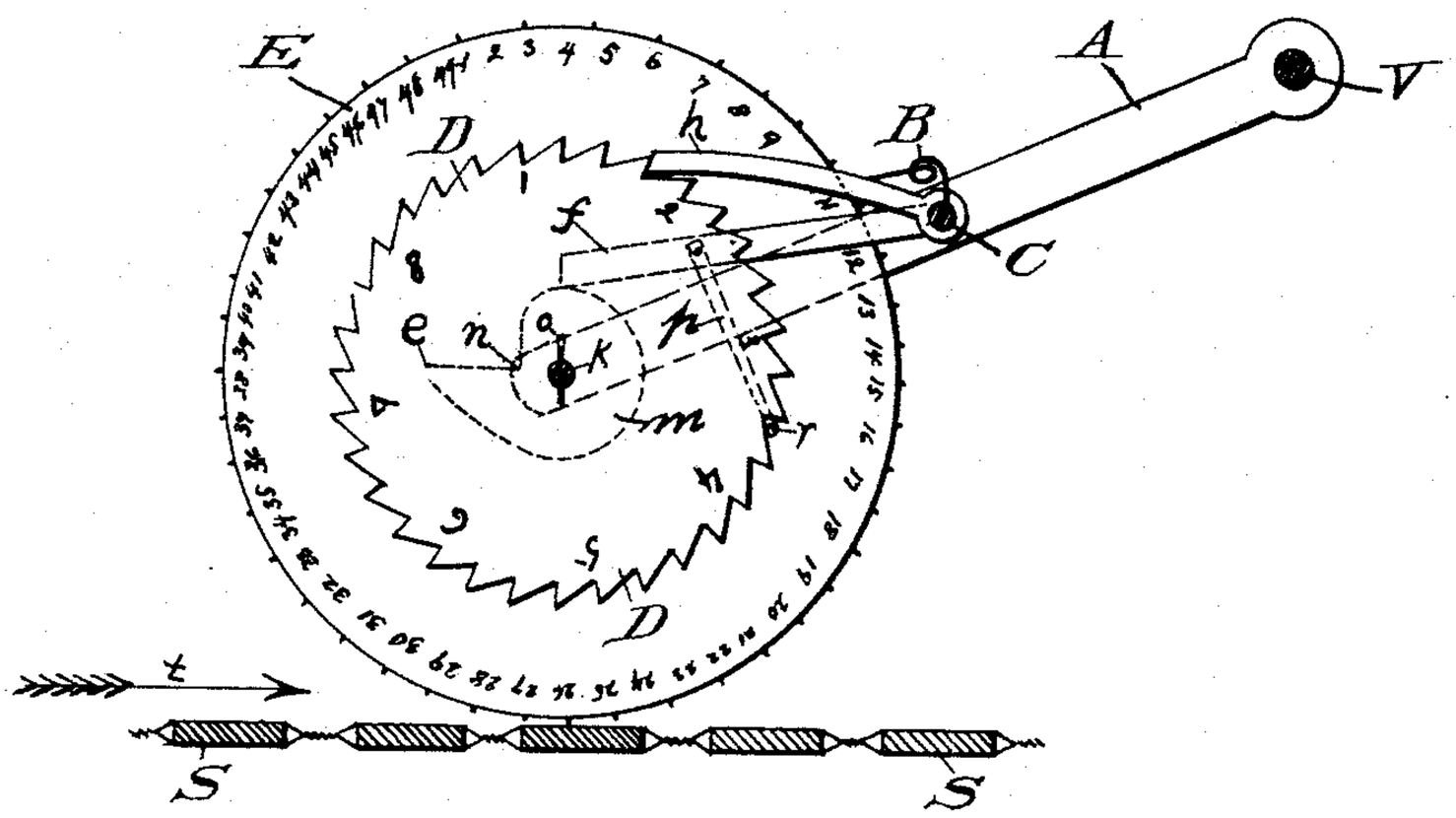
(No Model.)

W. M. GRAY & W. M. WHITE.

REGISTER FOR SLAT FENCE LOOMS.

No. 410,587. Patented Sept. 10, 1889.



Witnesses

John. L. Gobin.

F. G. Sharpe

Inventors

William. M. Gray.

William M. White.

Per. W. F. Sharpe Atty

UNITED STATES PATENT OFFICE.

WILLIAM M. GRAY AND WILLIAM M. WHITE, OF CRAWFORDSVILLE, INDIANA.

REGISTER FOR SLAT-FENCE LOOMS.

