June 27, 1933. H. G. R. BENNETT 1,915,713

METAL BAND LOOPING MACHINE

Filed Aug. 28, 1931

Fig. 1.

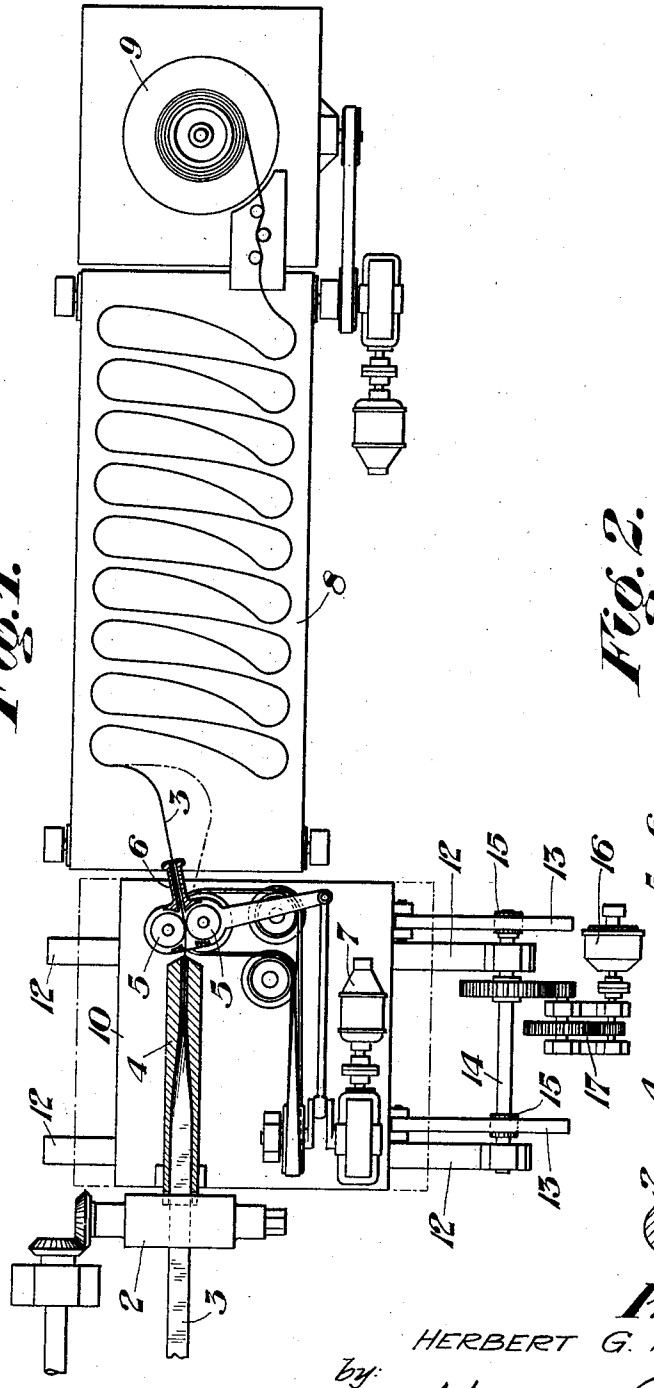
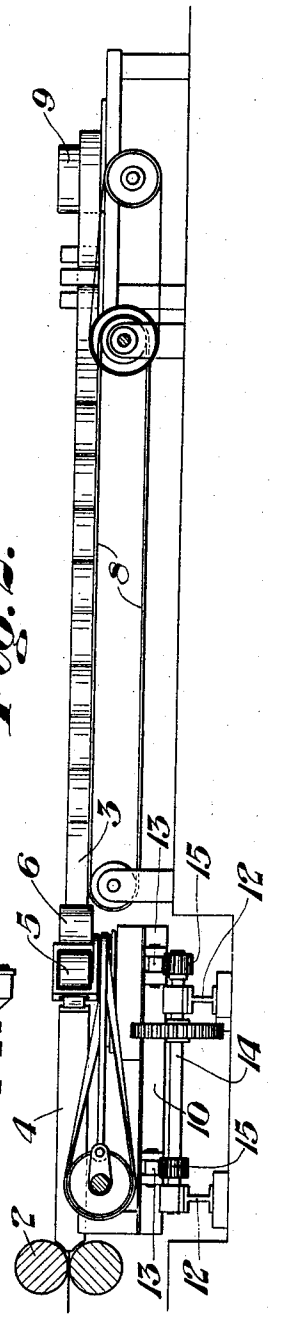


Fig. 2.



Inventor:
HERBERT G. R. BENNETT,
by: Masius & Rauber
his Attorneys.

Patented June 27, 1933 1,915,713

UNITED STATES PATENT OFFICE

HERBERT G. R. BENNETT, OF YOUNGSTOWN, OHIO

METAL BAND LOOPING MACHINE

Application filed August 28, 1931. Serial No. 560,010.

This invention relates to a looping machine handling metal band delivered from a mill. Generally metal band mill rolls are of sufficient length to permit the band to be shifted from one point to another as they become worn, and the band is led from the last stand thereof to a fixedly positioned looping machine having a straight guide. It follows that there are times when this band and the looping machine are not alined and that, because of the high delivery speed of the modern metal band mill, this condition prevents proper passage of the band through this guide, causing serious damage to the various parts. One of the objects of this invention is to eliminate such undesirable conditions. Other objects may later become apparent.

In the drawing:

Figure 1 is a partially diagrammatic top plan view of one form of the invention.

Figure 2 is a side view of Figure 1.

Having reference to this drawing, there is shown the last stand of rolls 2 delivering a metal band 3. When the rolls 2 become worn at one point the operator of the mill will shift the feed of the band 3 to another point. The band 3 passes through a guide 4 which changes it to a vertical plane and feeds it through a pair of pinch-rollers 5 and a vibrator 6. The parts 5 and 6 are driven by a motor 7 which is belted and levered respectively thereto, the whole being merely a diagrammatic representation of an ordinary band looping machine. Metal band is delivered from the vibrator 6 onto a moving conveyer 8 in loop form which carries it to a winding reel 9.

The parts of the looping machine just described are carried on a platform 10 slidably arranged on transverse tracks 12. This platform may be moved on these tracks so that the guide 4 and metal band 3 are alined, even though the metal band 3 is fed through the mill rolls 2 at different points to compensate for wear.

The drawing shows a preferable form of apparatus for accomplishing this adjustment. A pair of racks 13 are pivotally connected to the platform 10 and a shaft 14, carrying a pair of pinions 15 engaging these racks 13, is driven by an air motor 16 through a gear reduction train 17. By operating the motor 16 in one direction or another the shaft 14 will be slowly rotated so that the pinions 15 will move the racks 13 back and forth, thereby moving the platform 10 transversely of the feed of the metal band 3.

Although a specific form of the invention has been shown in accordance with the patent statutes it is not intended to limit the scope of the invention exactly thereto, except as is defined by the appended claims.

I claim:

1. In combination with a mill having rolls through which a metal band is delivered at optional points, a looping machine for said metal band, a guide leading said metal band into said looping machine and means for alining said guide with said metal band.

2. In combination with a mill having rolls through which a metal band is delivered at optional points, a transversely movable looping machine for said metal band having a guide for leading the latter thereinto, racks connected to said machine in line with its path of movement, a shaft carrying pinions engaging said racks, a motor and a gear train connecting said motor to said shaft.

In testimony whereof, I have hereunto set my hand.

HERBERT G. R. BENNETT.