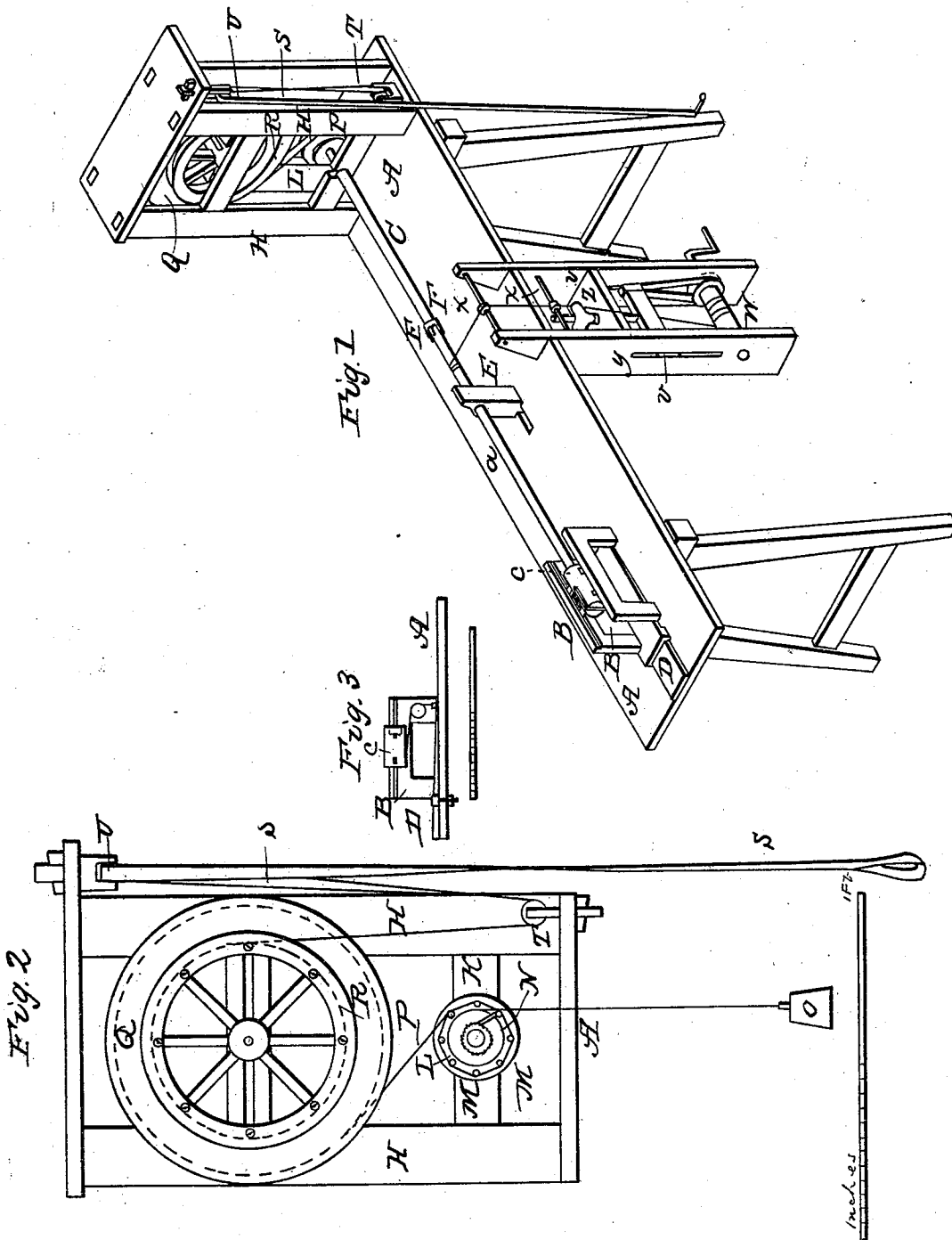


H. WARNER.  
Broom Machine.

No. 5,444.

Patented Feb. 15, 1848.



# UNITED STATES PATENT OFFICE.

HENDERSON WARNER, OF HAMILTON COUNTY, OHIO.

## MACHINERY FOR MAKING BROOMS.

Specification of Letters Patent No. 5,444, dated February 15, 1848.

*To all whom it may concern:*

Be it known that I, HENDERSON WARNER, of the county of Hamilton and State of Ohio, have invented a new and useful Machine for Making Brooms of Broom-Corn; and I do hereby declare that the following is a full, clear, and exact description of the principle, construction, and operation of the same, reference being had to the annexed drawings, making a part of this specification in which—

Figure 1 is a perspective view. Fig. 2 is a transverse section through the frame, and Fig. 3 shows the apparatus for holding the handle.

The nature of my invention consists in an apparatus for binding the broom corn firmly to the handle, by means of the mechanism below described.

The machine is composed of the following parts namely: A substantial wooden bench (A A), elevated three feet from the ground by means of four wooden legs. This bench is eight feet long and twenty inches wide; mortised into the left end of the bench are two frames (B, B) grooved horizontally, to carry a cylindrical piece of wood (c) which is hollowed out at one end to receive the broom handle (a). This cylinder (c) is kept pressing hard against the handle by the wooden spring (D Figs. 1 and 3) to which it is attached by a strap. The other end of the handle is supported by the carrier (E) and is held fast by four knives (F F) secured by iron straps into the end of the wooden shafts (G) which at the other end is journaled into the vertical frame (H H) within which an iron ratchet wheel (K Fig. 2) is fixed firmly on the end of the said shaft (G). This ratchet wheel has shoulders turned upon it, on each side the ratchet. These shoulders form journals for two iron disks (L Figs. 1 and 2). These disks, though capable of revolving on the ratchet wheel are firmly united together by iron studs (M) and thus form a pulley which when acted on by the operator, pushes around the ratchet wheel by means of the click (N) and when left at liberty again the pulley is carried back by the weight (o) whose strap is attached to a smaller pulley turned on the outside of one of the disks.

The pulley L is operated on by the strap (P) from the large pulley (q) which has attached to it a smaller one (R) from which another strap (s) passes around the rollers (T U) to be acted on by the foot of the operator.

The apparatus (V V) is to hold and regulate the wire or cords used for binding on the corn.

(W) is a spool or roller to hold a supply of wire or cord. (x x) are small pulleys to convey the said wire or cord. (y) is a small beam having attached two straps which pass around the spool (W) and produce friction in proportion as the beam (y) is drawn up by the thumb screw (z).

Operation: First wind a supply of wire or cord onto the spool (W) by means of the winch and pass the loose end over the small pulleys (x x) and tack it to the handle (which has been previously inserted by placing the top end in the socket of cylinder (c) and lifting the knife of shaft (G) enough to admit the butt end and then pressing both together into their place.) This done place the right foot in the loop of the strap (S) and thus inducing a revolving motion in the shaft (G) through the medium of the pulleys, at the same time apply the corn under the wire then raise the foot and the weight will carry the pulleys, &c., back preparatory to another wind and when the requisite number of layers of corn have been applied the wire is again secured by a tack and cut off.

I do not claim any of the parts of this machine except in their application to said machine, but

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

The combination of the following apparatus in a broom making machine substantially as herein described namely the peculiar arrangement of the ratchet wheel and its attached pulleys (L), the apparatus for holding and pressing forward the handle, the apparatus for holding and regulating the wire or cord.

HENDERSON WARNER.

Attest:

GEO. H. KNIGHT,  
EDWARD HY KNIGHT.