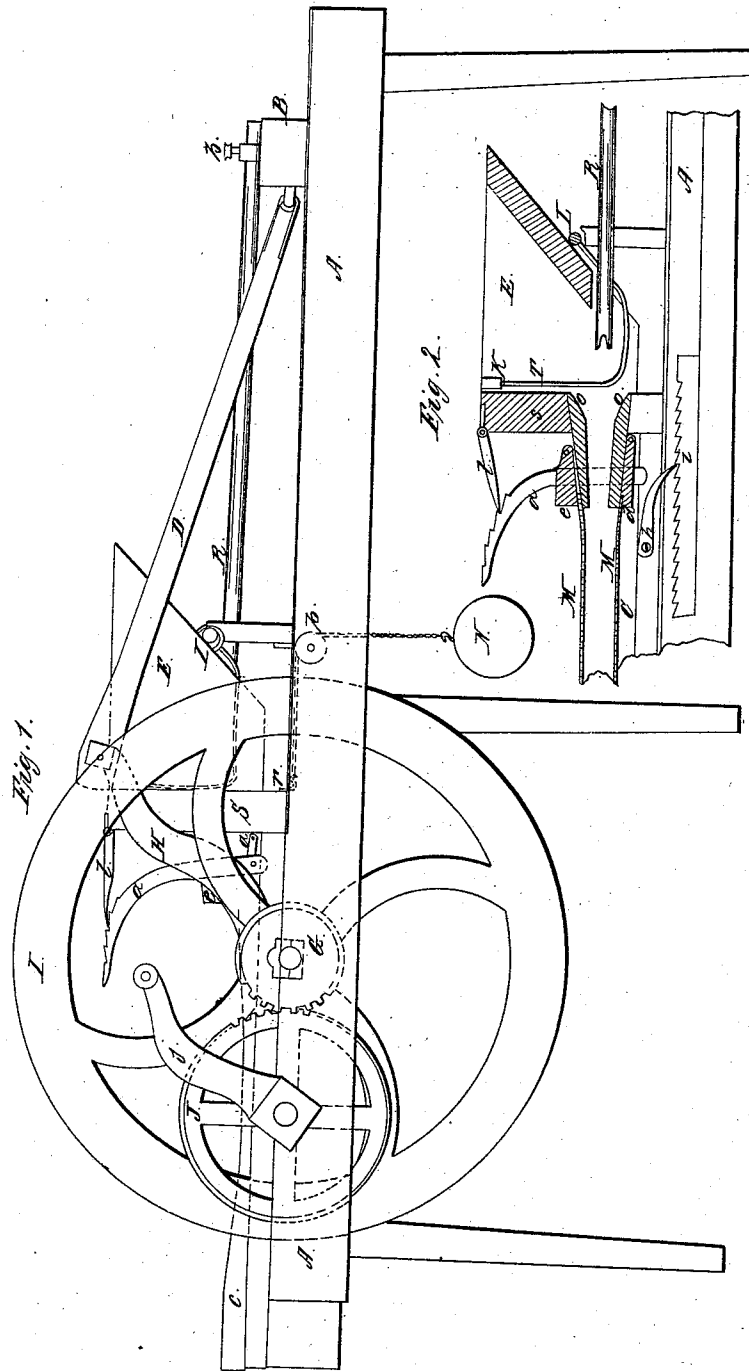


J. W. HOWELL.
Stuffing Horse Collars.

No. 10,534.

Patented Feb. 14, 1854.



UNITED STATES PATENT OFFICE.

JOHN W. HOWELL, OF NEW PARIS, OHIO.

MACHINE FOR STUFFING HORSE-COLLARS.

Specification of Letters Patent No. 10,534, dated February 14, 1854.

To all whom it may concern:

Be it known that I, JOHN W. HOWELL, of New Paris, in the county of Preble and State of Ohio, have invented a new and
5 useful Machine for Stuffing Horse-Collars; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying
10 drawing, making part of this specification.

The nature of my invention consists in so constructing a machine, that by means of a forked or other shaped piston working through a hopper with an adjustable crib
15 or bottom holding the straw, in connection with a clamp for retaining the open end of the leather or casing of said collar it may, by suitable gearing actuating the piston, be stuffed to any desired degree of hardness
20 and that with great rapidity.

In Figures 1 and 2 of the drawings: A A represents the longitudinal portion of an oblong frame or table supported at a suitable height. At one end thereof is secured
25 in proper journals a fly wheel, I, carrying a pinion G on its shaft.

J is a cog wheel or driver, actuated by the winch J' which on turning gives a rapid motion to the pinion.

30 H is a crank on the shaft of G and by a pitman D gives a sliding movement to the headblock B, on edge ways, united the framing A. Connected to this block B is the piston or stuffer R, which is secured to the headblock by a set screw b which admits the length of the rod to be adjusted. This headblock is confined in its slide movement by jogs or lips entering under the
ways.

40 C is a board for supporting the collar, and is sufficiently thick to admit of its being hollowed at its narrow end, to receive and sustain the collar; this board is retained on a sliding board working in ways.

45 E is the hopper for holding the straw or material for filling the collar. It is open at top, but its bottom is closed by a lifting or adjustable grate F K, the hinge of which is at L.

50 N is a heavy weight keeping the hopper and collar up to the work of stuffing.

S is the front of the hopper; through a suitable opening therein is inserted the directing funnel o, o, on which the leather col-

lar M M forming a hollow tube or sack is 55 secured by the clamps d and e closed thereon by the bent strap lever, a, the leather retained between the jaws d and e and o, o, the dog l retaining the clamps on the leather. 60

h is also a dog working on the rack i secured on the rear side of the frame A. The use of the rack is to prevent the weight drawing on the hopper until the dog is lifted. 65

P is a pulley over which the cord from the weight N connected with the hoppers front S is connected.

The mode of operation in stuffing a collar is as follows: The open end of the collar 70 is slipped on the end of the funnel o, o, the jaws or clamps e and d having been released by liberating the lever a. When said lever is brought into position as seen in the drawings the collar will be securely fastened 75 or clamped. The straw is then placed in the hopper E, having been cut about 1 foot long. It rests across the grating F. The forked end of the piston R on sliding through the hopper, gathers a few straws in 80 its fork and on being pressed forward by the block B through the pitman D and crank H, the straw is carried into the leather collar, and this movement of the rod R is kept up until the collar is filled 85 and well packed. The swell or middle of the collar is first stuffed (although the far end may be done previously) and by raising the dog h, permits the weight to draw the hopper toward the piston R and the rod 90 or piston R to be withdrawn slightly at each movement of the hopper. A little exercise of judgment is required of the person forming the collar as regards the time of moving the dog h; but the rapidity and 95 efficiency of this mode of performing a hitherto laborious part of the manufacture of horse collars can not otherwise than be appreciated. By means of the adjustable bottom or grating F the quantity of straw 100 through which the fork R passes may be regulated. If a smaller quantity, say in light buggy collars, is desired, it is only necessary to raise the bar K of the grate and the fork will have less to pass through, 105 the bars F of course being placed on each side of the piston do not interfere with its movement.

Having described the nature of my improvement in machines for stuffing horse collars what I claim as my invention and desire to secure by Letters Patent is—

5 The construction of the hopper E with an adjustable grate or crib bottom F in combination with the piston R, funnel *o*, *o*, clamps *e* and *d* and lever *a* acting thereon, substantially in the manner set forth in the

foregoing specification and accompanying 10 drawing.

In testimony whereof I have hereunto signed my name before two subscribing witnesses.

JOHN W. HOWELL.

Witnesses:

LEWIS S. DAVIS,
JOHN D. KING.