(No Model.)

H. D. ROBINSON.

TWISTING WHEEL FOR FENCE MACHINES.

No. 422,977. Patented Mar. 11, 1890.

Fig. 1.

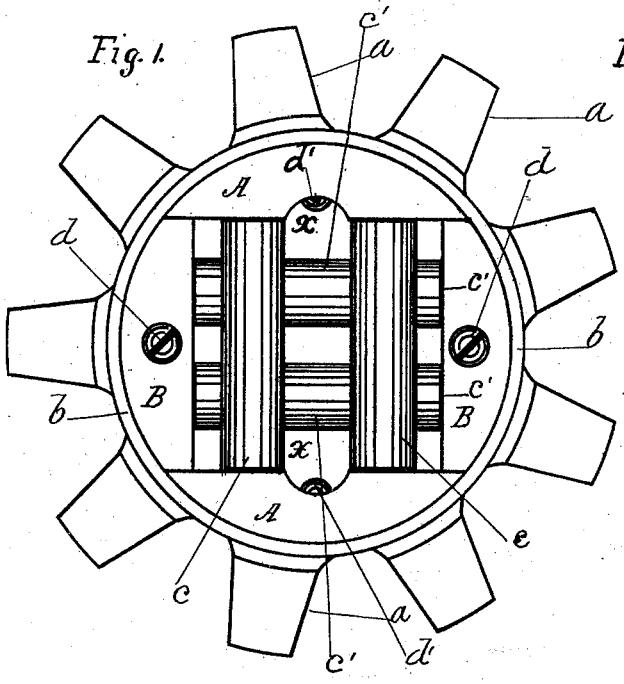


Fig. 2.

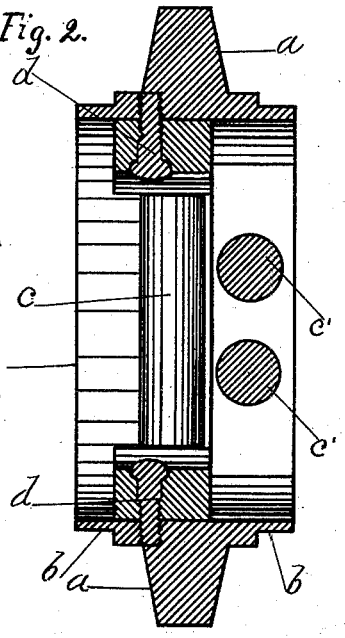


Fig. 3.

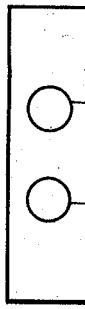


Fig. 4.

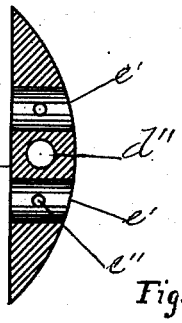


Fig. 5.

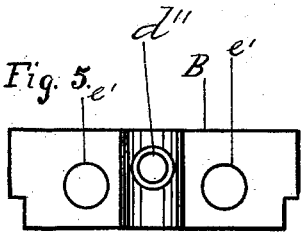


Fig. 6.

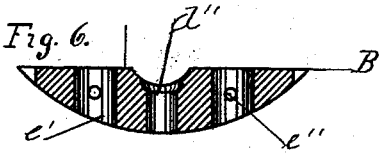
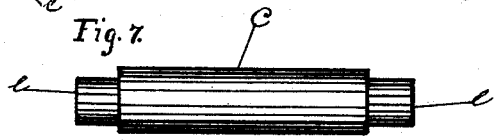


Fig. 7.



Witnesses.
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W. A. Tanner

Inventor
Henry D. Robinson
by W. D. Dennis
Attorney

UNITED STATES PATENT OFFICE.

HENRY D. ROBINSON, OF CHESTER, INDIANA.

TWISTING-WHEEL FOR FENCE-MACHINES.

