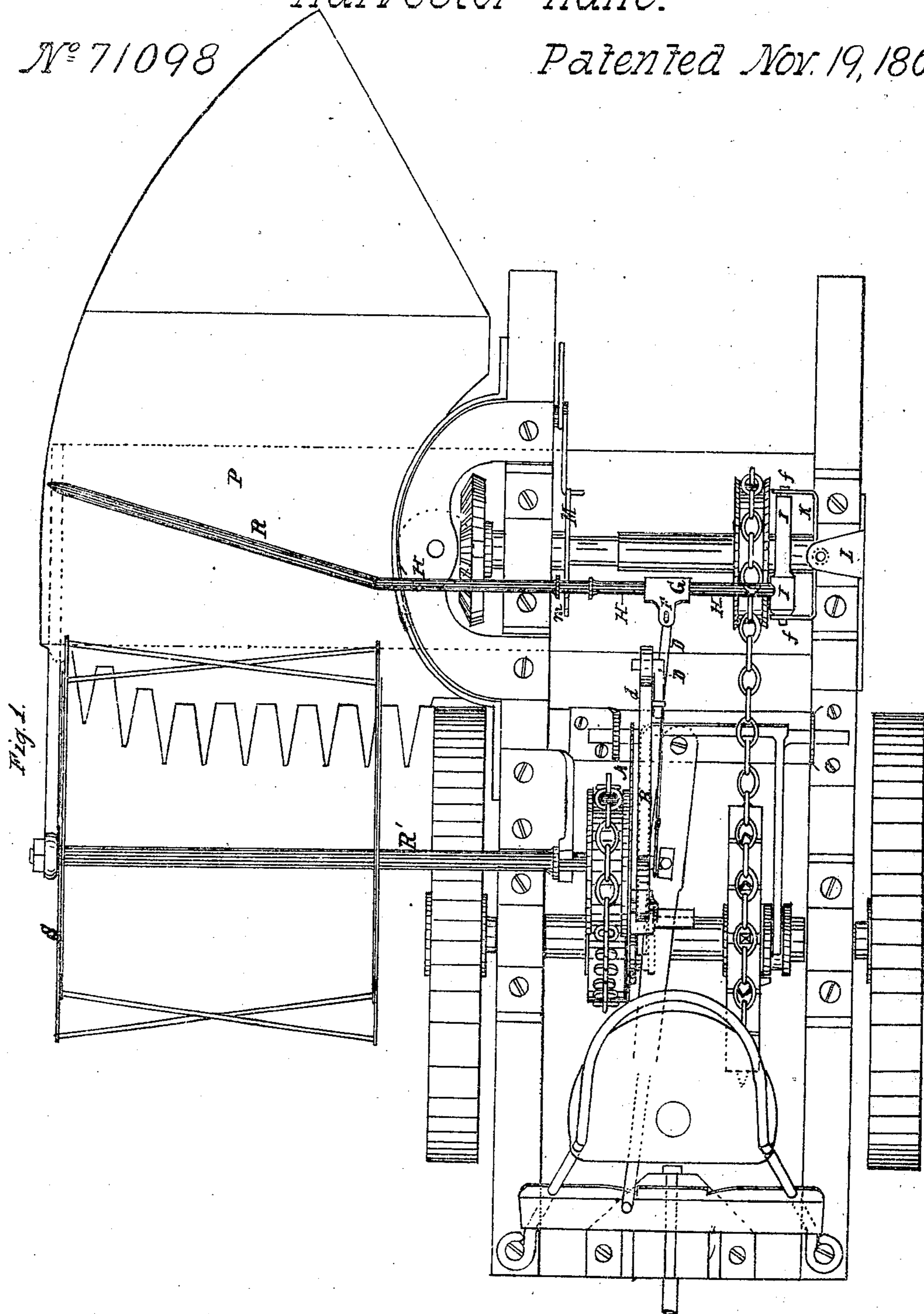


P. Werni.

Harvester Rake.

