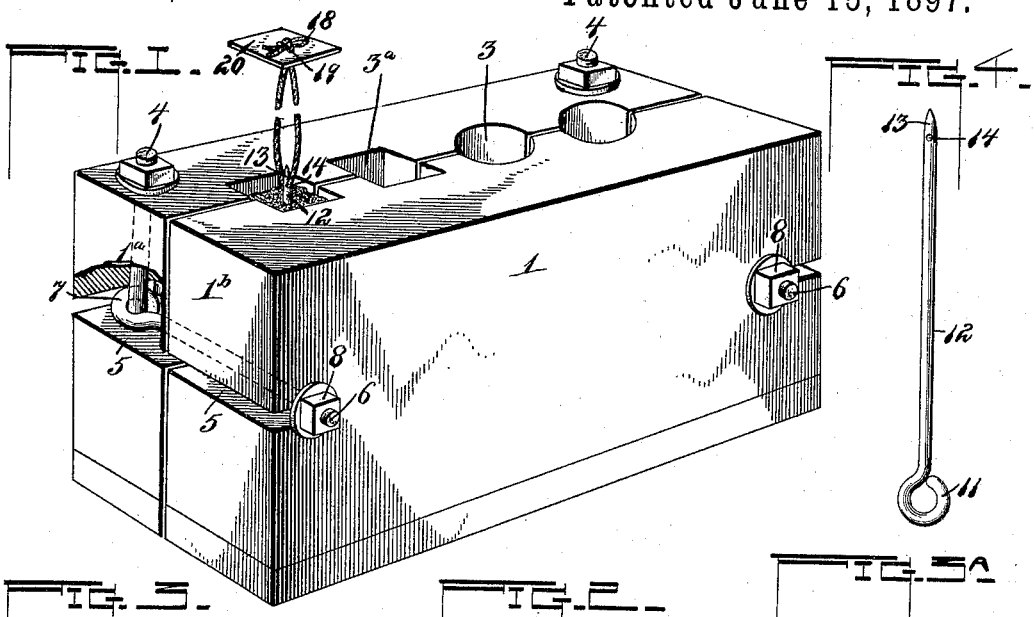
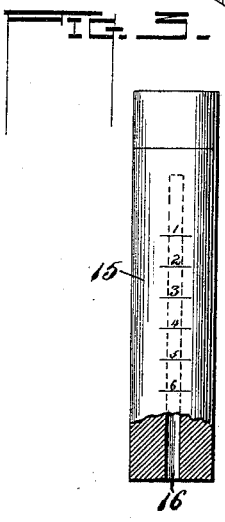
(No Model.)

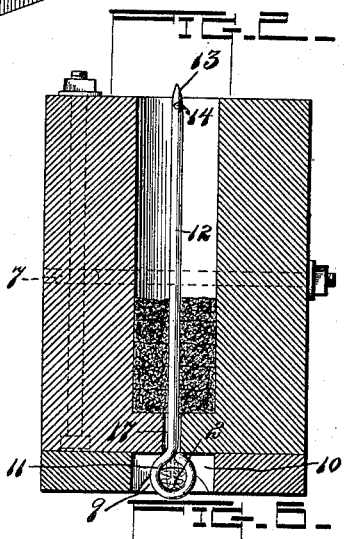
M. W. BRYSON.

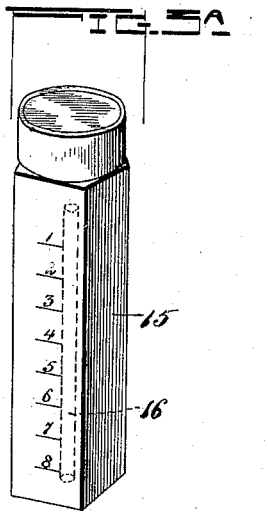
TOBACCO COMPRESSOR.

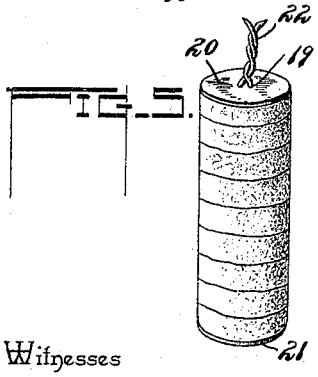
No. 584,322. Patented June 15, 1897.

