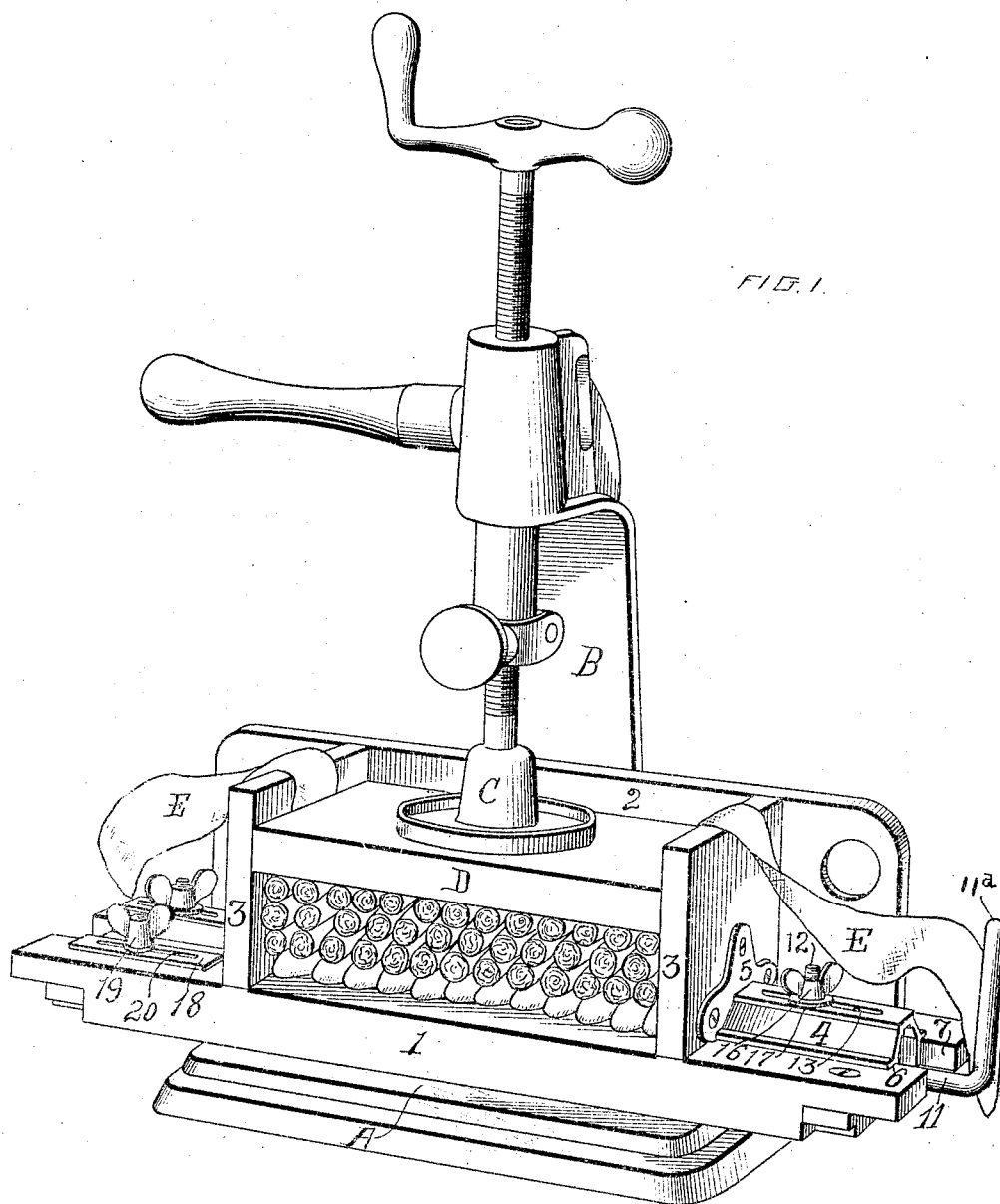


996,980.

N. DU BRUL.
CIGAR PACKER.
APPLICATION FILED APR. 3, 1911.

Patented July 4, 1911.
2 SHEETS—SHEET 1.



WITNESSES

M. F. Kayle.

Octavius Knight

BY

INVENTOR

Napoleon Du Brul

Knight Bros

Attorneys

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2 SHEETS-SHEET 2.

FIG. 2.

