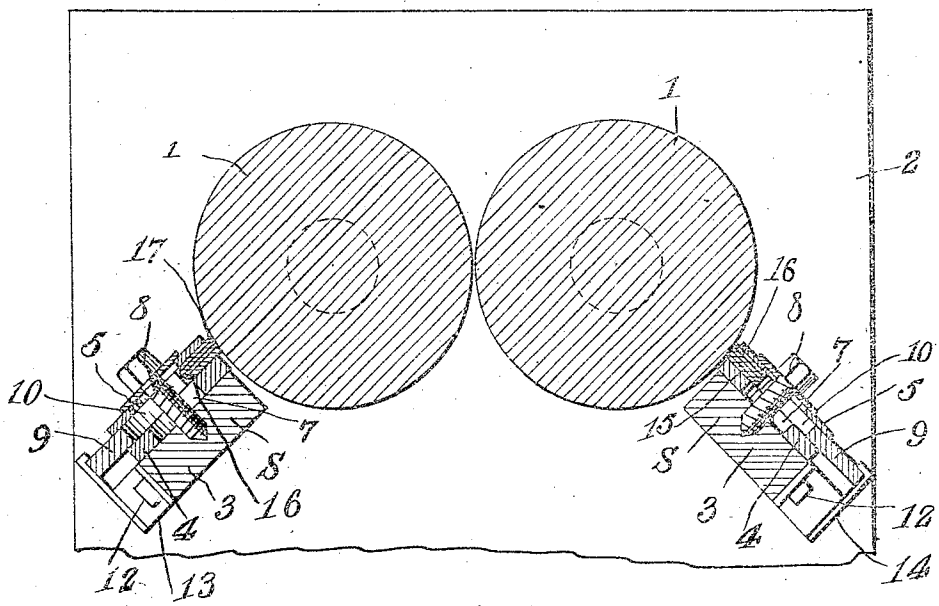
No. 891,694. PATENTED JUNE 23, 1908.

W. I. HILL.

ROLL SCRAPER.

APPLICATION FILED OCT. 29, 1907.

Fig. 1.



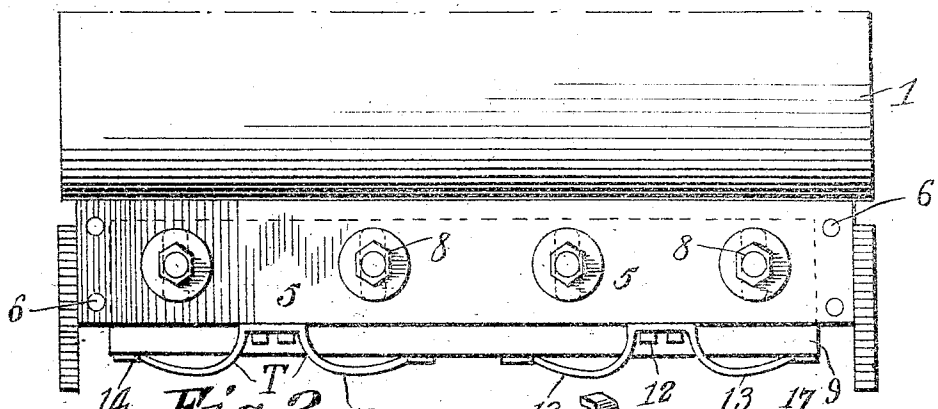


Fig. 2.

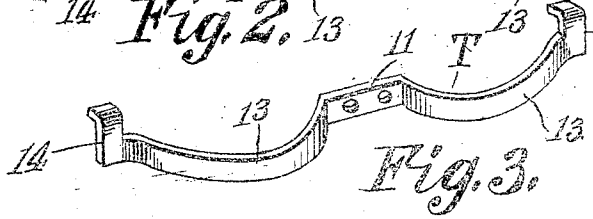


Fig. 3.

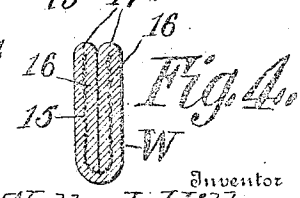


Fig. 4.

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UNITED STATES PATENT OFFICE.

WALTER I. HILL, OF CLARKSBURG, WEST VIRGINIA.

ROLL-SCRAPER.

No. 891,694. Specification of Letters Patent. Patented June 23, 1908.

Application filed October 29, 1907. Serial No. 398,351.

To all whom it may concern:

Be it known that I, WALTER I. HILL, a citizen of the United States of America, residing at Clarksburg, in the county of Harrison and State of West Virginia, have invented new and useful Improvements in Roll-Scrapers, of which the following is a specification.

This invention relates to scrapers for the rolls of tin plate machines, the same being used for the purpose of removing surplus metal from the rolls; and it is an improvement upon the device of this class for which Letters Patent of the United States, No. 861,981, were granted to myself on the 30th day of July, 1907.

