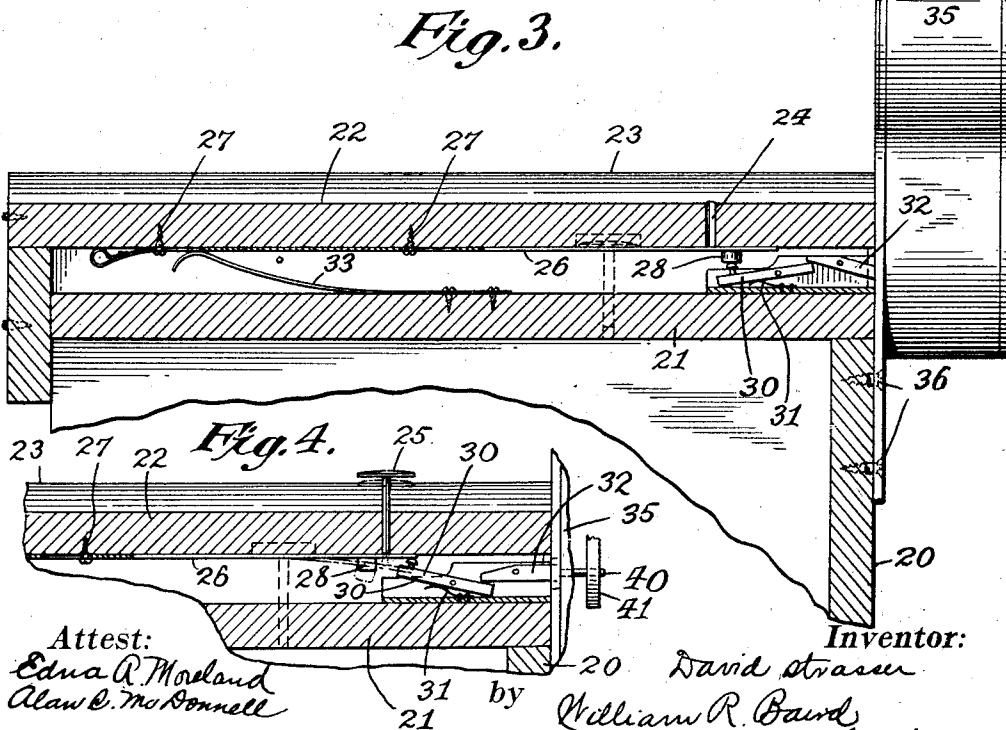
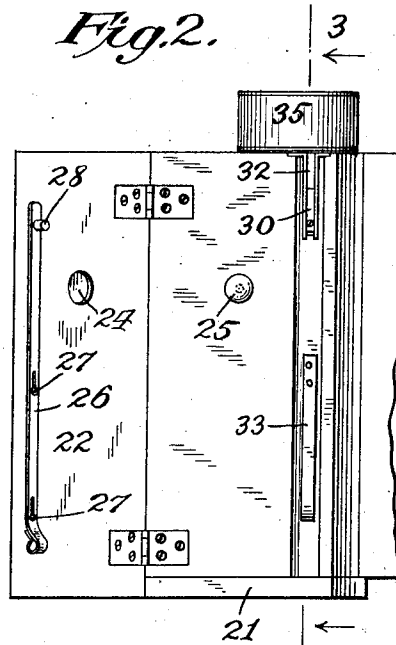
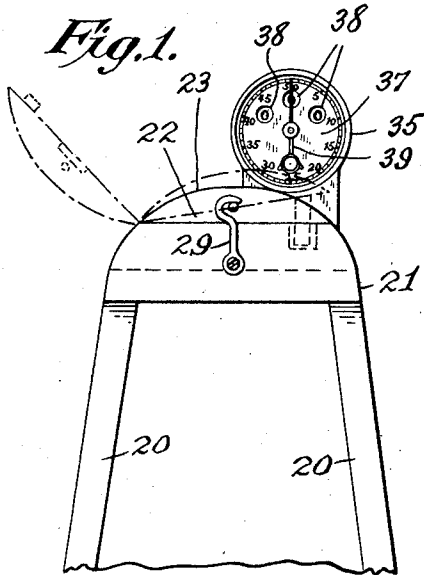


D. STRASSER.
CIGAR WRAPPER COUNTER.
APPLICATION FILED MAY 9, 1912.

1,061,930.

