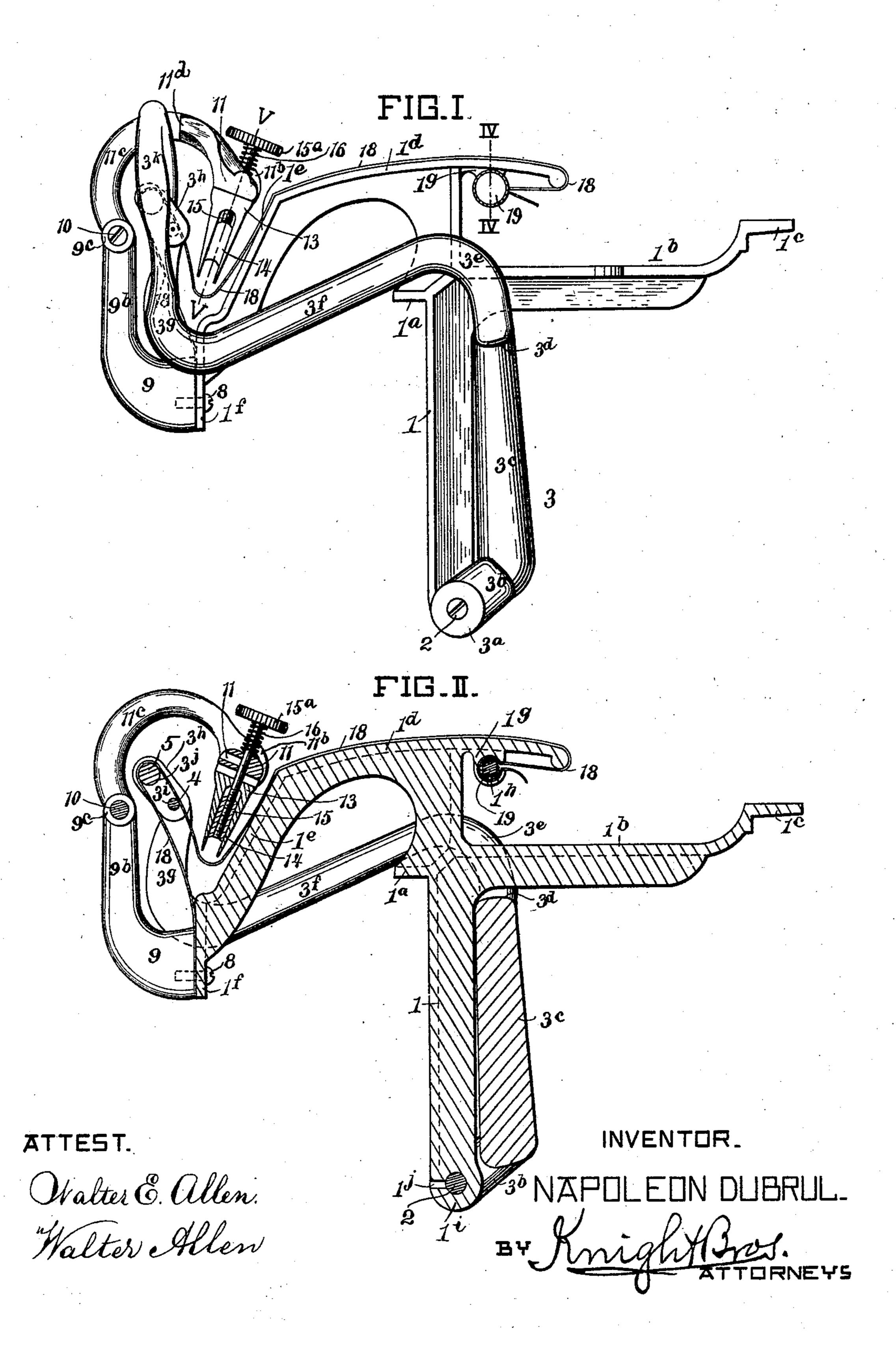
N. DU BRUL. CIGAR BUNCHING MACHINE.

No. 560,576.