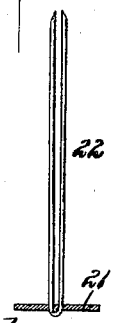


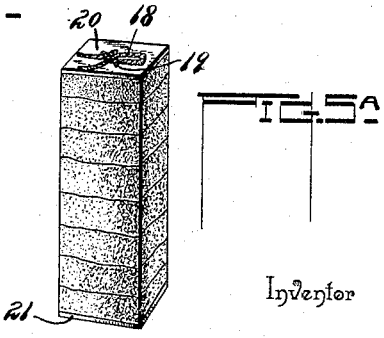












Witnesses

Milton P. Connell

C. E. Foss

Inventor

Marcus W. Bryson,

By his Attorneys,

C. A. Snow & Co.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

MARCUS W. BRYSON, OF WEBSTER, NORTH CAROLINA.

TOBACCO-COMPRESSOR.

SPECIFICATION forming part of Letters Patent No. 584,322, dated June 15, 1897.

Application filed December 31, 1895. Serial No. 573,987. (No model.)

To all whom it may concern:

Be it known that I, MARCUS W. BRYSON, a citizen of the United States, residing at Webster, in the county of Jackson and State of North Carolina, have invented a new and useful Tobacco-Compressor, of which the following is a specification.

My invention relates to the manufacture of plug-tobacco, and has for its object to provide a sectional or layer plug of which the sections or layers are detachably connected to provide for the division of a plug into the desired number of parts without the use of a tobacco-knife.

A further object of my invention is to provide simple and efficient means for forming sectional or layer plugs.

Further objects and advantages of this invention will appear in the following description, and the novel features thereof will be particularly pointed out in the appended claims.

In the drawings, Figure 1 is a perspective view of a mold-box forming one member of the apparatus employed for forming sectional or layer plugs. Fig. 2 is a transverse sectional view of the same, taken through one of the molds. Figs. 3 and 3^a are detail views of different forms of packing-rods. Fig. 4 is a detail view of the needle detached. Figs. 5 and 5^a are detail views of sectional or layer plugs constructed in accordance with my invention. Fig. 6 is a detail view of the wire tie upon which the sections or layers may be strung without the use of the threading-pin or needle.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

1 designates a box consisting of blocks 1^a 1^b, hinged together, as shown in dotted lines at 2, to provide for their arrangement in either parallel or divergent planes, as desired, the inner surfaces of said blocks or sections being provided with registering grooves 3 and 3^a, forming molds of respectively cross-sectionally round and square construction. The block 1^a is provided with fulcrum pins or bolts 4, which intersect registering grooves 5, formed in the extremities of the blocks or sections, and locking-bolts 6 are provided with terminal eyes 7, fitted upon said fulcrum pins or bolts. These locking-bolts are adapted to fit in the registering terminal grooves 5 and are fitted with nuts 8 to bear against the outer side surface of the block or section 1^b, as indicated in Fig. 1.

The contiguous angles of the sections of the box are cut away to form a longitudinal channel 9, in the floor of which, respectively opposite the molds 3 and 3^a, are formed seats 10 for the reception of a ring 11 on the needle or threading-pin 12, which is adapted to be arranged axially in one of the molds during the introduction of the tobacco-leaf thereinto. Said needle or threading-pin is reduced or tapered to a point at 13 and is provided with an eye 14 for a purpose hereinafter explained.

In connection with the above-described apparatus I employ a hollow packing-rod 15, of which different forms, respectively round and square, are illustrated in Figs. 3 and 3^a, the same being provided with a bore 16 for the reception of the body or straight portion of the needle or threading-pin during the operation of packing the tobacco-leaf into the mold, said needle or pin being arranged in a vertical guide 17, connecting the seat 10 with the lower end of the mold, as shown in Fig. 2.

In operation the threading-pin or needle is arranged in the mold to receive the tobacco, and the latter is introduced in wads into the mold, each layer being moved to its place and compressed by means of the packing-rod, the exposed end of said rod being struck by means of a mallet or a similar tool to insure the desired compactness. In order to secure comparative uniformity in the thickness of the sections or layers, the packing-rods are provided with indexes having transverse lines or points spaced at regular intervals and numbered consecutively, whereby the number of the index which is flush with the upper surface of the box indicates the number of layers which have been introduced into the mold.

