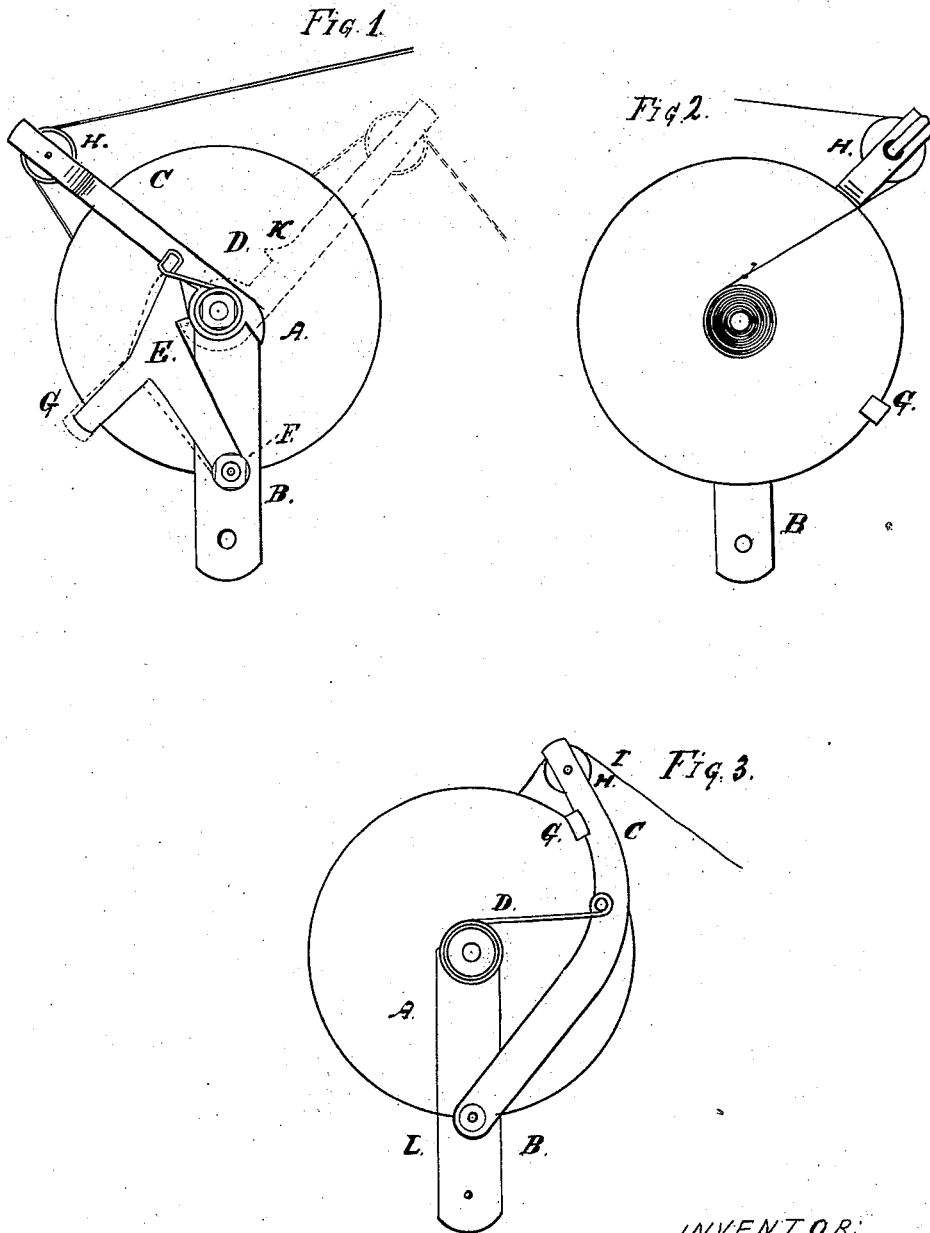


O. O. STORLE.  
Tension-Wheel

No. 209,144.

Patented Oct. 22, 1878.



WITNESSES:

J. B. Smith  
C. S. Birge

INVENTOR:

Ole O. Storle

# UNITED STATES PATENT OFFICE.

OLE O. STORLE, OF MILWAUKEE, WISCONSIN, ASSIGNOR OF TWO-THIRDS  
HIS RIGHT TO JOHN G. FLINT, JR., OF SAME PLACE.

## IMPROVEMENT IN TENSION-WHEELS.

Specification forming part of Letters Patent No. **209,144**, dated October 22, 1878; application filed  
December 10, 1877.

*To all whom it may concern:*

Be it known that I, OLE O. STORLE, of Milwaukee, in the county of Milwaukee, in the State of Wisconsin, have invented certain Improvements in Tension-Wheels, of which the following is a specification:

The object of my invention is the regulating the tension of wire or cord on grain-binders, or for the regulating the tension of the thread on a sewing-machine. The construction of the machinery for the accomplishment of this will be more fully described farther on.

Referring to the drawing, forming part of this specification, Figure 1 is a side view of my invention; Fig. 2, a sectional view of the same, and Fig. 3 a modified form of the tension-wheel.

In the drawing, A is the wheel; B, a standard which supports the wheel; C, an arm, with a pulley on its end over which a wire, cord, or thread passes; D, a spring wound round the end of the shaft of the wheel A, one end of the same secured to the arm C, and the other end of the same secured to standard B or brake-arm E; E, a three-pronged brake-lever. F is a pin through one end of the brake-lever into the standard B; G, a hook or foot on one prong of the brake-arm E, hooking on to the head of wheel A or on arm C of Fig. 3, performing the same service. H is a pulley on the end of arm C; I, the cord, wire, or thread wound round the center shaft of the wheel or on a spool on the shaft, and running through or over the pulley H. K is a projec-

tion in arm C, Fig. 1, which hooks on over the upper prong of the brake-arm E. L is a pin in the end of arm C, Fig. 3, passing into standard B.

The object of this invention is to have the tension the same, whether much or little wire or thread on the wheel.

The operation of this tension-wheel is as follows: When there is a pull on cord I hard enough to pull the arm C forward, as shown in dotted lines, the foot of the arm will strike against the brake-arm E and throw the hook or foot off of the wheel A and let the wheel turn, so that the cord, wire, or thread may unwind enough for any purpose wanted, and when the work is accomplished the spring pulls the lever C back again and takes up the slack.

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

1. Wheel A, arm C, provided with pulley H, spring D, attached one end to arm C and the other end to lever E, in combination with lever E, provided with brake G, substantially as specified.

2. Arm C, provided with projection K, in combination with standard B, spring D, and lever E, provided with the brake G, substantially as described.

OLE O. STORLE.

Witnesses:

J. B. SMITH,  
C. S. BIRGE.