

S. P. DICK & D. R. MUSSELMAN.
 Plug Tobacco Cutter.

No. 201,915.

Patented April 2, 1878.

Fig. 1.

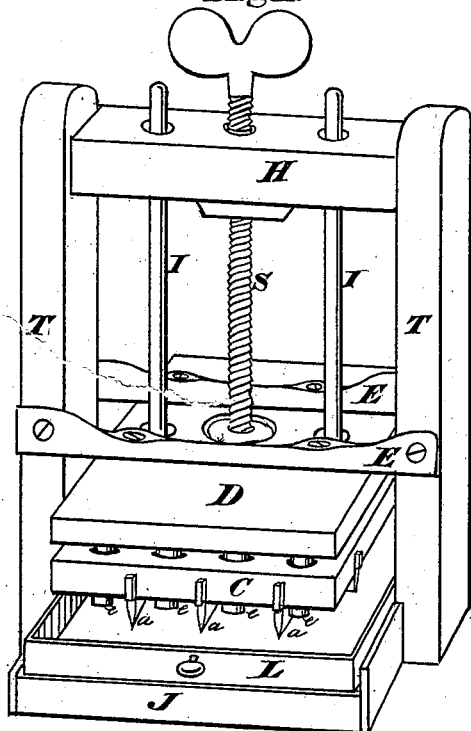


Fig. 3.

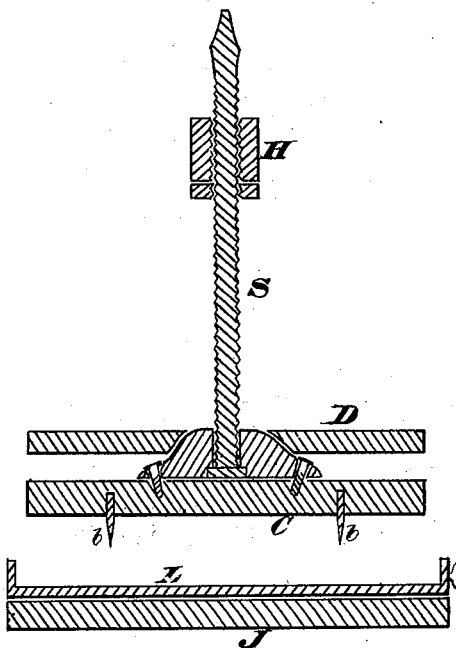


Fig. 2.

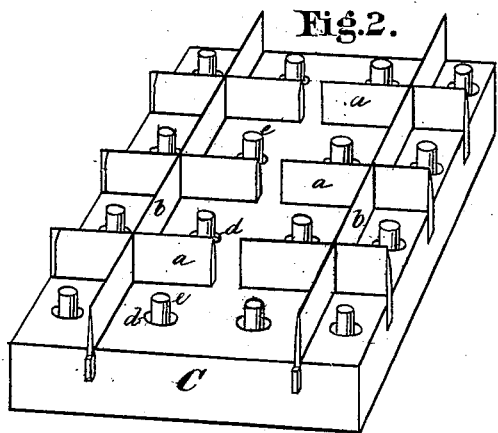
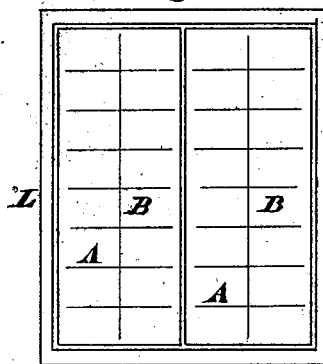


Fig. 4.



Witnesses.

Frank Pender.
 W. F. Lincoln

Inventor:

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UNITED STATES PATENT OFFICE.

SAMPSON P. DICK AND DAVID R. MUSSELMAN, OF LOUISVILLE, KENTUCKY.

IMPROVEMENT IN PLUG-TOBACCO CUTTERS.

Specification forming part of Letters Patent No. **201,915**, dated April 2, 1878; application filed February 15, 1878.

