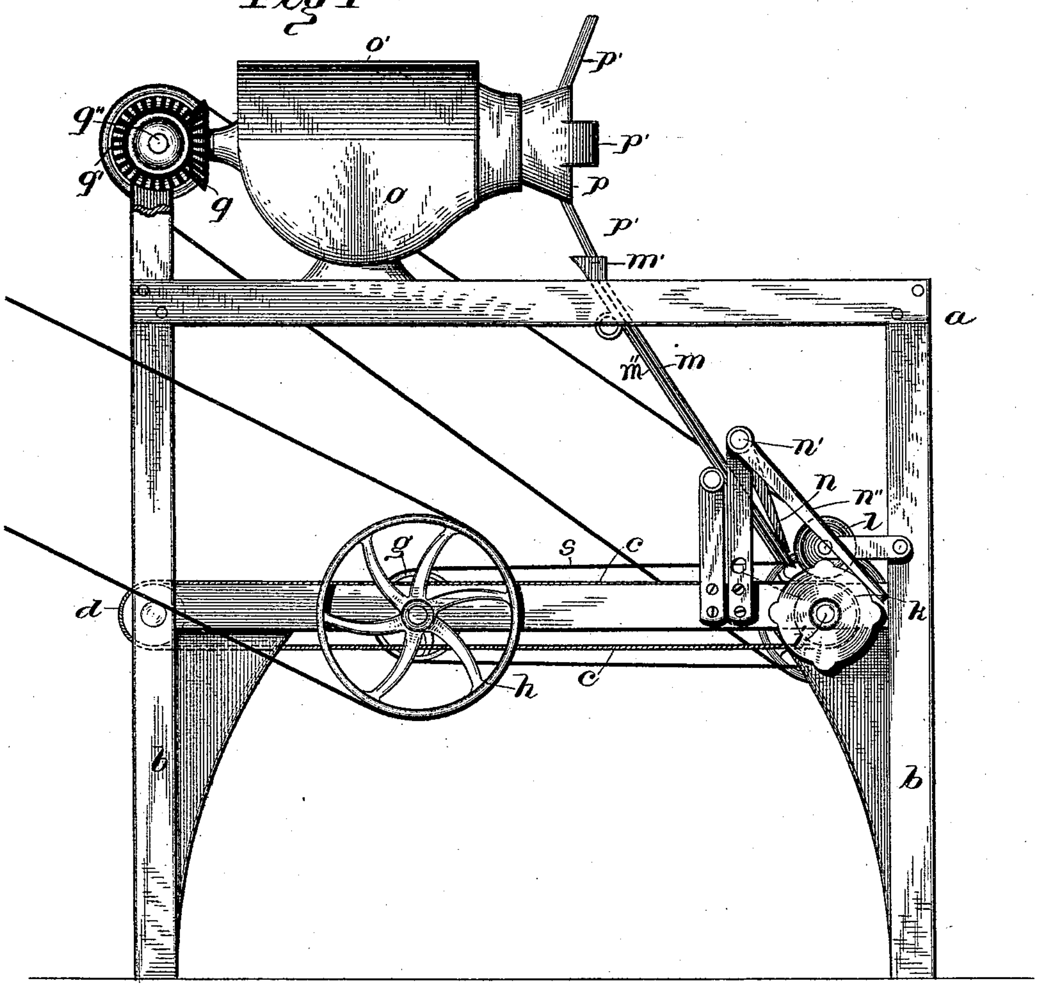
(No Model.) 2 Sheets—Sheet 1.

J. M. KING.

TOBACCO TAGGING MACHINE.

No. 494,296. Patented Mar. 28, 1893.

Fig 1



Attest.
C. C. Burdine
H. Hume Clendenin

Inventor,
James M. King
per DuBois & DuBois
Att'ys.

(No Model.) 2 Sheets—Sheet 2.

J. M. KING.

TOBACCO TAGGING MACHINE.

No. 494,296. Patented Mar. 28, 1893.

