(No Model.)

W. N. DICK.

TWINE TENSION FOR HARVESTERS.

No. 405,083. Patented June 11, 1889.

Fig. 1.

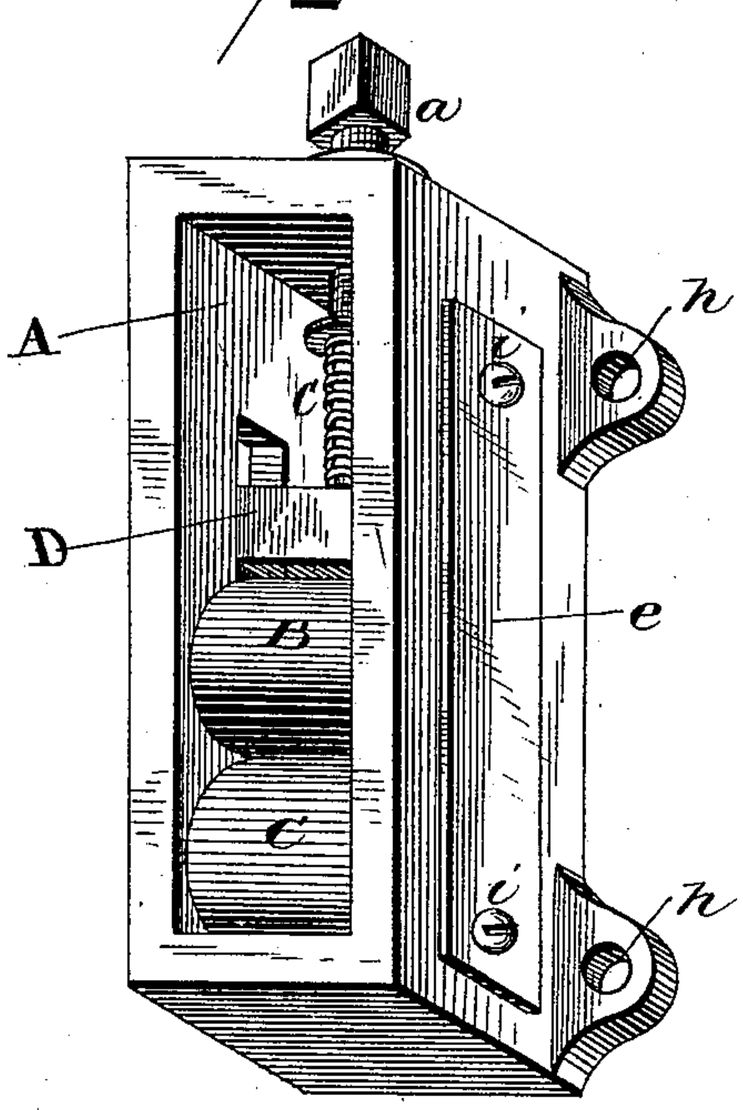


Fig. 2.

