

D. SMITH.

Preparing Tobacco for Packing.

No. 3,404.

Patented Jan'y 15, 1844.

Fig. 1

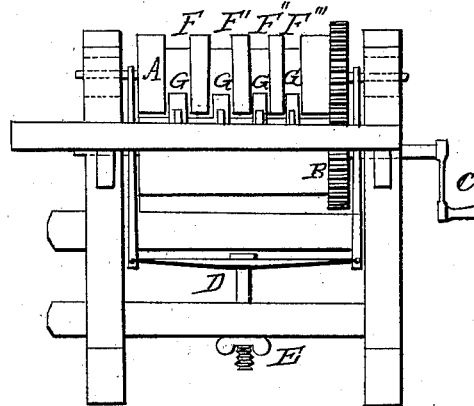
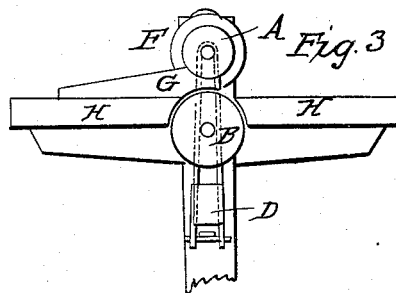
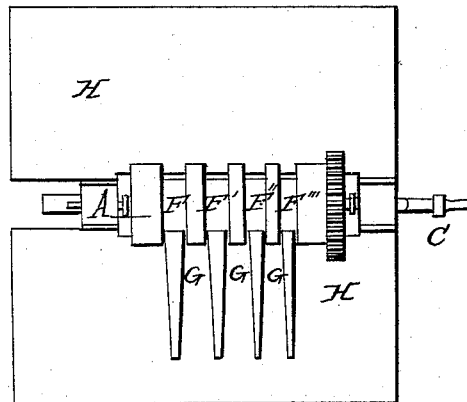


Fig. 2



UNITED STATES PATENT OFFICE.

DAVID SMITH, OF SOUTH HILL, VIRGINIA.

IMPROVEMENT IN MACHINES FOR PREPARING TOBACCO FOR PRESSING.

Specification forming part of Letters Patent No. 3,404, dated January 15, 1844.

To all whom it may concern:

Be it known that I, DAVID SMITH, of South Hill, Brunswick county, Virginia, have invented a new and useful machine for preparing hands or bundles of tobacco for being packed in hogsheads, and which is applicable, also, to the preparing of rolls of tobacco for being packed into boxes; and I do hereby declare that the following is a full and exact description thereof.

It is well known that the value of tobacco is dependent, in a great degree, upon the closeness with which it is packed in the hogsheads that contain it. The ordinary way of packing is to lay the hands or bundles as closely together as they can be placed, and then to prize them by means of a powerful press; but it is not possible in this way to pack the article so compactly as is to be desired. Attempts have been made to condense the hands or bundles before placing them in the hogshead by passing them between rollers; but as such rollers have been heretofore employed their action has been unequal, the edges of the bundles not being condensed, and their use has been abandoned.

My improvement consists in the combining of guards or guide-pieces with a pair of rollers in such manner as to cause the hands, bundles, or rolls of tobacco, which are passed between them to come out in flat rectangular pieces, of equal width along their whole length, and consequently in a form fitting them for being packed together readily and closely.

In the accompanying drawings, Figure 1 is a front elevation, and Fig. 2 a top view, of my machine.

A is the top, and B the bottom, roller of the pair, between which the hands or rolls of tobacco are to be passed. These two rollers are geared together, and they may be turned by a winch, C. The top roller is represented as drawn down by a spring, D, the tension of which may be regulated at pleasure by means of the screw-cramp, E. A weight may be used for the same purpose; but the spring is more compact and convenient.

F, F', F'', and F''' are grooves in the upper roller, which grooves are rectangular, and should differ somewhat in width, to adapt them the better to light or to full hands.

G G are rectangular pieces, which I denominate "guard" or "guide" pieces. These are made fast to the table H, and are of such thickness as exactly to fill the grooves where they enter them. Their under sides are in contact with the lower roller, B. Fig. 3 is a section through one of them, and through the rollers in the line *xx* of Fig. 2.

In using this machine the hands or bundles are to be passed in between the guards, and the rollers being made to revolve, the tobacco will be pressed by the projecting portions of the upper roller, so as to form a compact rectangular mass of an equal width, but varying in thickness by its tapering toward the ends. The degree of pressure required will differ according to the state of the tobacco, and this can be regularly and perfectly governed by the means above pointed out.

The apparatus may be made of hard wood or of iron, as may be preferred. It is applicable, as above stated, not only to the preparing of the hands or bundles for being packed in hogsheads, but also to the preparing of roll-tobacco for packing in boxes. The size of the grooves may of course be varied to any desired extent. This apparatus may be varied by preparing boxes or troughs in which the hands of tobacco may be laid and passed between the rollers, the box or trough being of the proper width to receive the projecting part of the upper roller.

Having thus fully described the nature of my machine for preparing tobacco for packing in hogsheads or in boxes, what I claim therein as new, and desire to secure by Letters Patent, is—

The combining of the guard or guide pieces G G with a pair of rollers, one of which is furnished with rectangular grooves, the respective parts being so arranged as to produce the intended effect, substantially in the manner set forth, together with such variations of the same as leave its principle of action unchanged, producing a like effect by equivalent means.

DAVID SMITH.

Witnesses:

THOS. P. JONES,
EDWIN L. BRUNDAGE.