(No Model.)

W. C. McCORMACK.

STAVE DRESSING MACHINE.

No. 255,647. Patented Mar. 28, 1882.

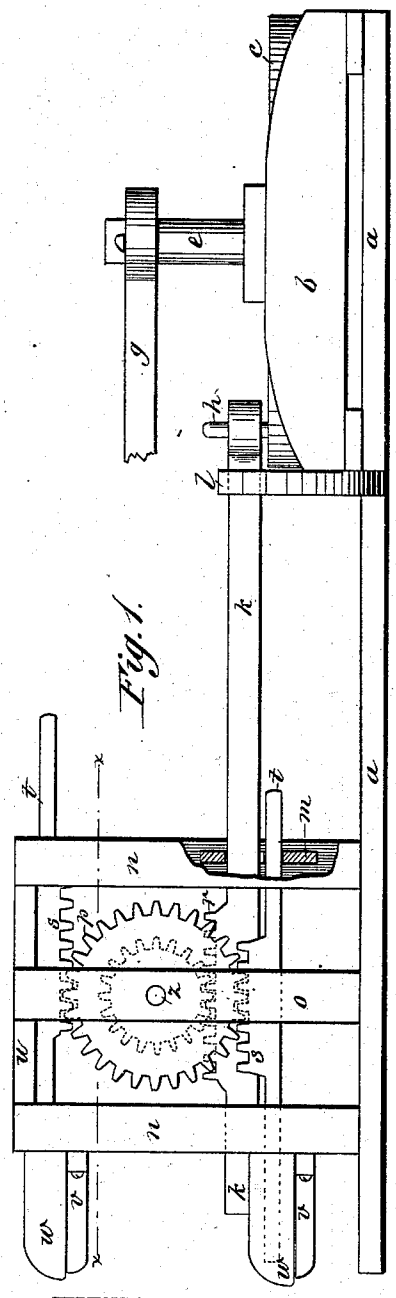


Fig. 1.

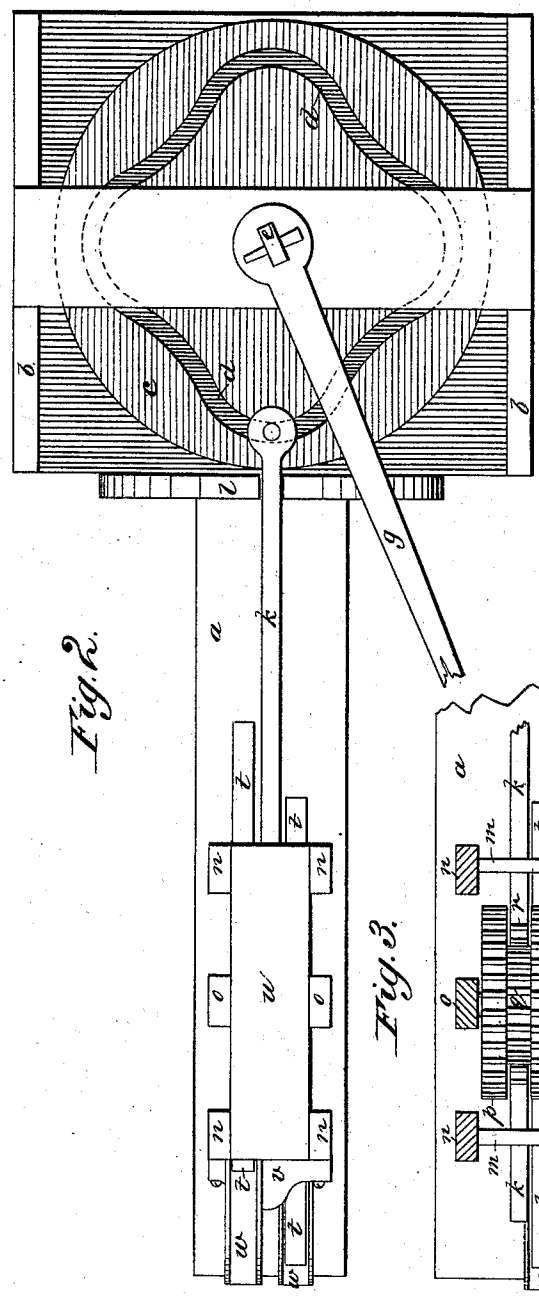


Fig. 2.

Fig. 3.