SPECIFICATION forming part of Letters Patent No. 422,977, dated March 11, 1890.

Application filed November 23, 1889. Serial No. 331,311. (No model.)

To all whom it may concern:

Be it known that I, HENRY D. ROBINSON, a citizen of the United States of America, residing at Chester, in the county of Wayne and State of Indiana, have invented certain new and useful Improvements in Twisting-Wheels for Fence-Machines, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to that class of fence-machines in which vertical pickets are secured in position by twisted horizontal wires.

My invention consists in a wheel adapted to revolve by means of sprockets and chain, the wheel being so constructed that the wire to be twisted is held up and guided by revolving cylinders having their bearings within the rim of the wheel through which the wires pass.

In the drawings, Figure 1 is a side elevation of the wheel, showing the sprockets on its periphery, the annular bearing thereon upon which the wheel revolves, the revolving cylinders in position, the head-blocks in which the cylinders have their bearings, and the openings through which the wires pass. Fig. 2 is a vertical central sectional view of the wheel, showing one of the vertical cylinders and portion of the head-blocks in which they have their bearings, also the screws by which the head-blocks are secured to the inner rim of the wheel. Fig. 3 is a front elevation of one of the head-blocks, showing the seats of the journals of the revolving cylinders. Fig. 4 is a horizontal section of the same. Fig. 5 is a top plan view of the upper and lower head-blocks, showing the seats for the journals of the cylinders, and a curved recess forming one side of the opening through which the wire passes. Fig. 6 is a horizontal section of the same. Fig. 7 is a view of one of the revolving cylinders with its journals.

In Fig. 1, *a a a* represent the sprockets on the outer circumference of the wheel; *b b b*, the annular bearing, which is a portion of the rim of the wheel and which forms the axis on which it is revolved. *c c* are the vertical revolving cylinders, the journals *e e* of which have their bearings in the head-blocks A A. *c′ c′* are similar cylinders placed horizontally within the wheel, the journals of which have their bearings in similar head-blocks B B. Both the head-blocks A A and B B are firmly attached to the inner surface of the wheel by means of the screws *d d* and *d′ d′*. These revolving cylinders *c c* and *c′ c′* are placed at right angles and at such distance asunder and from the edge of the head-blocks as may be requisite. The open spaces *x x* are for the wire to pass through, and the weight of the wire and the accumulated weight of the pickets as they are attached is sustained by the upper horizontal cylinder, which revolves, carrying the wire without friction, while the pressure on the wire to produce the twist, which is lateral, is borne by the vertical cylinders, thus doing away with friction in the same manner. By the revolutions of the wheels the horizontal cylinders become vertical, and vice versa, but producing the same results—that is, passing the wires through the wheel in the process of twisting without friction. The space *x x* is of sufficient size to admit of any splice or inequality of the wire passing through without hinderance.

In Fig. 2, *b b* represents the projection of the rim of the wheel, which is turned down true and forms the journal-bearing, upon which the wheel revolves in suitable boxing.

In Figs. 3 and 4, A is the head-block; *e′ e′*, journal-seats for the cylinders; *d″*, screw-holes, and *e″ e″* oiling-holes.

In Figs. 5 and 6, B represents the alternative head-block; *e′ e′*, the journal-seats; *d″*, the screw-holes.

In Fig. 7, *c* is the revolving cylinder; *e e*, the journals of the same.

Having thus fully described my said invention, what I claim as new, and desire to secure by Letters Patent, is—

A twisting-wheel composed of the rim provided with a bearing *b* as an axis and having projecting sprockets *a a a* on its periphery, head-blocks A A and B B, secured within the rim, cylinders *c c c′ c′*, journaled therein, forming openings *x x*, and screws *d d* and *d′ d′*, all combined and operating in the manner and for the purpose herein described.

In testimony whereof I affix my signature in presence of two witnesses.

HENRY D. ROBINSON.

Witnesses:
J. C. DOAN,
W. T. DENNIS.