

UNITED STATES PATENT OFFICE.

HARRISON W. HOLLEY, OF HALE'S FORD, VIRGINIA.

IMPROVEMENT IN MACHINES FOR ROLLING AND CUTTING TOBACCO.

Specification forming part of Letters Patent No. 209,808, dated November 12, 1878; application filed June 17, 1878.

To all whom it may concern:

Be it known that I, HARRISON W. HOLLEY, of Hale's Ford, in the county of Franklin and State of Virginia, have invented a new and Improved Machine for Rolling and Cutting Plug-Tobacco, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a side elevation of my improved machine for shaping and cutting plug-tobacco; Fig. 2, a vertical longitudinal section on line *x x*, Fig. 3, a top view of the same; Fig. 4, a detail side view of the lever and crank arrangement for operating the combined oil-packing boxes and scrapers; and Fig. 5 is a detail vertical transverse section of one of the pressure-rollers and of a combined packing-box and scraper.

Similar letters of reference indicate corresponding parts.

The invention will first be described in connection with the drawing, and then pointed out in the claim.

Referring to the drawings, A represents the supporting-frame of my improved machine for shaping and cutting plug-tobacco, which frame is made of side walls that are firmly braced by transverse pieces, and arranged to form at one end a kind of box for a feed-belt, B, and at the other end a support for a series of pressure and cutter rollers.

The feed-belt B is tightly stretched over rollers B¹, of which the inner one forms, in conjunction with a top roller, B², the first set of pressure-rolls. The leaf-tobacco is prepared in the ordinary manner and placed on the feed-belt, the box receiving the proper quantity to make the plug the desired weight.

When the tobacco passes through between the pressure-rollers B¹ B² it is lightly pressed and shaped, and then passed over a fixed platform or bridge, C, to a second set of rolls, D D, which are placed closer together than the first rollers, and provided with one or more circular cutting-knives, D', so that the tobacco is pressed harder and split at the same time in longitudinal direction.

The circular knives D' of the rollers D overlap each other and exert a shear cut on the tobacco, they being fastened by means of washers and screws, or otherwise, to the roller-

sections, and designed to give the cut a smooth finish.

From the pressing and cutting rollers D the tobacco passes to a third set of rollers, E, which are placed closer together than the middle rollers, D, so as to exert still greater pressure on the tobacco, and reduce it thereby to the required thickness.

The upper roller E is arranged with a cutting-knife, E', that extends over its entire length, and serves to cut the plug transversely to the desired length, a groove and sole-leather filling, E², of the lower roller E admitting the entering of the knife E', so as to keep it free from gum. The leather filling may be readily replaced when worn out.

The feed-belt B, the upper pressure-roller, B², and the middle rollers, D, are arranged with combined boxes and scrapers F, that are filled with oil-packing, for the purpose of oiling and scraping the feed-belt and pressure-rollers.

The combined boxes and scrapers F are applied to cross-shafts *a*, that turn in bearings of frame A, and are provided at one end with exterior crank-disks *b*, which are connected by pivoted crank-rods *d* with a lever-rod, *e*, pivoted to a hand-lever, *f*, so as to be jointly operated by the latter. This lever-and-crank arrangement admits the application of the boxes and scrapers to, or their removal from, the feed-belt and rollers, and facilitates the cleaning of the scrapers.

The packing is supplied from time to time with oil through top holes of the boxes.

The feed-belt and pressing and cutting rollers are revolved in the same direction by suitable transmitting-gearing from a hand or power shaft with fly-wheel, so as to take up and operate successively on the tobacco and the journal-boxes of the lower rollers, made adjustable in the usual manner by set-screws in slots of the side walls of the frame, so as to be raised or lowered for making the plugs thicker or thinner, as desired.

The side walls of the frame A are provided at the inside, at that portion along which the tobacco passes, with longitudinal side strips G, that are dovetailed into the frame, and arranged with rear handles, so as to be readily removed, cleaned from the adhering gum, and then replaced.

By the use of this shaping and cutting machine, plug tobacco may be turned out quicker and with a better finish than when made by hand, and plugs of any thickness, length, and width be obtained.

The machine is simple and strong, easily kept clean and in repair, and operated with great facility.

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

In rolling and cutting plug-tobacco, the ma-

chine herein described, consisting, essentially, of three sets of pressure-rolls, arranged successively close together, an endless feed-belt passing through the first set of rolls, longitudinal knives on the second set, and transverse knives on the third set, all of said rolls being geared together, as shown and described.

HARRISON WYSONG HOLLEY.

Witnesses:

K. OLEY,

WM. E. HOLLEY.