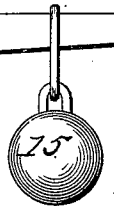
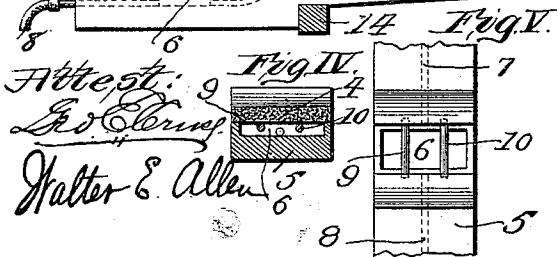
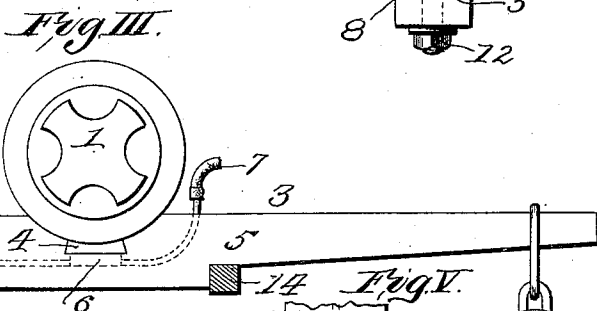
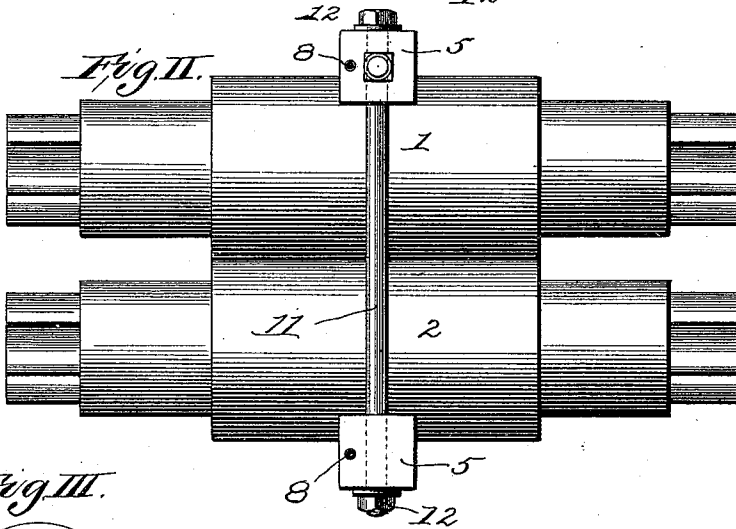
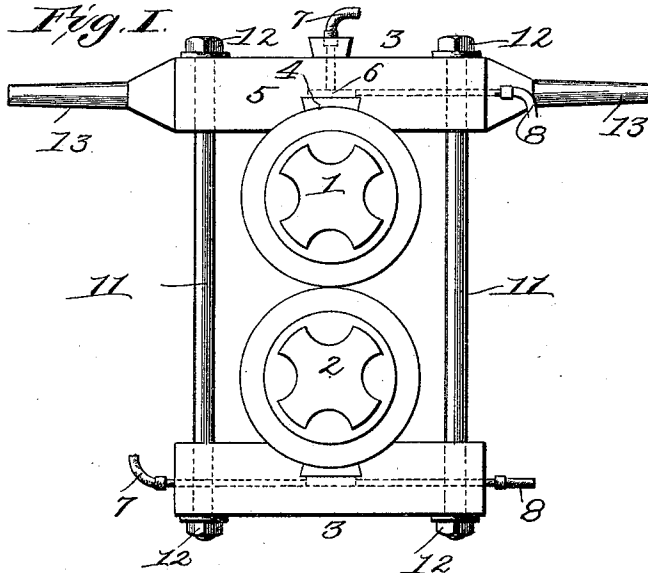


(No Model.)

W. E. HARRIS.  
GRINDER AND DRESSER FOR METAL ROLLS.

No. 536,520:

Patented Mar. 26, 1895.



*Inventor:*

*William E. Harris*

*By Knight Bros*

# UNITED STATES PATENT OFFICE.

WILLIAM E. HARRIS, OF NILES, OHIO.

## GRINDER AND DRESSER FOR METAL ROLLS.

SPECIFICATION forming part of Letters Patent No. 536,520, dated March 26, 1895.

Original application filed March 24, 1894, Serial No. 505,028. Divided and this application filed November 9, 1894. Serial No. 528,331. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM E. HARRIS, a citizen of the United States, residing at Niles, in the county of Trumbull and State of Ohio, have invented a certain new and useful Improvement in Grinders and Dressers for Metal Rolls, of which the following is a specification.

My present invention is a division of my application filed the 24th of March, 1894, and serially numbered 505,028, in which I claim broadly a blank provided with concave grinding faces and a chamber through which water is adapted to pass, and my present invention relates to specific means of applying the dresser or grinder to the surface of rolls.

In order that my invention may be fully understood I will now proceed to describe the same with reference to the accompanying drawings, in which—

Figure I is an end elevation of a pair of rolls having the dressers or grinders applied thereto. Fig. II is a side elevation of the same. Fig. III is a modification of the means for applying the dresser or grinder. Fig. IV is a detail cross section of the dresser or grinder holder showing the cooling chamber, and Fig. V is a detail plan view of the holder with the dresser or grinder removed.

Referring to the drawings: 1, 2 represent the rolls which may be journaled in any suitable frame and 3 the dressers or grinders.

The dressers or grinders 3 which are fully described in the application above referred to are composed of a suitable grinding face 4 dovetailed into a holder 5 which is formed with a cooling chamber 6 and suitable inlet and exit tubes 7, 8 for admitting and withdrawing a cooling medium from the chamber 6. This latter construction is to keep the grinding or dresser face 4 cool while at work.

9 and 10 (see Figs. IV and V) represent strengthening rods for the dresser 4.

The holders and dressers which are concave where they fit around the rods are held to the said rolls by means of the rods 11 and nuts

12. These rods as will be seen from Figs. I and II are passed through the holders at their ends and are held therein by the nuts 12. By this construction the dressers or grinders can be made to bear more or less on the surface of the rolls.

13 represents a pair of handles formed on the upper holder to facilitate the handling of the device when it is desired to move it to a different part of the roll's surfaces.

In Fig. III I have shown a modification of the means for adjustably holding the dresser or grinder to the roll. In this instance the holder is suitably pivoted on a bar 14 conveniently located on the frame in which the rolls are journaled, and it is provided at its outer end with the weight 15.

Having thus fully described my invention, the following is what I claim as new therein and desire to secure by Letters Patent:

1. In a mill roll dressing device, the combination of the upper and lower roll, a dresser or grinder for each of said rolls mounted within a holder formed with a cooling chamber, and suitable means for adjustably connecting said holders, substantially as and for the purpose set forth.

2. In a dresser for mill rolls, the combination of the roll, and a dresser mounted within a suitable holder formed with a cooling chamber and provided with reinforcing rods or strips for the dresser, substantially as shown and described.

3. In a mill roll dressing device, the combination of the rolls, a dresser or grinder for each roll, mounted in a holder having a cooling chamber and an adjustable connection between said holders consisting of rods passing through the holders and secured therein by nuts, substantially as and for the purpose set forth.

WILLIAM E. HARRIS.

Witnesses:

T. A. WINFIELD,  
H. R. HAMMOND.