SPECIFICATION forming part of Letters Patent No. 410,587, dated September 10, 1889.

Application filed May 18, 1888. Serial No. 274,338. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM M. GRAY and WILLIAM M. WHITE, citizens of the United States, residing at Crawfordsville, in the county of Montgomery and State of Indiana, have invented a new and useful Slat-Fence-Loom Register, of which the following is a specification.

The object of our invention is to provide an automatic register that shall indicate with perfect reliability the length of fence which has passed out from the loom.

The drawing is a general view of our invention as it appears in position and in use.

A is the supporting-arm, having a circular aperture at one end thereof, through which is thrust a horizontal axle V, about which the arm A is free to move, the axle V being attached to some fixed timbers of the fence-loom. In the other end of the arm A is inserted a rigidly-fixed horizontal axle K, on which the system of wheels E and D and the cam-hub *m* are free to revolve. Next to the arm A is the large wooden wheel E, the circumference of which is thickly set along its center line with short wire brads perpendicular to the circumference. The circumference of the wheel measured around the outer extremity of the wire-bands is forty-nine and one-half inches, or one-fourth of a rod.

m is a cam-hub fixed to the wheel E and revolving with it. The section of the hub, as shown by the dotted lines in the drawing, is semicircular on one-half of it and the outline is broken up on the other half by the projection *e* and the angle *n*. The position of the notched wheel D is immediately in front of the hub *m*. The series of notches in the circumference of the wheel D are equidistant from each other and are thirty-two (32) in number. They are divided into groups of four (4) notches, and each group numbered with figures around the margin from one to eight, inclusive. An axle C is fixed rigidly in the arm A. The axles V C K are each upon the same side of the arm A with the wheels, and are parallel to each other, and are perpendicular to the arm A. On the axle C is a short lever *f*, the free end of which is held down against the periphery of the hub *m* by a spring of any suitable construction.

p is a hook or catch suspended freely from the lever *f* near its center, being so pivoted as to swing freely forward and backward through a small angle in a plane parallel to the planes of the wheels.

r represents the portion of the hook or catch *p* bent at right angles to the body of the hook, the part *r* working in the notches on the circumference of the wheel D.

h is a catch occupying a position on the axle C immediately in front of the lever *f*, and the free end thereof rests in the notches in the wheel D, being held down firmly in the notches by a spring B of any suitable form.

S is a section of slat fence, represented as passing outward from the fence-loom in the direction indicated by the arrow *t*. The wheel E rests upon the slat fence, and is held down by the weight of the parts, as above described.

The manner in which the apparatus registers the length of fence passing under it is as follows: The manufactured fence, moving in the direction indicated by the arrow *t*, causes the wheel E to make one revolution for each one-fourth rod of fence that passes under it by operating upon the wire brads in the circumference of the wheel. This revolution of the wheel E brings the projection *e* of the hub *m* under the free end of the lever *f* and elevates it, and in being elevated (the lever *f* through the medium of the hook *p* acting in one of the notches of the wheel D) the wheel D is made to revolve. When the circumference of the wheel D has been carried forward a distance equal to one-half the distance between the notches the catch *h* drops backward one notch, and the spring B presses it firmly against the notch. As the wheel E revolves farther, the projection *e* of the hub *m* elevates the lever still more, and thereby causes the notched wheel D to revolve a little farther until the projection *e* passes from under the free end of the lever *f*, when it drops into the angle *n*. This drop gives the hook *p* a hold one notch in rear of its previous position. In the same manner the wheel D is moved

around one notch for each revolution of the wheel E. The catch *h* is made to drop into its next notch each time before the lever *f* drops into the angle *n*, so as to make sure of tallying each time.

The figures 1 2 3, &c., indicate the number of rods run off, and the figures around the circumference of the wheel E indicate the number of inches.

Having now described our invention and the manner of its action, what we claim, and desire to secure by Letters Patent, is—

The combination of the arm A, the shaft C thereon carrying the pawl *h* and the arm *f*, and pawl *p* and the shaft K, with the disk E, provided with brads on its periphery, loose on the shaft K, the cam *m*, fixed to the disk E to vibrate the arm *f*, and the ratchet-wheel D, also loose on the shaft K and engaged by the pawls *h* and *p*, the said disk E and ratchet-wheel D being marked with figures on their surfaces.

WILLIAM M. GRAY.
WILLIAM M. WHITE.

Witnesses:
JOHN L. GOBEN,
F. G. SHARPE.