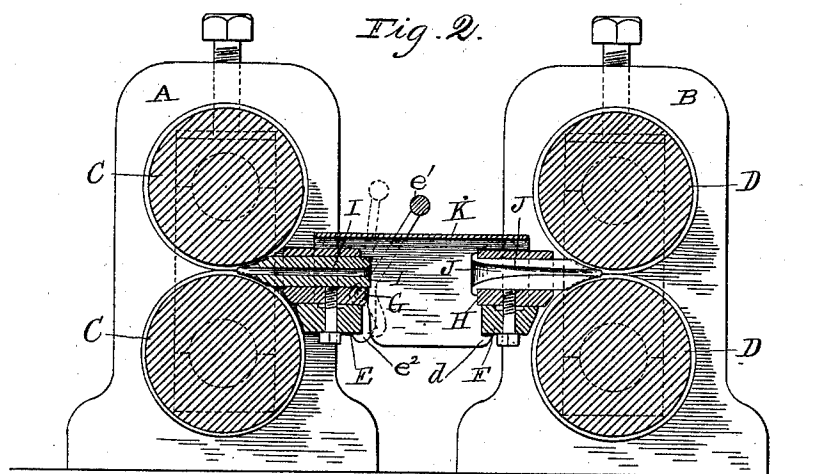
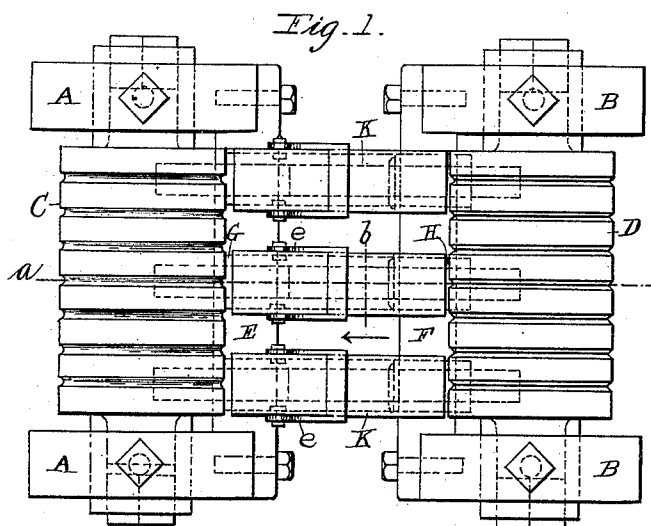


(No Model.)

G. JANSSON.
ROD ROLLING MILL.

No. 415,784.

Patented Nov. 26, 1889.



Witnesses;

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UNITED STATES PATENT OFFICE.

GUSTAF JANSSON, OF MUNKFORS, SWEDEN, ASSIGNOR OF ONE-HALF TO
CHARLES H. MORGAN, OF WORCESTER, MASSACHUSETTS.

ROD-ROLLING MILL.

SPECIFICATION forming part of Letters Patent No. 415,784, dated November 26, 1889.

Application filed August 30, 1889. Serial No. 322,465. (No model.)

To all whom it may concern:

Be it known that I, GUSTAF JANSSON, of Munkfors, in the county of Wermland, Sweden, have invented certain new and useful Improvements in Rod-Rolling Mills; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, forming a part of this specification, and in which—

Figure 1 represents a top or plan view of so much of a rod-rolling mill as is necessary to illustrate my improvements. Fig. 2 is a central vertical longitudinal section through the parts shown in Fig. 1, taken on line *a* of said figure. Fig. 3 is a transverse section taken on line *b*, Fig. 1, looking in the direction indicated by the arrow. Fig. 4 is a detached side view of my improved protecting-hood, hereinafter more fully described; and Fig. 5 is a modification in the construction thereof, also hereinafter more fully described.

My invention is designed more particularly for "continuous" rod-rolling mills, but is also applicable to other kinds of rolling-mills. The purpose thereof is to provide means whereby two or more rods may be treated at the same time and thus admit of an increased production. Said invention also serves to reduce the liability of injury to the workmen by confining the rods within proper limits in case of breakage in passing through from one set of guides to the next.