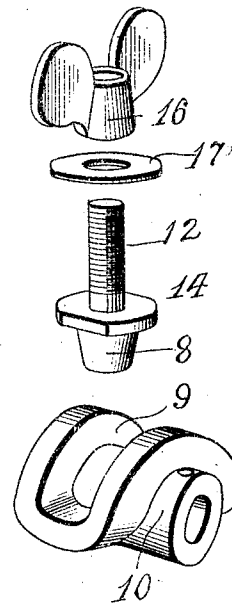
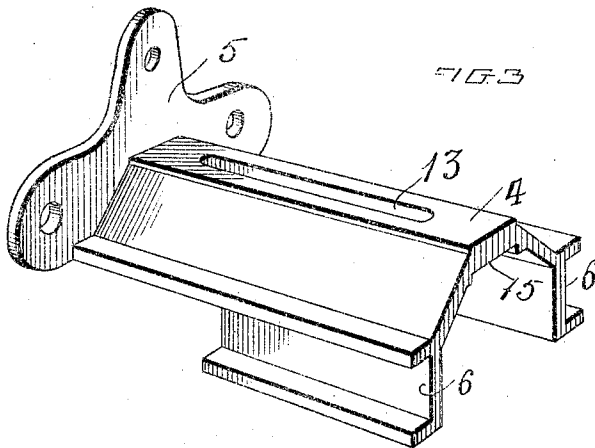
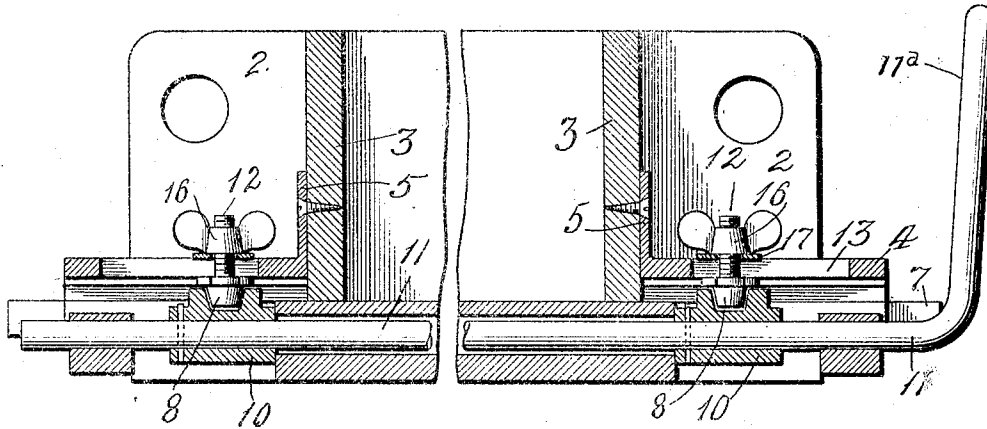
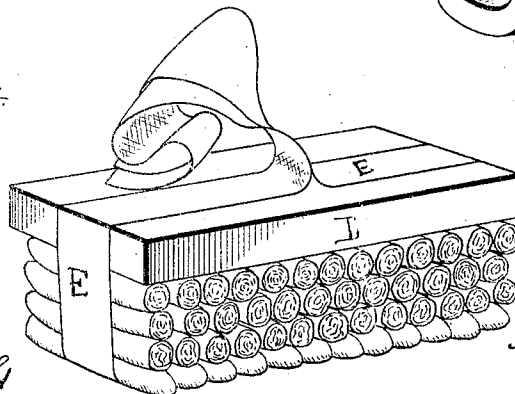


FIG. 4.



WITNESSES:
H. F. Lyle
Octavius Knight

INVENTOR,
Napoleon DuBul
By Knight Bros
Attorneys.

UNITED STATES PATENT OFFICE.

NAPOLEON DU BRUL, OF CINCINNATI, OHIO.

CIGAR-PACKER.

996,980.

Specification of Letters Patent.

Patented July 4, 1911.

Application filed April 3, 1911. Serial No. 618,732.

To all whom it may concern:

Be it known that I, NAPOLEON DU BRUL, a citizen of the United States, and residing at 507 to 519 East Pearl street, in the city of Cincinnati, county of Hamilton, and State of Ohio, have invented certain new and useful Improvements in Cigar-Packers, of which the following is a specification.

This invention relates to a means for giving side pressure to a bundle or stack of cigars prior to introducing the cigars into the box; also to means adapted to be introduced into the packer for removing the cigars from the packer and maintaining the pack or bundle in its condensed form while transferring the pack or bundle from the packer to the box and for readily releasing it in the box without injury to the wrappers or shifting of the relative positions of the individual cigars.