The present invention has for its object to still further increase the efficiency of the scraper; and with these and other ends in view, which will readily appear as the nature of the invention is better understood, the present invention consists primarily in an improved cage or device wherein the scraper is movable and adjustably supported. The invention further consists in the improved construction of the scraper, the latter being composed partly of a wick or member of peculiar construction, the same being composed of asbestos or other analogous refractory material reinforced by a netting or framework of steel wire.

The invention further consists in the improved construction and novel arrangement of parts which will be hereinafter more fully described and particularly pointed out in the claims.

In the accompanying drawing has been illustrated a simple and preferred form of the invention, it being, however, understood that no limitation is necessarily made to the precise structural details therein exhibited, but that changes, alterations and modifications within the scope of the invention may be resorted to when desired.

In the drawing,—Figure 1 is a cross section taken through a tin plate machine embodying the invention, and showing one of the end standards of the frame and a pair of the rolls, together with the scrapers coöperating therewith. Fig. 2 is a top plan view, showing one of the scrapers arranged in operative position with relation to one of the rolls. Fig. 3 is a perspective detail view of one of the pressure springs. Fig. 4 is a sectional detail view on a larger scale, of one of the wicks constituting the scrapers.

Corresponding parts in the several figures are denoted by like characters of reference.

The rolls 1, 1 are mounted for rotation in a suitable frame including end standards, one of which is shown at 2. The frame supports the scrapers S, S, each of which includes a supporting bar 3 and a frame or cage which is composed of parallel members 4 and 5, suitably spaced apart and connected adjacent to their ends by means of fastening members, such as rivets 6. The members 4, 5, constituting the cages, are provided with slots 7 for the passage of cap screws 8 which engage the supporting bar 3, and which serve to retain and to guide the scraper bars 9 which are provided with slots 10 engaging the screws. The scraper bars are forced in the direction of the rolls by means of pressure springs T, each of which is composed of a strip of spring metal having a straight central body portion 11 perforated for the passage of fastening members 12, whereby the pressure springs are secured in position upon the supporting bars 3; said pressure springs being bowed or bent to form spring arms 13 provided with terminal bearing lugs 14 engaging the outer edges of the scraper bars or blades 9. When the cap screws 8 are loosened these springs will operate to force the scraper bars in the direction of the rolls, as will be readily understood; it being further understood that by tightening the cap screws, the scraper bars or blades may be firmly secured in adjusted position.

For the purpose of directly engaging the rolls in order to remove surplus metal therefrom I employ the wicks W which are constructed of strips of asbestos cloth in connection with a framework or reinforcement 15 of wire netting, a strip of wire netting being placed upon the strip of asbestos cloth, and the edges 16 of the latter being folded upon the wire netting, after which the latter, together with the asbestos cloth, is bent or doubled upon itself, as shown most clearly in Fig. 4 of the drawings; the raw edges of the asbestos cloth will thus be protected between the folds of the material, and the double edges 17 will be projected and exposed for wear. The wick or member, thus constructed, is adjusted between the side members of the cage adjacent to the inner edge

of the scraper bar or blade, and the pressure of the springs upon the latter will force upwardly the wick in the direction of the roll, which latter will thus be actively engaged by the said wick. The latter has been found extremely efficient for the purpose of removing the surplus metal from the rolls; it is stiffened and reinforced by the framework of wire netting, and it is thus rendered extremely durable and efficient for the purpose for which it is intended.

From the foregoing description, taken in connection with the drawing hereto annexed, the operation and advantages of this invention will be readily understood by those skilled in the art to which it appertains. The construction is simple and inexpensive, and experience has proven that the improved device is very efficient in operation.

Having thus described the invention, what is claimed as new, is:—

1. A roll scraper for tin plate machines comprising a supporting bar, a cage consisting of suitably spaced and connected members having registering slots, cap screws extending through the slots into the base or supporting member, a scraper member operating between the members of the cage, and spring means secured upon the supporting member and engaging the scraper member to force the latter in the direction of the roll.

2. A roll scraper for tin plate machines comprising a supporting bar, a cage thereon comprising a pair of members, means adjustably securing the cage on said bar, a scraper bar between the members of the cage, springs to move the scraper bar in one direction, a roll engaging wick mounted slidably in the cage between the members thereof and movable with the said scraper bar and means to secure the scraper bar in adjusted position and clamp the same and the said wick between the members of the cage.

3. In a device of the class described, a roll engaging wick comprising a doubled strip of asbestos cloth and a doubled strip of wire netting, said wire netting being embedded in said cloth, concealed thereby and terminating short of the edges thereof.

In testimony whereof I affix my signature in presence of two witnesses.

WALTER I. HILL.

Witnesses:
L. G. LOCKWOOD,
GEO. E. LOCKWOOD.