To all whom it may concern:

Be it known that we, SAMPSON P. DICK and DAVID R. MUSSELMAN, of Louisville, county of Jefferson, and State of Kentucky, have invented certain Improvements in Tobacco-Plug Cutters, of which the following is a specification:

Our invention relates, first, to the construction of a cutting apparatus, which consists of a block of wood or other suitable material, into one face of which are embedded and fastened the backs of one or more series of knives for making incisions into plugs of manufactured tobacco longitudinally of the plugs, and one or more other series of knives for making incisions in the same transversely at right angles to such longitudinal incisions. The knife-block may be operated by any suitable device; but we have shown it operated by a screw-shaft in a frame in the drawings, and the operation is such that any number of plugs may be prepared with incisions at one operation. The incisions are to be made perpendicularly into one of the broad sides of each plug, and are to extend nearly through to the other broad side, but the incisions both ways are to stop short of the side and end margins, so that those margins may remain entire and uncut, and the plug shall retain its form and general appearance after being incised, and enough of its stiffness for handling purposes. The object of this treatment of the plugs is to have them marked and almost severed into a number of equal subdivisions, so that the retailer may detach the subdivisions as and when desired without the use of a knife; but until such detachment the incisions will be held closed by the uncut margins and the wrapper, and thus will be preserved the dampness, juices, and aroma of the tobacco.

Our invention relates, secondly, to a head or block made stationary in the same frame with and above the knife-block, and provided with pins or fingers, which protrude down through holes made for the purpose in the knife-block, and corresponding in arrangement with the knives in their block, so that when the knives have been forced into the plugs, and are about to be drawn up out of the same, the fingers will stop the tobacco and prevent its rising with the knives, for it adheres to them to

some extent. This device has been found to be necessary for use in combination with the knife-block and its knives for the purpose stated.

Our invention relates, thirdly, to a box or drawer of suitable form and size to contain the exact number of plugs to be prepared at one operation, and to hold them snugly and compactly together side by side with their ends in line, so that the incisions may be correctly made by the cutter. Such drawer is situated in a suitable recess in the bed of the frame, and is useful in introducing the tobacco for incision and removing it afterward.

Our said invention will be more fully described with reference to the accompanying drawings, in which—

Figure 1 represents a perspective view of a machine embracing our improvements; Fig. 2, a like view of the cutter in an inverted position, showing the knives and their arrangements, the holes in its block, and the pins before mentioned protruding through them; Fig. 3, a partial vertical central section of the same machine; and Fig. 4, a plan view of the drawer aforesaid, having in it a layer of two plugs, side by side, already prepared with incisions, and illustrating their appearance after such preparation.

H is the cross-piece, which has a suitable screw-hole for the screw-shaft S, by which the cutter-block C is forced down to incise the plugs, and then drawn up again, the said block being rigidly fastened to the lower end of that shaft, which extends down through a suitable opening in the block D, which latter is provided with the pins or fingers *e*, and is firmly attached to the cross-bars E E between the uprights T T. I I are guide-rods, extending down through cross-piece H and the block D, and are fixed in the knife-block C, and serve to secure true vertical action in that block. *b b* are the longitudinal knives, each one of which is arranged with a series of cross-knives, *a a a*. Each series of cross-knives is of such length, and at such distance apart, as to make the incisions as shown in Fig. 4, and leave the uncut margins as therein shown.

J is the bed in the frame, and L the drawer before mentioned to contain and confine the plugs together for the operation upon them.

A A are the short incisions in the plugs, and B B the subdivisions marked by the incisions.

It is manifest that the knife-block C and the finger-block D may be made as large as may be desired, to prepare many plugs at one operation.

The block D is stationary, and its fingers *e* do not aid in the mere incising of the plugs. They merely serve to stop the plugs from following the knives in their upward movement. They are so arranged that the central portion only of the area of each subdivision will impinge upon them.

We do not claim the block D and its fingers *e*, broadly, but only in combination with the said cutter-block C and its knives in the specified operation upon plugs of tobacco.

We are aware that the principle of the combination is not new, but claim that the peculiar construction of its parts and their arrangement, and the application of the whole to the described operation, are new; nor do we claim the drawer L, broadly, as a drawer, but merely in the restricted manner, as above set forth.

What we do claim, therefore, as our invention, and desire to secure by Letters Patent, is—

1. The cutter composed of the block C and longitudinal knives *b* and the cross-knives *a*, arranged and operated substantially as and for the purpose specified.

2. The stationary block D, having the fingers *e*, in combination with the cutter composed of block C, having its knives *a* and *b* adapted to stop the plugs of tobacco from rising with the knives after they are operated upon, substantially as described.

3. The drawer L, in combination with the bed J, adapted to confine the plugs snugly together while they are operated upon, and to facilitate their introduction into and removal out of the machine, substantially as described.

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Witnesses:

J. ENDER,
FRANK PARDON.

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