N^o 71098

Patented Nov. 19, 1867.



Witnesses.

L. L. Coburn
Franklin H. Brown.

Inventor.

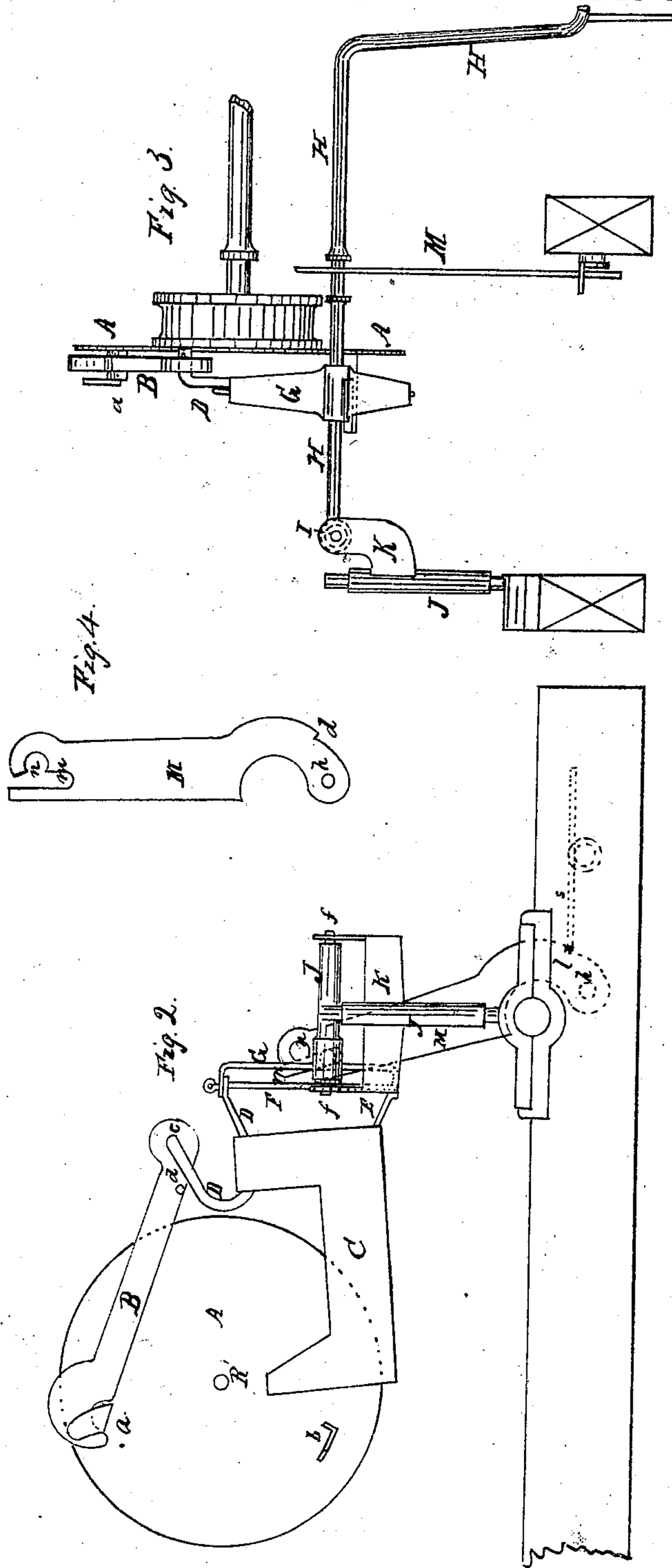
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United States Patent Office.

PELEG WERNI, OF CHICAGO, ILLINOIS.

Letters Patent No. 71,098, dated November 19, 1867.

IMPROVEMENT IN HARVESTER-RAKE.

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, PELEG WERNI, of Chicago, in the county of Cook, and State of Illinois, have invented a new and useful Improvement in Automatic Harvester-Rake; and I do hereby declare and make known that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters and figures marked thereon, which form part of this specification.