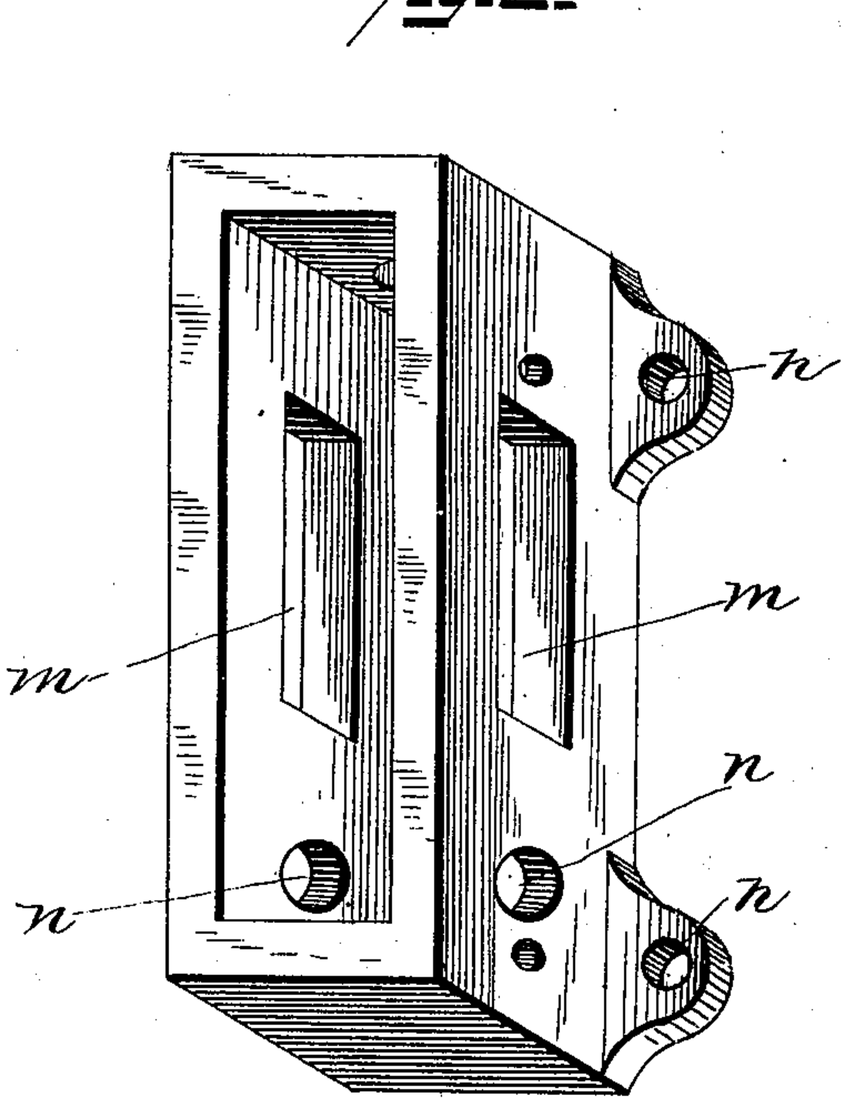
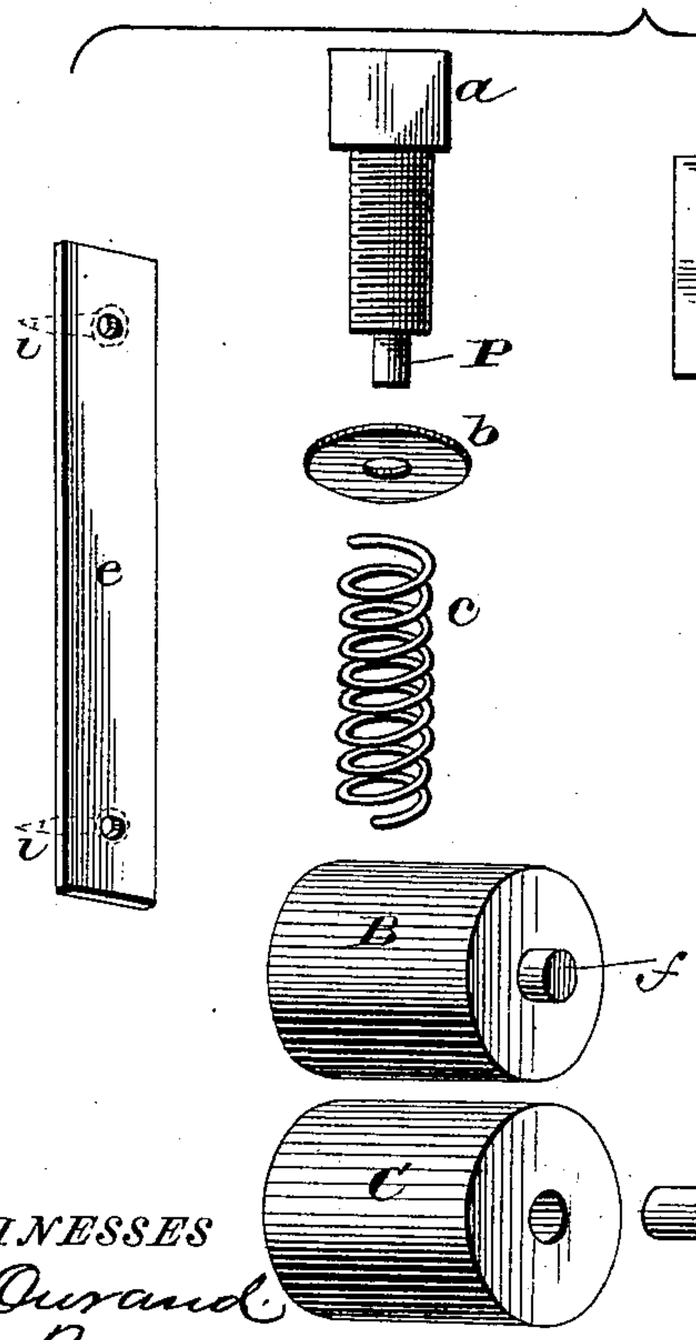


