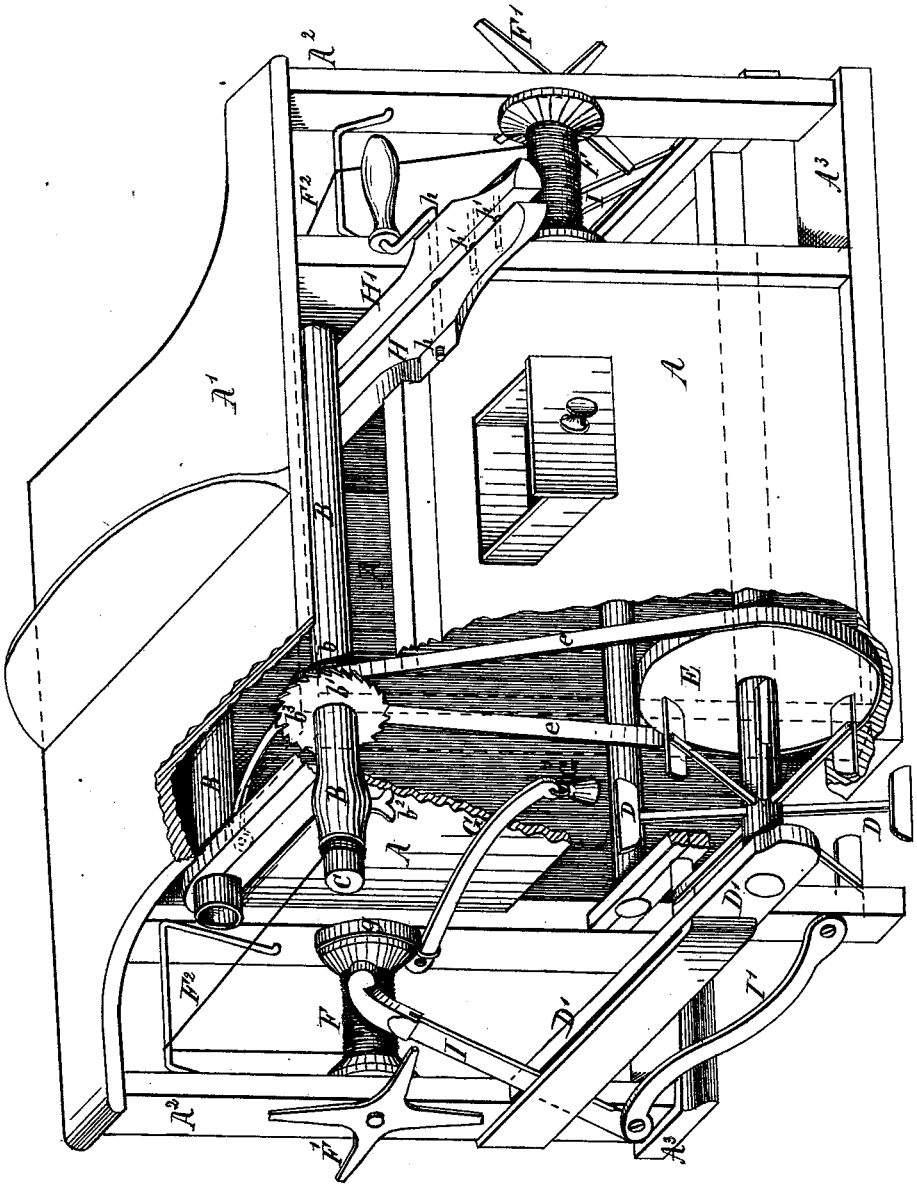
G. W. CHODRICK.

BROOM-MACHINE.

No. 188,003. Patented March 6, 1877.



Witnesses.
Henry Orth
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UNITED STATES PATENT OFFICE.

GEORGE W. CHODRICK, OF STOCKTON, MISSOURI.

IMPROVEMENT IN BROOM-MACHINES.

Specification forming part of Letters Patent No. **188,003**, dated March 6, 1877; application filed September 12, 1876.

To all whom it may concern:

Be it known that I, GEORGE W. CHODRICK, of Stockton, in the county of Cedar and State of Missouri, have invented certain new and useful Improvements in Broom-Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawing, and to the letters of reference marked thereon, which form a part of this specification.

The object of this invention is to provide a machine in which the various operations of winding, sewing, and trimming the broom can be performed by three men without the delay and loss of time that is usually involved in the ordinary course of manufacture.

The drawing represents a perspective view of my machine, portions of the inclosing casing being broken away in order to show more plainly some of the devices.

A A^1 are the sides and top of the casing. A^2 is a post, supported at a short distance from one corner of the casing by means of the sill A^3 and a projecting portion of the top. B is a hollow shaft, journaled in the sides of the machine, and carrying a band-wheel, *b*, a ratchet-wheel, b^1, and a set-screw, b^2. C represents a broom-handle inserted in the shaft B, and secured by set-screw b^2. D D represent a treadle-wheel the shaft of which has one end journaled in a girt, D′, and the shaft is arranged parallel with and at a short distance from the side A. E is a band-wheel, mounted upon the shaft of the treadle-wheel, and connected with the band-wheel *b* by a belt, *e*. F is the wire-spool, journaled in post A^2, and one of the corner-posts of the main frame-work. F^1 is a star-wheel or crank-wheel to wind the wire F^2 upon spool F. G is a brake-lever, the strap *g* of which wraps a drum attached to and carried by spool F. G′ is a weight hung upon lever G to regulate at pleasure the friction of the strap *g* upon the drum, and thus increase or diminish the tension of the wire F^2 upon the broom-corn on handle C.

It is apparent that the pawl b^3, which engages with the teeth of the ratchet-wheel b^1, will prevent the shaft B from turning backward and loosening the wire when the foot is removed from the treadle-wheel. H is the stationary jaw of the sewing-clamp, and H′ is the movable jaw. *h* is the binding-screw, and *h′ h′* are the guiding-pins, which determine the width of the broom. I is a knife arranged to play in a slot formed for its reception by screwing a piece of wood or metal to the outer side of girt D^1, one end of the knife being pivoted to the free end of a vibrating link, I′, so as to impart to the knife the desired drawing cut.

The operation of the machine will be fully understood from the drawing and description. The handle for the broom is placed in shaft B, and secured by set-screw b^2. The end of the wire wound upon spool F is attached to the handle in any usual manner. By means of the treadles D, band-wheel E, and band *e* the operator is enabled to rotate the shaft B with his foot while manipulating the wisps of straw with his hand.

Lever G, weight G′, and strap *g* furnish a ready means for adapting the tension of the wire to the work to be performed. The lever G may be provided with perforations, or may be notched at different points for attaching the weight at different distances from the spool F. The flexibility of the strap *g* insures a uniform friction at all points of the periphery of the spool.

What I claim is—

The combination of the treadle-wheel D, band-wheel E, shaft B, spool F, friction-strap *g*, and tension-lever G, substantially as and for the purposes set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

GEORGE W. CHODRICK.

Witnesses:
JAMES T. FARRIS,
LOUDEN H. PARK.