WITNESSES:

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UNITED STATES PATENT OFFICE.

WILLIAM C. McCORMACK, OF STANFORD, KENTUCKY.

STAVE-DRESSING MACHINE.

SPECIFICATION forming part of Letters Patent No. 255,647, dated March 28, 1882.

Application filed November 5, 1881. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM C. McCORMACK, of Stanford, in the county of Lincoln and State of Kentucky, have invented a new and Improved Stave-Dressing Machine; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side elevation of my improved stave-dressing machine. Fig. 2 is a top view, and Fig. 3 a detail view, of the same.

My invention relates to improvements in stave-dressing machines; and it consists in the peculiar construction and arrangement of the parts, as hereinafter more fully set forth.

In the accompanying drawings, *a* represents the base of my improved stave-dressing machine, to one end of which is secured a frame, *b*, which supports a horizontal wheel, *c*, provided with a cam-groove, *d*, on its upper face. The horizontal cam-wheel *c* is centrally journaled to the frame *b* by the vertical shaft *e*, having a horizontal arm, *g*, attached to its upper end, to which the horse or other power is applied to operate the stave-dressing machine, hereinafter described.

The cam-groove *d* in the upper face of the horizontal wheel is preferably made of a quadrangular form, with its corners rounded and its sides somewhat curved, and adapted to receive a pin, *h*, which passes perpendicularly through one end of a cam-rod, *k*, and thence into the cam-groove *d*. The cam-rod *k* is guided and supported in its reciprocations near the horizontal wheel *c* by passing through an opening in the vertical arched bridge *l*, secured to the frame *b*, and the cam-rod *k* passes thence through openings made in transverse pieces *m m*, connecting the parallel posts *n n*, secured to the base *a* of the machine.

o o represent two parallel posts, secured to the base *a* of the machine opposite each other and intermediate between the posts *n n*.

p p represent two cog-gears of the same diameter, and *q* a cog-gear of less diameter than the cogs *p* and intermediate between them. The cog-gears *p p q* are fast on a common axle, *z*, journaled in the opposite posts, *o o*.

r represents a rack on the upper face of the cam-rod *k*, adapted to engage with the intermediate cog-gear, *q*, when motion is imparted to the cam-rod by the cam-wheel *c* and impart a rocking motion to the gear *q*, and also a rocking motion to the gears *p p*, secured to the same axle, *z*. The gears *p p* engage with racks *s*, secured to the upper and lower faces of the plungers *t t*, and impart a horizontal reciprocating motion to said plungers in opposite directions at the same time. The plungers *t t* are supported at their opposite ends and slide in openings made in the transverse pieces *m m*, connecting the opposite posts, *n n*, and are arranged one above and the other below the cog-gears *p*.

u represents a cap-piece connecting the upper ends of the posts.

v v represent brackets secured to the outer faces of the two outer parallel posts, *n n*, to which are secured the open stave-boxes *w w*, the upper face of the bottom of each stave-box being flush with the lower face of a plunger, so that by rotating the cam-wheel the plungers will move back and forth in the boxes at the same time and in opposite directions.

Stationary knives adapted to dress the staves are inserted in the stave-boxes, which latter are made sufficiently long to allow full play to the plungers and also to receive the staves.

In practice, power being applied to the horizontal arm *g*, the cam-wheel is revolved and a horizontal reciprocating motion in opposite directions and at the same time is imparted to the upper and lower plungers in their respective stave-boxes, and staves inserted in the boxes are forced over the knives, dressed, and discharged from the boxes by the plungers.

It is obvious that several such stave-dressing machines constructed as above described, each provided with a cam-rod engaging with the cam-groove of the wheel, could be driven by the same cam-wheel actuated by the same power, thereby greatly increasing the number of staves dressed.

It is obvious that one cog-wheel would drive both plungers if the stave-boxes were arranged in the same vertical plane one over the other; but in order to facilitate the feeding of the machine another cog-wheel on the same axis and of the same diameter has been introduced,

thereby arranging the top box and plunger to a convenient distance for feeding on one side.

What I claim as my invention is—

The combination of the cam-wheel *c*, cam-rod *k*, provided with the rack *r*, cog-gears *p p q*, plungers *t t*, having racks *s s*, and stave-boxes *w*, provided with stationary knives, said plungers operating to force the staves past the knives, all substantially as described, and for the purpose set forth.

WILLIAM CRAIG McCORMACK.

Witnesses:

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