Patented May 13, 1913.

3 SHEETS-SHEET 1.

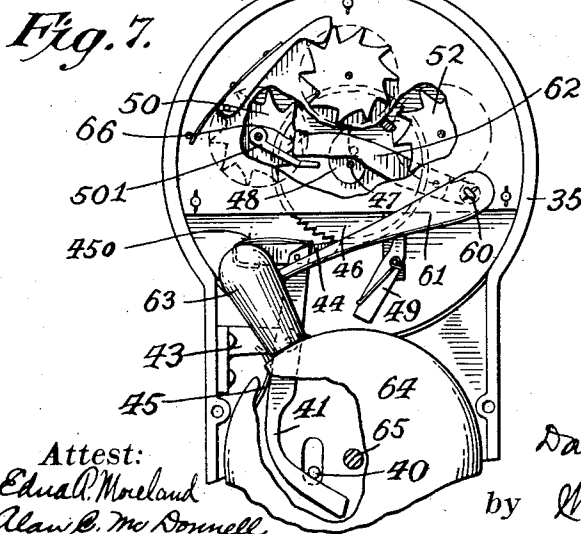
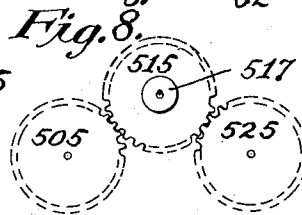
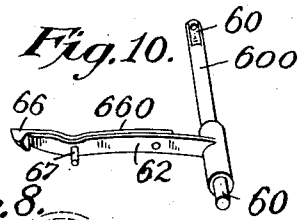
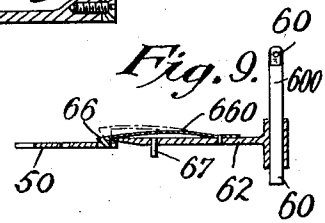
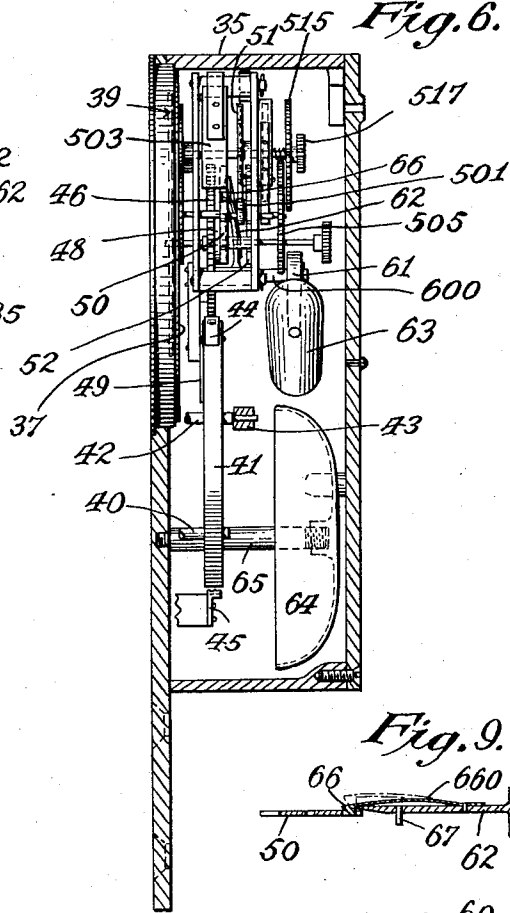
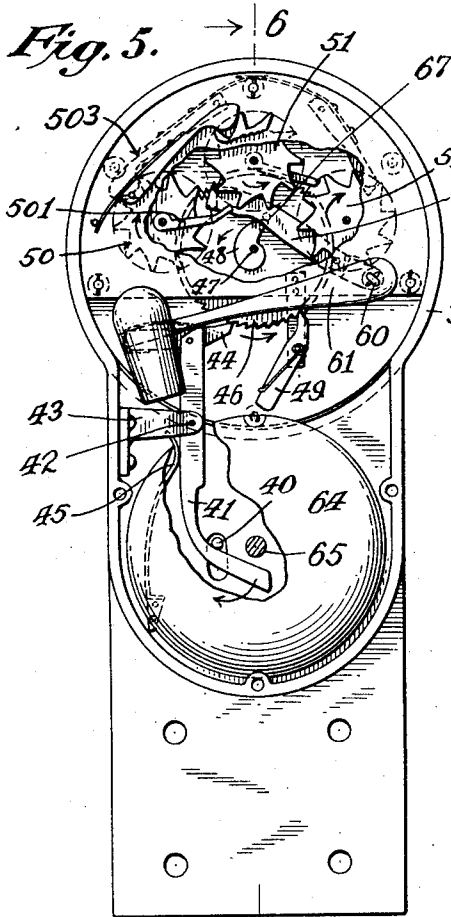