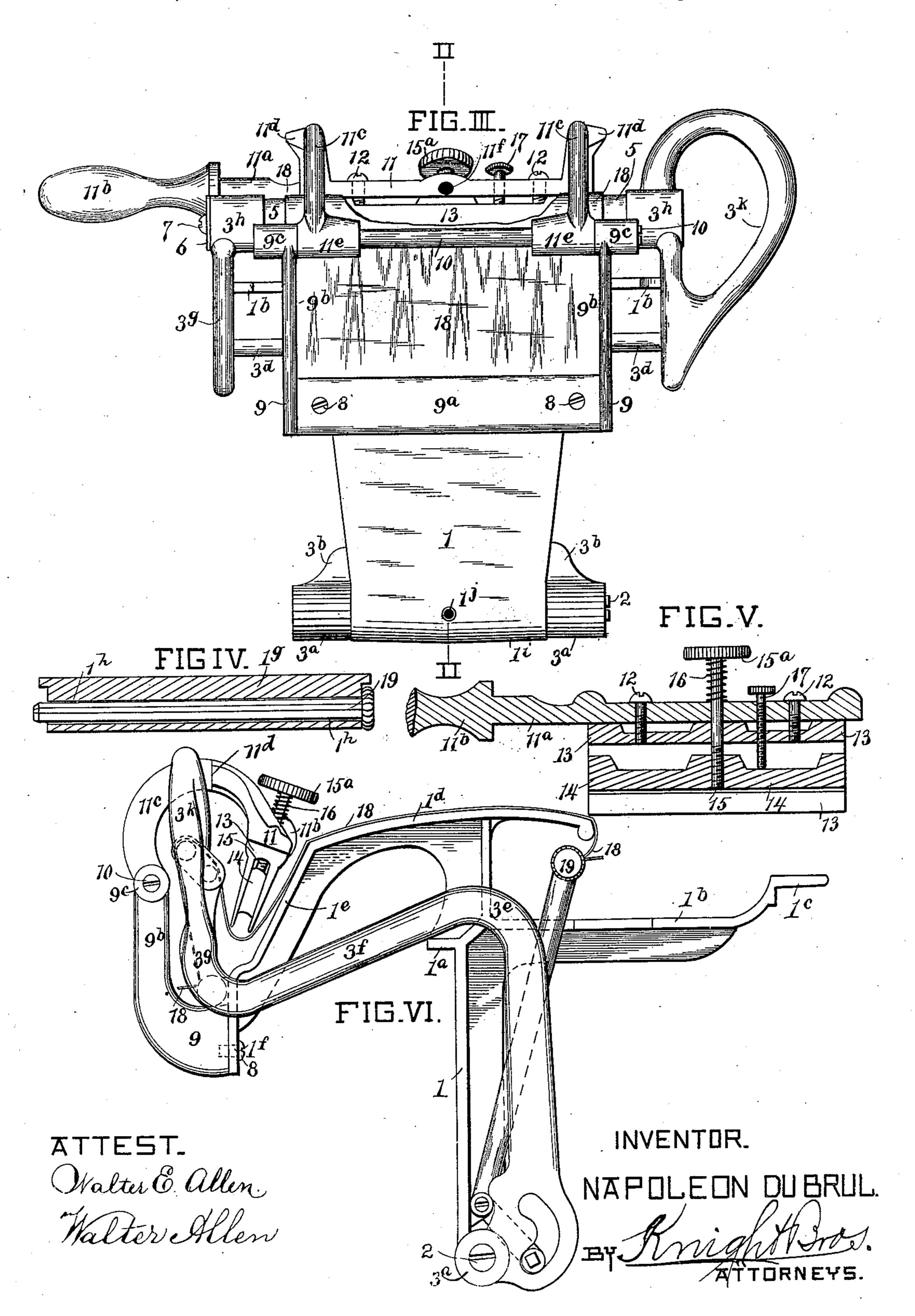
Patented May 19, 1896.



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United States Patent Office.

NAPOLEON DU BRUL, OF CINCINNATI, OHIO.

CIGAR-BUNCHING MACHINE.

SPECIFICATION forming part of Letters Patent No. 560,576, dated May 19, 1896.

Application filed July 23, 1894. Serial No. 518,384. (No model.)

To all whom it may concern:

Be it known that I, Napoleon Du Brul, a citizen of the United States, and a resident of Cincinnati, in the county of Hamilton and State of Ohio, have invented a new and useful Improvement in Cigar-Bunching Machines, of which the following is a specification.

My invention relates to improvements in my cigar-bunching machine, for which application for Letters Patent was filed March 9, 1894, Serial No. 503,020, and particularly to the construction of the frame, to the charger for delivering the filler into the apron-pocket prior to bunching, and means for securing the charger to the frame, and means for adjusting the apron to the operating-lever.

In my present construction I am enabled to dispense with the front wall of the apronpocket receptacle, the front apron-bar receptacle, and the front shelf shown in my previous application referred to.

My invention consists in features of novel construction as hereinafter described and claimed.

In order that my invention may be fully understood, I will proceed to describe it with reference to the accompanying drawings, in which—

Figure I is a side elevation of my improved cigar-bunching machine. Fig. II is a vertical longitudinal section thereof on the line II II, Fig. III. Fig. III is a front elevation of the machine. Fig. IV is a detail vertical transverse section through the rolling-table and apron-adjuster on the line IV IV, Fig. I. Fig. V is a longitudinal section of the charger on the line V V, Fig. I. Fig. VI is a side elevation of the machine, showing a modification, the apron-adjuster at rear end being mounted on the swinging apron-holder shown in my previous application referred to and at the front end to the front plate of the rolling-table.