Fig 2

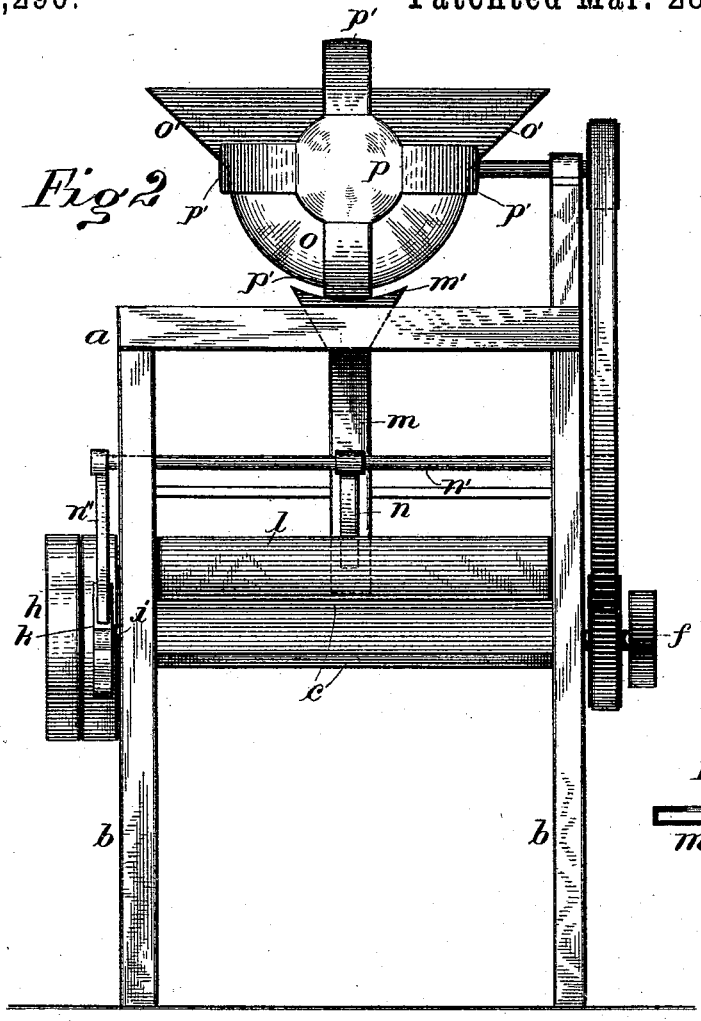


Fig 5

Fig 3

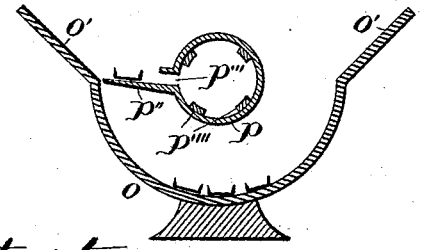
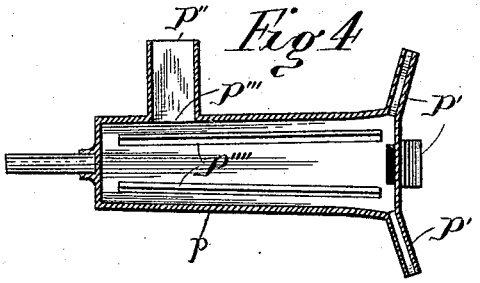


Fig 4



Attest;
C. C. Burdine
N. Hume Clendenin

Inventor,
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UNITED STATES PATENT OFFICE.

JAMES M. KING, OF NORTH DANVILLE, VIRGINIA.

TOBACCO-TAGGING MACHINE.

SPECIFICATION forming part of Letters Patent No. 494,296, dated March 28, 1893.

Application filed March 24, 1892. Serial No. 426,299. (No model.)

To all whom it may concern:

Be it known that I, JAMES M. KING, a citizen of the United States, residing at North Danville, in the county of Pittsylvania and State of Virginia, have invented certain new and useful Improvements in Tobacco-Tagging Machines; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention has reference to that particular class of tobacco tagging machines in which the tags are automatically fed and applied to the plugs of tobacco by means of a regulating arm actuated by a cam wheel.

The object of my invention is to produce a more simple machine than those heretofore in use, and also one that will be more effective and accurate in operation.

To this end my invention consists in the peculiar features and combinations of parts more fully described hereinafter and pointed out in the claims.

In the accompanying drawings: Figure 1 represents a side elevation of my invention. Fig. 2 represents a front elevation thereof. Fig. 3 represents a vertical section of the hopper and cylinder for supplying the tags to the chute; Fig. 4, a longitudinal section of the supply cylinder; Fig. 5, a cross section of the feed chute.

The reference letter *a* represents the framework of my device, which is supported by suitable legs *b*. Placed on the bottom of the frame *a* is an endless feeding apron *c*, mounted on rollers *d* and *e* journaled in each end of the frame. On the outside of the frame and attached to the same shaft *i* as the roller *e*, is a pulley *f*, which is actuated by a belt *s* from pulley *g*, the latter being journaled on the same shaft with the drive pulley *h*, which is driven by any suitable power. Attached on the opposite end of the shaft *i* and on the outside of the frame, is a cam wheel *k*, which revolves with the pulley *f*. Secured to the end of the frame and directly over the roller *e*, is a press-roller *l*, adapted to press the tags into the tobacco as the plugs pass under its periphery. Starting from the top of the frame and slanting toward the forward end, is a feed chute *m*, having a flaring mouth *m'*. The lower end of the chute is supported by vertical standards and is cut off just above the feeding apron *c* directly in front of the presser-roller *l*. The chute is intercepted by a check *n*, which is rigidly secured on a shaft *n'* above the chute. Also secured on the shaft *n'*, and on the outside of the frame, is a lever *n''*, the lower end of which lies on the periphery of cam wheel *k*. The feed chute *m* is provided in its under surface with a V-shaped groove *m''*, which receives the points of the tag. The tag is thus guided with its points down, throughout the entire length of the chute, and when it reaches the bottom, the points of the tag are in position to enter the plug that is on the apron. The construction of the chute is clearly shown in cross-section by Fig. 5.