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3 SHEETS—SHEET 2.

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Attest:
Edna A. Moreland
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his Atty

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3 SHEETS-SHEET 3.

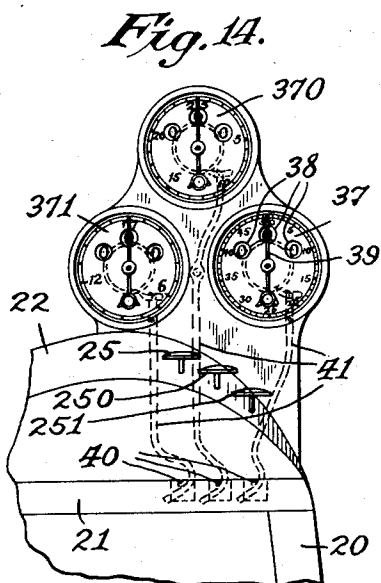
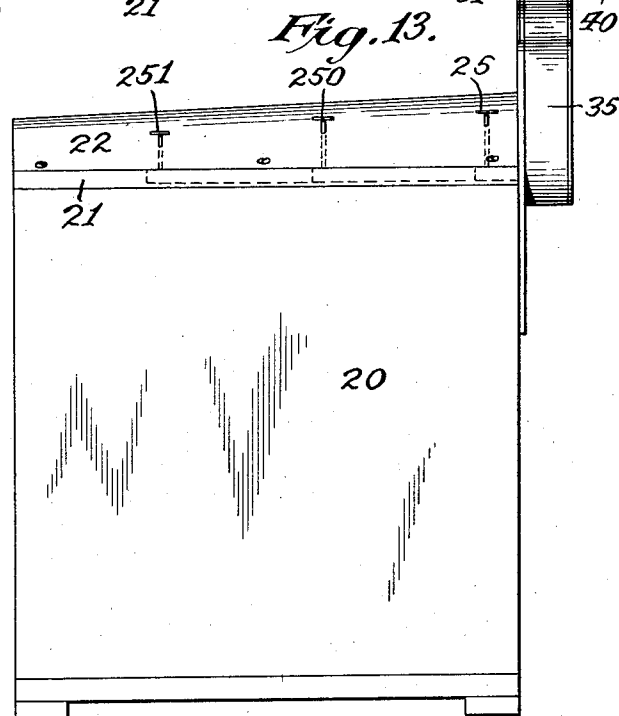
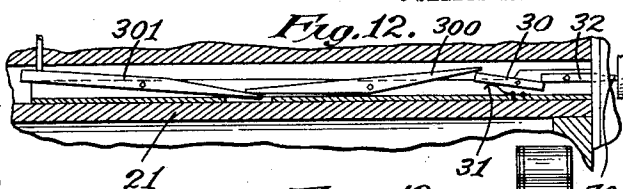
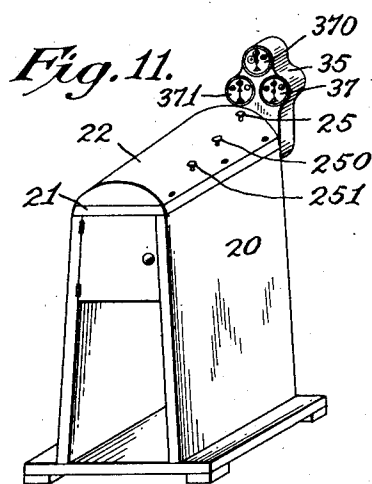
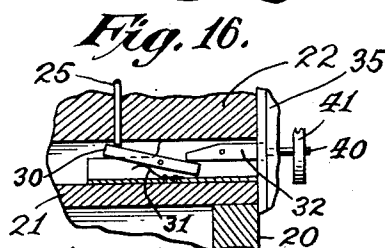
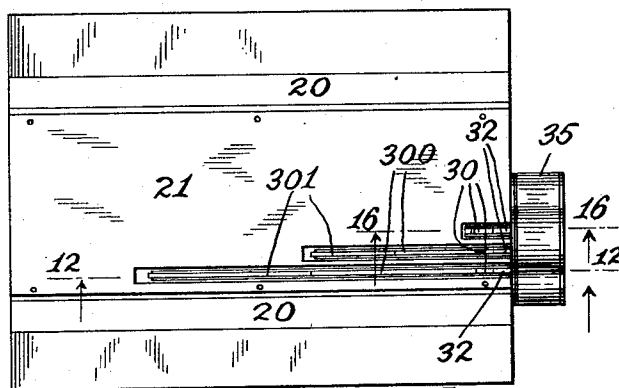