The main frame of the machine is cast integral with a vertical transverse central plate 1, a horizontal flange 1° (by which it is supported on the cross-rail of the cigarmaker's table as in my former application hereinbefore referred to) with a rearwardly-extending 5° shelf 1°, having a supporting-flange 1°, and with a convex rolling-table 1° surmounting the central plate above the shelf having an

inclined plate 1e and a pendent plate 1f beneath the inclined plate at its front end and a pendent sleeve 1^g, located beneath the table 55 at its rear end, having a cylindrical chamber 1^h and with a boxing 1ⁱ at the base of the frame. Extending through this boxing is a shaft 2, providing a pivot for my operating-lever 3, which is cast integral with boxes 3^a, secured 60 to the shaft, with shoulders 3b, with a central stem 3^e, with a cross-bar 3^d, with upwardlyextending curved arms 3°, with forwardlyextending arms 3f, with upwardly-extending roller-arms 3g, and with heads 3h, having 65 sockets 3i for a bunching-roller 4 and sockets 3^j for a guide-roller 5. The rollers are held in place by a plate 6, having a fastening 7.

Formed in one piece with one of the heads 3^h and with one of the roller-arms is a loop- 70 handle 3^k , whereby the lever is grasped in shifting it. Secured by suitable fastenings 8 to the pendent plate of the table is a removable charger-support 9, cast integral with a transverse bar 9^a and with forwardly and up- 75 wardly extending arms 9^b , having boxings 9^c . Passed through these boxings is a spindle-bolt 10, forming a pivot for my charger.

My charger-frame is cast integral with a cross-head 11, having a lateral stem 11^a and 80 a handle 11b, and with curved arms 11c, having stop-lugs 11^d and boxes 11^e, whereby the charger is hinged to the spindle-bolt of the support. Secured to the cross-head of the charger-frame by means of fastenings 12 is 85 the removable filler-cup 13, and within the latter is the adjustable plunger 14, supported on the screw-threaded stem 15, having a milled head 15^a, and sliding through the cross-head and into the cup. Surrounding the stem of 90 the plunger between the cross-head and the head of the stem is a coil-spring 16 for seating the plunger. 17 is a screw-threaded adjustable stop working through the cross-head and into the cup for limiting the inward move- 95 ment of the plunger. The stop-lugs on the arms of the charger-frame limit the return movement of the charger by bearing against the arms of the charger-support. 18 is the apron, secured at its front end between the 100 pendent plate and the cross-bar of the chargersupport, extending over the guide and bunching rollers and over the table, and held at its inner end within the cylindrical chamber of

the pendent sleeve by means of a rotatable rod 19, having flattened sides and corners and a milled head, whereby the rod is turned to adjust the apron in either direction and hold or clamp it. In the modification (see Fig. VI) I have shown the apron-adjuster located on the pendent plate as means for adjustably securing the front end of the apron, while the rear end of the apron is secured to a similar apron-adjuster mounted on the rear swinging apron holder and tightener, which is shown in my previous application hereinbefore referred to.

1^j is an oil-hole in the boxing of the main frame for lubricating the shaft, and 11^f is an oil-hole in the cross-head of the charger-frame

for lubricating the plunger-stem.

The rod 19 of the apron-adjuster may be round instead of angular in cross-section, as

20 shown in dotted lines in Fig. II.

It will be seen that in my present form of charger-support a front shelf is dispensed with, so that there is no obstruction between the charger and the scrap-receptacle, which is located beneath the charger.

Having thus described my invention, the following is what I claim as new therein and

desire to secure by Letters Patent:

1. A cigar-bunching machine comprising a transversely-arranged central plate, having a boxing located at the base thereof, a rolling-table located on the plate, having an inclined front plate, and a pendent plate providing a downward extension to the inclined plate, the rearwardly-extending shelf, located beneath the rear end of the table, the shaft, extending through the boxing, the operating-lever formed with boxes at its lower end pivoted to

the shaft, with the central stem, with a cross-bar located on the stem beneath the table, 40 with upwardly-curved arms extending from the cross-bar with arms extending forwardly from the curved arms, with roller-arms extending upwardly from the forwardly-extending arms and with heads surmounting the 45 roller-arms, the bunching and guide rollers mounted in the heads, and means for securing the ends of the apron; substantially as described.

2. A cigar-bunching machine comprising a 5° transversely-arranged central plate, a rollingtable located on the plate, having an inclined front plate and a pendent plate providing a downward extension to the inclined plate, the charger-support having a transverse bar, se- 55 cured to the pendent plate, having forwardly and upwardly extending arms carrying boxings, the spindle-bolt supported in the boxings, the charger-frame provided with a crosshead, having a lateral stem and handle, with 60 curved arms having stop-lugs, adapted to bear on the arms of the charger-support, and boxes whereby it is connected with the spindle-bolt, the removable filler-cup secured to the crosshead and provided with a spring-plunger; 65 substantially as described.

3. The holder for the end of the apron consisting of a sleeve having a rod located within it formed with flattened sides and a milled head whereby the rod is rotated for adjusting 7°

the apron; substantially as described.

NAPOLEON DU BRUL.

Witnesses:
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WALTER E. ALLEN.