Fig. 3.



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WILLIAM N. DICK, OF TAYLORVILLE, ILLINOIS.

TWINE-TENSION FOR HARVESTERS.

SPECIFICATION forming part of Letters Patent No. 405,083, dated June 11, 1889.

Application filed September 15, 1888. Serial No. 285,661. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM NEWTON DICK, a citizen of the United States, residing in Taylorville township, in the county of Christian and State of Illinois, have invented a new and useful Twine-Tension for a Twine-Binding Harvester, of which the following is a specification.

My invention relates to a roller twine-tension for a twine-binding harvester; and the object of my improvement is to provide for an evenness of pressure on the twine regardless of the unevenness of the twine. I attain this object by the mechanism in the accompanying drawings, in which—

Figure 1 is a perspective view of the complete invention. Fig. 2 is a view of the wooden or metallic frame of said invention, and Fig. 3 is a detail view of the several pieces of said device.

The wooden or metallic frame A contains the two rollers B and C, made of metal, hard rubber, wood, or other suitable material. The roller B works on the loose axle *f*, which slides in grooves *m* in the frame A, and the roller C works on loose axle *g*, which axle *g* turns in bearings *n* of frame A. The roller C is stationary as to position, except that it revolves on the axis *g*. The axle *f* slides up or down in grooves *m* of the frame A, as occasion may require. The roller B has a double journal-cap D fitted into the grooves *m* in the frame A, each end of which bears on one end of the movable roller-axle *f*, the cap D being pressed down on the movable roller-axle *f* in the grooves *m* in the frame A by a spring *c*, working on a pin *p*, extending from a thumb-screw *a*. The screw *a* works in the opening *o* on top of said frame A. The washer *b* is fitted on said pin *p* to prevent the spring *c* from working too high on the thumb-screw *a*, so as to force the journal-cap D down on the roller-axle *f*. The pin *g'* on top of the journal-cap D fits in the lower end of the spring *c* to hold it on the journal-cap D. The two plates *e* fit over grooves *m* on the sides of the frame A to hold the roller-axles *f* and *g* in their proper positions. The screws *i* and *i'* pass through the plates *e* into threaded holes *k* and *k'* in the frame A, to hold the plates *e* to the frame A. This device is fastened on the twine-box by means of screws passing through holes *h* in ears at each corner of the frame A, so that the string or twine used on binding-harvesters will pass through between the rollers. The axles *f* and *g* are loose, so that when the frame A is made of one piece of cast metal the rollers B and C can be more conveniently placed in the chamber and the axles inserted from the sides. The clamps *e e* are for the purpose of holding the axles in their places.

What I claim as my invention, and desire to secure by Letters Patent, is—

In a tension device for twine-binders, the combination of the frame A, having the slots *m* and perforations *n*, the roller C, loosely journaled in a pintle mounted in the perforations *n*, the roller B, turning loosely on the pintle, mounted in slots *m*, and the plates *e*, secured to the frame and overlying the slots and perforations, and thereby holding the rollers and pintles in place, substantially as described.

W. N. DICK.

Witnesses:
WM. A. POTTS,
W. C. LANGLEY.