

S. M. Mecutchen,

Rolling Sheet Iron,

Nº 65,930,

Patented June 18, 1867.

Fig. 1.

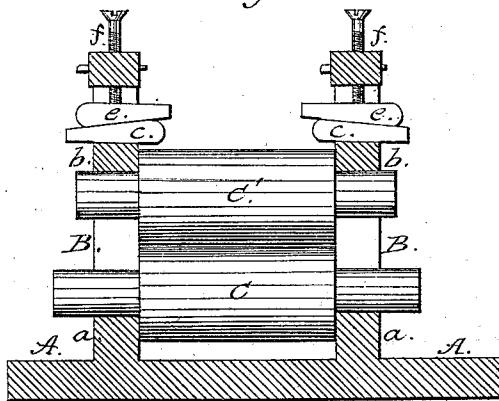
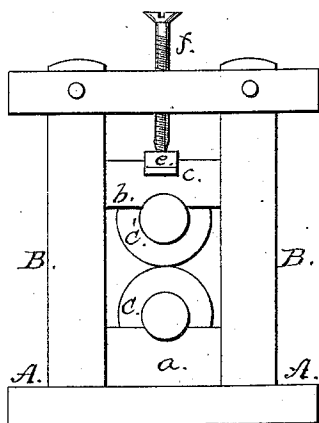


Fig. 2.



Witnesses;

*J. H. Hoxsue Godwin
John Parker*

Inventor;

*S. M. Mecutchen
By H. H. Hoxsue*

United States Patent Office.

SAMUEL M. MECUTCHEN, OF PHILADELPHIA, PENNSYLVANIA.

Letters Patent No. 65,930, dated June 18, 1867.

IMPROVED METHOD OF ADJUSTING ROLLERS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, SAMUEL M. MECUTCHEN, of Philadelphia, Pennsylvania, have invented an improvement in Rolling-Mills; and I do hereby declare the following to be a full, clear, and exact description of the same.

My invention consists of one or more wedges combined with the sliding bearing and set-screw of a rolling-mill, substantially as described hereafter, so that, should the screw become fixed in consequence of an excessive pressure applied to the same, it may be readily relieved by driving back the wedge.

In order to enable others skilled in the art to make and use my invention, I will now proceed to describe its construction and operation, reference being had to the accompanying drawing, which forms a part of this specification, and in which—

Figure 1 is a sectional elevation of a rolling-mill with my improvement; and

Figure 2, a side view.

A is a base-plate, to which are secured the opposite frames B B, and in bearings *a a* in the side frames turn the journals of the lower roller C, above which turns a parallel roller, C', the journals of the latter being adapted to bearings *b*, arranged to slide vertically in the frames. In a recess in the top of each bearing *b* fit two wedges *c c*, the latter resting on the former, and the thick end of one wedge being adjacent to the thin edge of the other, so that the upper side of the wedge *c* shall be parallel to the under side of the wedge *c*. Through the upper cross-piece of each frame B passes the usual set-screw *f*, the lower end of which bears against the top of the upper wedge *c*. In rolling-mills of the ordinary construction the set-screws are in direct contact with the bearings, so that when the plate or other object acted on becomes jammed between the rollers, and the latter are thereby prevented from turning, such an upward pressure is frequently exerted against the screw that it cannot be turned by the ordinary appliances, and its end has to be cut away to allow the roller C to be raised and the partly-rolled plate to be withdrawn. When such an accident occurs in a mill with the above-described improvement, the set-screws may be instantly relieved by driving back the lower wedges, the expense, labor, and delay required in cutting away the screws being thus avoided. A single wedge may be interposed between the set-screw and the bearing, although two are preferable for obvious reasons.

I claim as my invention, and desire to secure by Letters Patent—

The arrangement, substantially as described, of the wedges, sliding bearing *b*, and set-screw *f*, with a rolling-mill, for the purpose specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

SAMUEL M. MECUTCHEN.

Witnesses:

CHARLES E. FOSTER,
W. J. R. DELANY.