The tag hopper and means for feeding the tags to the chute, will now be described.

Placed on the top of the frame is an open-topped circular bottomed hopper *o*, having flaring side walls *o'*, and vertical end walls *o''*. Journaled in the end-walls *o'*, is a drum *p*, having hollow arms or conveyers *p'* on the outside of one of the end walls, and which alternately empty in the flaring mouth *m'* of the chute *m*. Near the rear end of this drum is placed a scoop *p''*, the lower end of which sweeps the bottom of the hopper *o*. A side opening *p'''* is made in the drum where the scoop joins it, through which opening the tags drop when the scoop is raised to vertical position. The drum is revolved by a bevel gear *q* meshing with an annular gear *q'* on a shaft *q''*, driven by a belt and pulley from the shaft *i*. The interior of the drum is provided with longitudinal agitating vanes *p''''* which tend to keep the tags always in motion, and, as the interior is sloping, they naturally gravitate toward the mouth of the drum.

Having fully described the preferred construction of my device, I will now proceed to describe its operation.

Power having been applied to the pulley *h*, its revolution sets in motion, through the medium of belt *s* and pulley *f*, the shaft *i*, which starts the feed apron, through the medium of roller *l* and also revolves the cam wheel *k*.

The same revolution starts the drum p, and as one of the flaring arms p' reach the position shown in Fig. 2, its mouth will be directly over the flaring mouth of the chute, and any tags that are in the forward end of the drum will gravitate through arm p' and into the chute m. The tags pass down the chute and are intercepted by means of the check n, the end of which always projects into the chute when the end of the lever lies between the cams on the cam wheel k, but when the cam wheel revolves, the cams on the periphery thereof engage and raise the lever, which movement also raises the check and allows a tag to pass on down the chute. The rising of the check is so timed that a plug of tobacco will always be under the mouth of the chute as the tag is released, the plugs being fed in the rear end and placed upon the feed apron. The feed apron continues to revolve and carries the plug under the presser-wheel l, which forces the teeth on the side of the tags into the plug, thus securing the tag to the plug. After passing under the roller l, the plugs fall into a suitable receptacle below.

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

1. The combination in a tobacco tagging machine, of a hopper, a revoluble drum therein, and a scoop on said drum for transferring tags from the hopper to the drum, substantially as described.

2. In a tagging machine the combination with a hopper, a revoluble drum therein, a scoop on said drum for raising tags from the hopper to the drum, and a feed chute registering with one end of the drum and so located that it receives the tags discharged therefrom, substantially as described.

3. In a tagging machine the combination with a hopper, a revoluble drum therein, a scoop on said drum for raising tags from the hopper to the drum, a feed chute registering with one end of the drum and so located that it receives the tags discharged therefrom, and a check in said chute for intermittingly feeding tags therefrom, substantially as described.

4. In a tobacco tagging machine, the combination with a tag hopper, of a revoluble drum therein, a scoop on said drum, lateral arms or conveyers secured to the drum, and a feed-chute adapted to receive tags from the conveyers, substantially as described.

5. The combination in a tagging machine, of a hopper having a revoluble drum therein, a scoop on said drum, lateral arms or conveyers secured to the drum, a feed chute, and a check in said chute for intermittingly feeding tags therefrom, substantially as described.

6. In a tagging machine the combination with a hopper, a revoluble drum therein, a scoop on said drum for raising tags from the hopper to the drum, and agitators on the interior of the drum for keeping the tags in motion, substantially as described.

7. In a tagging machine the combination with a hopper, a revoluble drum therein, a scoop on said drum for raising tags from the hopper to the drum, agitators on the interior of the drum, and a feed chute registering with one end of the drum and so located that it receives the tags discharged therefrom, substantially as described.

8. The combination in a tagging machine, of a hopper, a revoluble drum therein, a scoop on said drum for raising tags from the hopper, agitators on the interior of the drum, lateral arms or conveyers secured to the drum, a feed chute, and a check for intermittingly feeding tags from the chute, substantially as described.

9. In a tagging machine the combination with a hopper, of a revoluble drum therein, a scoop on said drum for raising tags from the hopper to the drum, agitators on the interior of the drum, a feed chute registering with one end of the drum and so located that it receives the tags discharged therefrom, and a check for intermittingly feeding tags from the chute, substantially as described.

10. In combination with pressure rollers, an endless belt passing between the rollers, a feed chute leading to said belt, and a check for intermittingly releasing tags from the chute, substantially as and for the purpose set forth.

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

JAMES M. KING.

Witnesses:
B. S. MOTLEY,
WALTER R. HICKEY.