In placing cigars in boxes, it is customary to arrange them in alternate rows of odd and even numbers—say twelve in one row and thirteen in the next—the cigars of one row lying in the angular spaces provided by the cigars in the lower row. It is important to have sufficient room in the packer to place the wider row in order to avoid breakage of the wrappers, to shift the cigars in position so as to face the label bands upward, and to carefully arrange the cigars before bringing on the side pressure. It is also preferable to have the pressure develop by moving the side walls uniformly and simultaneously on opposite sides of the pack, than to apply the pressure at one end only. It is also very desirable to have the packer readily adjustable for boxes of different sizes and also for cigars requiring different degrees of compression, for which purposes the side wall or walls must be adjustable relatively to the compressing means so that they will accurately assume the proper distance apart with relation to the length of the box, when the packer is at the inner end of its throw and thereby develop a length of pack which may be introduced without injury but will nevertheless neatly fit the box without disturbing the positions of the cigars; and means must be provided for limiting the opening movement of the side walls, under the opening throw of the compressing means in order that the wall or walls may be stopped at a distance which will just receive the wider row of cigars while the bundle is being formed. It is also

very desirable to have a device of this kind exceedingly simple in construction, light in weight and readily handled.

It is further desirable in a device of this kind to provide means whereby the pack may be conveniently removed and the cigars retained in their relative positions while being transferred from the packer to the box and for the sake of reducing the number of parts that have to be manipulated, it is desirable to use, in this connection, the pressure board employed for imparting the vertical pressure on the pack.

My present invention answers all of the above-enumerated requirements and consists in the novel features of construction hereinafter fully described and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a perspective view of my invention in use in connection with a known type of packer's press employed for developing vertical pressure upon the cigars after the lateral pressure has been developed; Fig. 2 is a vertical longitudinal section of my improved packer, the intermediate portion of which is broken away; Fig. 3 is a segregated perspective view of one of the two identically-formed but oppositely acting pressure developing means, and Fig. 4 is a perspective view illustrating the method of removing the compressed pack from the packer.

Referring to Fig. 1, A represents the base, B the standard, and C the platen of a known type of packer's press, which, together with the pressure board D, may be employed for developing the vertical pressure on the pack to be formed by my present invention. E is a broad temporary ribbon laid into the packer previous to introducing the cigars for the purpose of developing, in connection with the pressure board D, a sling by which to remove the pack after it is formed and transfer it to the cigar box.

1 represents the base, 2 the fixed back and 3 the movable side walls of the packer forming the subject of my present invention.

To rigidly and accurately support the side walls 3 in position upon the base 1 and against the back 2 with sufficient closeness to avoid any creasing or injury to the wrappers, and at the same time to permit said side wall or walls to be freely moved without binding or sticking, I provide a pair of elongated arched cross-heads 4 having at their inner ends attaching flanges 5, which

receive the side walls 3, and having lateral guideways 6 which receive the sides 7 of the end slots formed in the base 1 to receive said cross-heads.

5 To develop uniform movement of the two side walls 3 simultaneously in opposite directions, when desired, each of the cross-heads 4 is provided with a cam stud 8 (Figs. 2 and 3) fitted to the groove 9 of a cam 10 which is mounted upon a shaft 11 having a crank arm 11^a, extending through the base 1. Cams 10 are oppositely pitched so that when desired simultaneous opening or closing movement will be imparted to the side walls 3 according to the direction in which the shaft is rotated; and degree of pitch of said cams is preferably such that partial rotation of the shaft 11 is sufficient to impart a full throw to the cams, which will develop the fullest throw of the side walls that may be needed in the use of the device.

In order that the initial spacing of the side walls 3 may be selected at will, within the range of lengths of cigar boxes that the device is intended to serve, the cross-heads 4 are longitudinally adjustable relatively to the cam studs 8, and this is conveniently accomplished by providing said studs 8 with threaded shanks 12 extended upwardly through slots 13 in the cross-heads 4 and adapted to clamp the cross-head between the stud flange 14 (fitted slidably but non-rotatably in the channel 15 of the cross-head) and the wing nut 16 with its washer 17 located above the cross-head and in convenient position for manipulation without disturbing the packer or any cigars that may have been introduced therein when gaging the adjustment. Obviously, the range of adjustment of initial position is the sum of the lengths of the two slots 13 in the cross-heads 4, and whatever the positions of the cross-heads relatively to the controlling cam studs 8, the throw developed by the cams 10 will be constant.