It consists of a hood or cover so constructed and arranged as to protect the wire upon the top and sides in its passage between the delivering and receiving guides of a rod-rolling mill, as will be hereinafter more fully set forth.

In order that others may better understand the nature and purpose of my said invention, I will now proceed to describe it more in detail.

In the drawings, A A and B B represent the housings for two pairs of reducing-rolls C C and D D.

E F are the guide-bars which support the guide-boxes G H, which in turn hold the delivering-guide I and receiving-guide J, respectively.

All of the above parts may be of ordinary well-known construction and arrangement, and therefore require no detailed description.

The part K represents my improved hood or cover, which fits over the tops and sides of the guide-boxes G H and rests at each side thereof on the guide-bars E F, said hood extending nearly up to the reducing-rolls at each end and over the whole space between each set of guides, so as to protect the rods in their passage between the delivering and receiving guides, as previously stated.

In practice I prefer the construction shown by the first four figures of the drawings—viz., of arranging the hood over the guide-boxes and supporting the same as specified; but as the same result may readily be accomplished in various other ways I do not limit myself thereto. An illustration of one other way is shown by Fig. 5. In this instance the same result is effected by forming the hood integral with the top delivery-guide, said guide being extended over the space between the two sets of guides to form the hood K. As will be apparent, the same result may thus be produced; but the construction is not as desirable in practice, as it does not permit of the easy removal of said hood when occasion requires such removal.

By the first-described construction and arrangement the hood is made so that it may be easily detached in the following manner: One end of the hood is provided at each side with a recessed portion *c* to form the hooks *d*, adapted to catch and hold upon the under edge of the guide-bar F, as is shown in Fig. 2, while to each side of its opposite end, outside of the hood, is pivoted a latch *e*, the two latches being extended up above the hood and connected by the transverse operating-handle *e'*, whereby the lower hooked ends *e* of the latches may be engaged and disengaged to and from the bottom edge of the guide-bar E. (Shown by full and dotted lines in Fig. 2.) As the handle portion extends considerably back of the hooked ends and pivots of said latches, it is obvious that when fitted in position the hood is held securely in place, and at the same time may be readily detached

when required by simply swinging the handle *e'* so as to disengage the hooked ends from the guide-bar, and lifting said hood so as to disengage its hooks *d d* from the guide-bar F in said lifting operation. By thus protecting the rods at the top and sides at the points mentioned in a rolling-mill it is also obvious that any desired number of rods may be treated at the same time with perfect safety to the workmen, as in case of the breaking and snarling of any one of the rods being treated the others are in no wise affected or retarded in their progress, as would be the case were such protecting-hoods not employed. By this provision the danger of injury to the workmen is not only greatly lessened, but the production largely increased by the treatment of several rods at the same time, as aforesaid.

20 Having now fully described my invention, what I claim therein as new, and desire to secure by Letters Patent, is—

1. In a rod-rolling mill, a hood or cover so constructed, arranged, and fastened in position as to protect the rods in passing from the delivering-guides to the receiving-guides, substantially as and for the purposes set forth.

2. In a rod-rolling mill, the combination of

the delivering-guides and their boxes and the receiving-guides and their boxes with a hood or cover so constructed, arranged, and fastened in position as to protect the rods upon the top and sides thereof in passing from the delivering-guides to the receiving-guides, substantially as and for the purposes set forth.

3. In a rod-rolling mill, the combination of the delivering-guides and their boxes, the receiving-guides and their boxes, and the guide-bars with a hood or cover so constructed, arranged, and fastened as to protect the rods upon the top and sides in passing from the delivering-guides to the receiving-guides, substantially as and for the purposes set forth.

4. In a rod-rolling mill, the combination of the delivering-guides and their boxes, the receiving-guides and their boxes, and the guide-bar with a hood or cover so constructed and arranged as to protect the rods upon the top and sides in passing from the delivering-guides to the receiving-guides, and means for fastening said hood or cover in position, substantially as and for the purposes set forth.

GUSTAF JANSSON.

Witnesses:

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W. B. NOURSE.