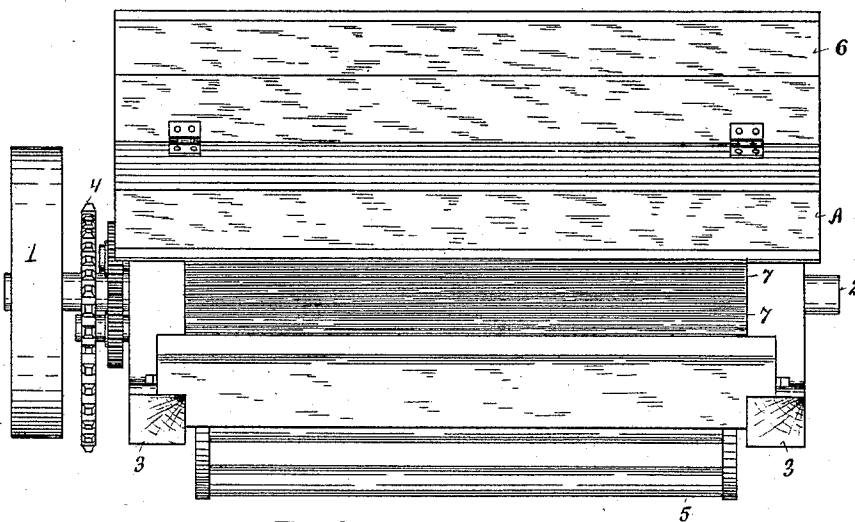
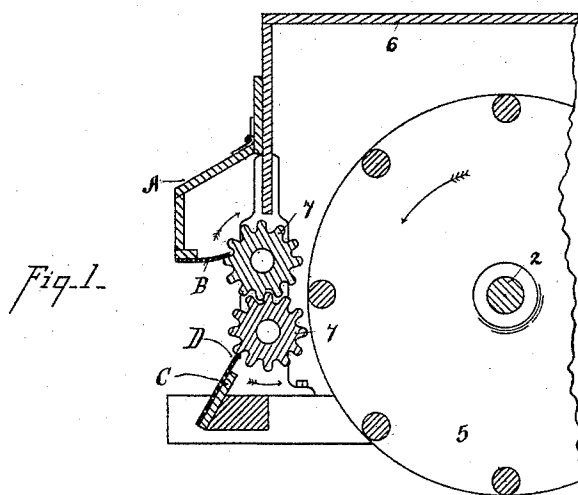


(No Model.)

J. O. WARD.  
HEMP BRAKE.

No. 474,273.

Patented May 3, 1892.



Witnesses

*C. W. Miles*  
*T. Simmons*

Inventor

*Josiah O. Ward*  
By his Attorneys *Ward & Boy*

# UNITED STATES PATENT OFFICE.

JOSIAH O. WARD, OF ORANGE, NEW JERSEY.

## HEMP-BRAKE.

SPECIFICATION forming part of Letters Patent No. 474,273, dated May 3, 1892.

Application filed August 27, 1891. Serial No. 403,897. (No model.)

*To all whom it may concern:*

Be it known that I, JOSIAH O. WARD, a citizen of the United States, and a resident of Orange, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Hemp-Brakes, of which the following is a specification.

My invention relates to an improvement in hemp-brake machines of the kind shown and described in the application of John J. Hawkins, Serial No. 372,690, filed November 6, 1890.

The object of my invention is to provide an attachment adapted to be used in connection with the delivery-rolls of hemp-brake machines which employ a stationary beater and rotating riddle-beater and the delivery-rolls in the rear of the rotary beater, where the broken hemp is carried out. This attachment prevents the hemp from wrapping around said rolls and insures a proper delivery of the broken hemp, dispensing with belts and auxiliary delivery-rolls. I have shown my invention as adapted to be used with the corrugated form of delivery-rolls. It is obvious that it may be used with other well-known forms of delivery-rolls.

The various features of my invention will be fully set forth in the description of the accompanying drawings, making a part of this specification, in which—

Figure 1 is an end elevation of my improvement, partly in section. Fig. 2 is a rear elevation of Fig. 1.

1 represents the driving-pulley; 2, the main shaft; 3, the frame of the machine; 4, the delivery-roll-driving pulleys. 5 represents the breaking-riddle; 6, the curb of the frame. 7 represents corrugated delivery-rolls. These parts are of the ordinary construction.

In the operation of hemp-breaking machines difficulty is experienced in the proper delivery of the broken hemp, as it is apt to stick to the corrugated rolls and wind round the same, thereby preventing their operation and clogging the machine. My invention obviates this difficulty.

A represents a bracket extending longitudinally along the machine above the corrugated

roll. To this bracket is extended longitudinally across the face of the roll an elastic cleaner B, which is made of rubber and projects laterally in across the face of the corrugated roll 7, preferably lapping past the teeth of the same, so as to be in frictional contact with the same as they revolve progressively. The friction of the scraping material prevents the fiber from sticking to the teeth and being carried around therewith, which would cause a wrapping of the rolls. C represents a similar bracket attached to the machine projecting upward, which carries an elastic rubber scraper D.

Bracket C serves as a guide for carrying the fiber downward after it leaves the corrugated delivery-rolls 7 and prevents it being caught or carried back into the machine.

The elastic cleaner-strips, combined with the fluted rolls, entirely avoid tangling of the tow, and the fluted rolls prevent wrapping of the tow and the formation of tow rolls, which results where revolving brushes or bristles are employed.

Having described my invention, what I claim is—

1. In a hemp-brake, the combination of a rotary riddle-beater 5, the corrugated intermeshing delivery-rolls 7, and the elastic rubber cleaner-strips B and D, co-operating, respectively, with the corrugated rolls, substantially as described.

2. In a hemp-brake, the combination, with a frame-work and a rotary riddle-beater 5, of the corrugated intermeshing delivery-rolls 7, the upper and lower brackets A and C, supported by the frame-work, and the elastic cleaner-strips B and D, secured to the brackets and co-operating, respectively, with the corrugated delivery-rolls, substantially as described.

In testimony whereof I have hereunto set my hand.

JOSIAH O. WARD.

Witnesses:

WALTER J. CARR,  
WM. H. MORALES.