The initial position given to the side walls 3 by the adjustment of the cross-heads relatively to the cam studs will be the compressed dimension of the cigar pack (just sufficiently less than the length of the box to permit introduction without injury to the wrappers or disarrangement of the cigars), and the opening distance from this initial position will be determined by the degree of compression required to properly condition the pack and will vary with different sizes of cigars. To facilitate accurately selecting this opening distance, a slide gage 18 is adjustably secured upon the base 1 by the wing nut 19, whose bolt is embedded in the base and extends through the slide gage slot 20. After the initial position of the side walls 3 determined by the size of the box has been selected with the cams at the end of their

inward or compression throw, opening movement is imparted to the side walls, by the cams, until there is just sufficient room to receive the wider row of cigars without undue crowding or injury when they are turned to position the label bands and then the gage plate is brought up against the adjacent side wall 3 so as not only to prevent further opening while the pack is being formed, but to gage the opening in forming succeeding packs of the same cigars for the same sized boxes. Inasmuch as arresting one of the side walls necessarily arrests its cam stud and, therefore, prevents further rotation of the cam shaft, the opening movement of both side walls is controlled by a single slide gage 18.

In using the device, the pack is built up as suggested in Fig. 1 and the packer is then assembled with the known type of packer's press A, B, C, and pressure board D which latter will correspond exactly to the box that is to receive the cigars; the ribbon E being introduced before the cigars, and the pack having remained under pressure the desired length of time to permit the cigars to set, it is then removed from the press and the ends of the ribbon E are drawn tightly over the pressure block D, as suggested in Fig. 4, when the cam shaft 11 will be thrown in the direction to relieve the side pressure, and the pack will be lifted from the packer and transferred to the box with ease and without any danger of disarranging the cigars or injuring the most delicate wrapper. When the ribbon is withdrawn from the pack before the block D is removed, the block D is held down with the hand to facilitate the removal of the ribbon and prevent disarrangement of the cigars.

I claim:—

1. A cigar packer comprising a base, side walls, means for movably mounting said side walls on said base comprising cross-heads fitted to and guided upon the base, and means for imparting simultaneous opposite movements to said side walls comprising a cam shaft and studs carried by the cross-heads and cooperating with the cams on said cam shaft.

2. A cigar packer comprising a base, side walls, means for movably mounting said side walls on said base comprising cross-heads fitted to and guided upon the base, and means for imparting simultaneous opposite movements to said side walls comprising a cam shaft and studs carried by the cross-heads and cooperating with the cams on said cam shaft; said studs being adjustably mounted on said cross-heads.

3. A cigar packer comprising a base, side walls, means for movably mounting said side walls on said base comprising cross-heads fitted to and guided upon the base,

and means for imparting simultaneous opposite movements to said side walls comprising a cam shaft and studs carried by the cross-heads and cooperating with the cams on said cam shaft; said base being provided with a gage located in the path of one of the side walls and adjustable to determine the point at which it arrests the opening movement of said side wall.

4. In a cigar packer, the combination of a base having slotted ends; the cross-heads having lateral guideways embracing the sides of said ends and thereby slidably mounted on said base; side walls carried by said cross-heads; said cross-heads having longitudinal slots and having cam studs adjustably mounted in said slots; and a cam shaft mounted in said base beneath the cross-heads and carrying oppositely pitched cams engaging said cam studs.

5. In a cigar packer, the combination of a base having slotted ends, upwardly arched cross-heads constructed with laterally presented guideways receiving the sides of the base slots, cam studs having threaded

shanks and nuts through which they are adjustably mounted in said slots, a cam shaft located beneath said cross-heads carrying cams cooperating with said cam studs.

6. In a cigar packer, the combination with a side wall, of means for imparting movement to said wall comprising a cam shaft, a cross head and a stud carried by the cross head and cooperating with the cam on said shaft.

7. In a cigar packer, the combination with a base, of means for movably mounting a side wall on said base comprising a cross head fitted to and guided upon the base, and means for imparting movement to said side wall comprising a cam shaft and a stud carried by said cross head and cooperating with the cam on the cam shaft.

The foregoing specification signed at Cincinnati Ohio this first day of April, 1911.

NAPOLEON DU BRUL.

In presence of two witnesses—

W. J. HUNTER,

C. O. STRAILLAY.