To enable those skilled in the art to understand how to construct and use my invention, I will proceed to describe the same with particularity, making reference in so doing to the aforesaid drawings, in which—

Figure 1 represents a plan or top view of my invention.

Figure 2 is a side view of the same.

Figure 3 is a rear view; and

Figure 4 is a detached view of the bar or arm which supports and operates the rake.

Similar letters of reference in the several figures denote the same parts of my invention.

Having made an application for a separate patent on the sickle shown in the drawings, and having described the devices whereby said sickle, and also the reel, is operated, I shall in this specification confine my description to the rake, its attachment, and mode of operation.

A represents a circular plate or disk, secured upon the end of the reel-shaft R', so as to revolve with it; said plate being provided with two lateral projections or pins *a b*, the former being arranged nearer the circumference than the latter, as shown. A horizontally-arranged rod or arm, H, is secured to the rake R, its opposite end being rigidly attached to a horizontal roller, I, supported upon journals *ff*, in arms K, which are rigidly secured to a vertical turning-post, J, which revolves in suitable bearings attached to the main frame, as hereinafter described. The said arm H is supported in a slot, *m*, in the upper end of an upright arm, M, whose lower end is pivoted to the frame of the machine, as shown at *h*, so as to have a motion forward and back about said pivot; it being kept from swinging over too far backwards by means of a shoulder, *l*, which rests on a spring, *s*. In one side of the aforesaid slot *m* a recess, *n*, is formed, in which the rod or arm H rests at times, as hereinafter specified. Upon said arm H there is rigidly attached an upright arm, G, whose upper and lower ends are bent so as to form the supports of a vertical shaft or rod, F, whereby the piece C is supported upon arms D E, as shown, so that said arm H may vibrate in the desired manner, while the bar or arm C remains parallel with the longitudinal sides of the frame. Upon one end of the upper arm D, which is curved, as shown, is pivoted an arm, B, provided with a notch at its front end at *t*, so that said bar B has a vertical movement around the pivoted connection with the arm D. Upon said arm B is a pin, *d*, which rests upon the arm D, and prevents B from dropping too low, as hereinafter set forth.

Having described the construction of my said improvement, I will now describe its operation. Assuming the rake to be at the front of the platform, just ready for the backward movement, the arm H lies in the lower part of the slot *m*, and the projection *b*, upon the disk A, is just at the front end of the arm C, so that as the disk revolves, said projection presses against said arm, and gives the rake the desired backward sweep, until it reaches the rear of the platform, the heel of the rake striking a suitable stop to prevent its further backward movement; the projection *b* leaving the arm C, and moving around to repeat the operation. The rake in this position has its arm H resting in the recess *n* aforesaid on the arm M. The rake remains in the aforesaid position until enough grain has accumulated upon the platform to form a bundle, when the projection *a* catches in the notch at the end of the arm B, and draws the rake forward to the desired position; said pin slipping from said hook when the rake is required to drop upon the platform, which falls of its own weight; thereupon the arm H, passing down to the lower part of slot *m*, when the projection *b* immediately runs it back as before.

Having described the construction and operation of my invention, what I claim, and desire to secure by Letters Patent, is—

1. I claim the plate or disk A, in combination with the bars B and C, and the arm H of the rake, when constructed and operating substantially as and for the purposes described.

2. I claim, in combination with the arm H of the rake, the supporting arm M, pivoted at *h*, about which

point it has a vertical movement, carrying the rake in both the effective and non-effective stroke, substantially as and for the purpose set forth.

3. I claim the combination of the said rake-arm H and swinging supporting-arm M, pivoted as aforesaid, with the rollers I J, and their connection K, arranged in the manner set forth, and operating as described.

4. I claim the combination of the revolving plate A, provided with projections *a b*, the arms B C, the rake-arm H, provided with a double joint, as described, and the movable supporting-arm M, arranged and operating as and for the purposes specified.

PELEG WERNI.

Witnesses:

LEWIS L. COBURN,

W. E. MARRS.