After the mold has been filled sufficiently to form a plug of the desired length a tie 18, of cord or similar flexible material, is threaded through the eye 14 of the threading-pin or needle, and the extremities of said tie are threaded, respectively, through perforations

19 contiguous to the center of a holding-disk 20, which may be of metal, cardboard, or other stiff material. The threading-pin or needle is then withdrawn from the mold, thus drawing the tie, which is of greater length when doubled than the mold, through the centers of the layers until the looped extremity thereof projects beyond the bottom of the box. The cord is then detached from the pin or needle by cutting the loop, and the extremities of the tie thus formed are threaded through perforations in a disk similar to that above described, and a tie is formed to fasten this lower disk 21 in contact with the lower end of the plug after the plug has been withdrawn from the mold by opening the box. Thus the tie forms a flexible tension connection between the terminal disks which form the ends of the plug to prevent the relative displacement of the members or layers thereof, and it is obvious that by severing the cord or detaching one of the disks the members of the plug may be separated, so that one or more of the layers may be sold separately. This feature is of advantage in the retail trade, as it enables the consumer to buy any desired portion of a plug without necessitating the cutting of the plug by the dealer to suit the amount named.

I also propose to employ a tie constructed of wire which is of sufficient stiffness to enable the sections or layers of tobacco to be threaded thereon without the intermediate use of the threading-pin or needle. This tie 22 is shown in Fig. 6 and also in Fig. 5, in the latter case the same being shown engaged with the terminal disks to hold the sections of a plug in the proper relative positions. In Fig. 6 the tie is shown detached, and it will be seen that the extremities thereof are pointed to facilitate the impaling of the layers of tobacco-leaf thereon. This tie is used substantially as described in connection with the threading-pin or needle, in that as the leaf is introduced into the mold in which the tie is arranged the packing-rod is employed to compress the layers, the extremities of the tie passing up into the bore of the packing-rod. The only difference in operation with the form of tie shown in Fig. 6 is that its looped extremity is engaged with the lower terminal disk before it is inserted in the mold, whereby after the completion of the plug it is only necessary to connect the upper extremities of the tie above the plane of the upper disk, said extremities of the tie having been previously passed through the perforations in the disk.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

Having described my invention, what I claim is—

1. The herein-described tobacco-plug, comprising a plurality of separable axially-alined wads arranged in transverse coextensive layers, said wads containing equal quantities of tobacco-leaf, and means for temporarily connecting said wads, the same consisting of a tie extending axially through the wads and provided with terminal fastening devices, substantially as specified.

2. An apparatus for manufacturing plug-tobacco, consisting of a mold, means disposed axially in the mold and having a sharpened upper extremity upon which wads of tobacco-leaf introduced into the mold may be impaled, and a hollow packing-rod for independently compressing the wads to form detachable layers, said packing-rod being provided with a graduated scale for comparison with the contiguous portion of the mold, to indicate the relative thicknesses of successive layers, substantially as specified.

3. An apparatus for manufacturing plug-tobacco, consisting of a mold, a terminally-sharpened needle removably arranged in an axial position in the mold and adapted to be withdrawn through the bottom thereof, said needle being provided at its upper pointed extremity with an eye for engagement with a tie, and a hollow packing-rod for independently compressing portions of tobacco-leaf consecutively introduced into the mold, all constructed and arranged for operation as specified, whereby after the completion of the compression of the contents of the mold a tie may be engaged with the eye of the needle, and the latter withdrawn from the mold to pass said tie axially through the compressed layers, substantially as described.

4. An apparatus for manufacturing plug-tobacco consisting of a box provided with a mold, means disposed axially in the mold and having a sharpened upper extremity upon which wads of tobacco-leaf introduced into tne mold may be impaled, and a hollow packing-rod for independently compressing the wads to form detachable layers, substantially as specified.

5. An apparatus for manufacturing plug-tobacco consisting of a box constructed of relatively-movable blocks or sections provided in their contiguous faces with registering grooves combined to form molds, and also provided with openings in the lower extremities or floors of the molds, an eye-pointed threading-pin or needle adapted to be inserted through the opening in the floor of a mold and occupy an axial position therein with its pointed extremity uppermost, whereby wads of tobacco-leaf introduced into the mold are impaled thereon, and a hollow packing-rod for coöperation with the mold and threading-pin or needle, substantially as specified.

6. An apparatus for manufacturing plug-tobacco consisting of a box comprising hingedly-connected blocks or sections provided in their facing surfaces with registering grooves forming molds, holding-arms pivotally connected to one section or block and arranged

in registering grooves in the extremities of the blocks, and nuts threaded upon the free extremities of said rods to engage the exterior side surface of the other section or block, in combination with an impaling device arranged axially in a mold, and an axially-bored packing-rod for introduction into the mold around the impaling device, substantially as specified.

MARCUS W. BRYSON.

Witnesses:
J. W. KEENER,
E. H. CAGLE.