Fig. 15.



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UNITED STATES PATENT OFFICE.

DAVID STRASSER, OF NEW YORK, N. Y.

CIGAR-WRAPPER COUNTER.

1,061,930.

Specification of Letters Patent.

Patented May 13, 1913.

Application filed May 9, 1912. Serial No. 696,145.

To all whom it may concern:

Be it known that I, DAVID STRASSER, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Cigar-Wrapper Counters, of which the following is a specification.

This invention relates to devices for counting and registering the number of cigar wrappers estimated by an inspector to be obtainable from tobacco leaves examined by him, and its novelty consists in the construction and adaptation of the parts, as will be more fully hereinafter pointed out.

The object of the invention is to provide a simple means whereby an inspector of tobacco leaves may be relieved of the tedium and effort of attempting to keep a mental count of the number of possible wrappers in the leaves inspected and to eliminate the numerous sources of error otherwise inherent in the situation.

Figure 1 is a front elevation in miniature of a preferred form of a device embodying my invention; Fig. 2 is a top plan view of the same with the cover open; Fig. 3 is a central longitudinal vertical section of the same on the plane of the line 3—3 in Fig. 2, but on an enlarged scale; Fig. 4 is a detail of a portion of the device shown in Fig. 3 with a substitution of some of the parts; Fig. 5 is an enlarged rear elevation of the registering mechanism, parts being broken away to show concealed parts, the rear wall being also shown removed; Fig. 6 is a central vertical section of the parts shown in Fig. 5 on the plane of the line 6—6 in Fig. 5; Fig. 7 is a view of a portion of the parts shown in Fig. 5 with some of the parts in a different position; Fig. 8 is a rear detail of the resetting device; Fig. 9 is a detail of the gravity pawl; Fig. 10 is a perspective of said pawl. Fig. 11 is a perspective in miniature of a form of the device provided with a plurality of counting keys and mechanism; Fig. 12 is a vertical longitudinal section of the same on the plane of the line 12—12 in Fig. 15, but on an enlarged scale; Fig. 13 is a side elevation of the device shown in Fig. 11; Fig. 14 is a detail front elevation of a portion of the same; Fig. 15 is a plan view of the parts shown in Fig. 13

with the cover removed; and Fig. 16 is a vertical longitudinal section on the plane 55 of the line 16—16 in Fig. 15.

In the drawings, 20 represents the legs or other suitable form of support of table or platform 21, upon which the other parts of the device are supported or to which they are secured. A cover 22 is hinged or otherwise secured to the table along one edge. It has a rounded upper surface 23, is provided with an aperture 24 to receive an actuating button 25 and on its under surface is provided with a slidable actuator indicated at 26 and which is made of a strip of metal suitably slotted to permit of it being moved to a limited extent lengthwise of the cover upon screws 27, 27, and which is provided on its under surface with a contact knob 28. A hook and pin indicated at 29 serves to hold the cover in a closed position when desired.

Within a recess on the support 21 there is arranged a system of levers of which 30 is a lever normally pressed upward by a spring 31 and 32 is a lever moved by the depression of the lever 30 and which directly or indirectly moves the actuating lever 40 of the counting mechanism. 33 is a spring which is secured to the table 21 and serves to constantly restore to position the actuator 26 or the cover 22 when either are depressed.

The counting device includes a suitable casing 35 secured to the table 21 by any suitable means as screws 36. It is provided with a dial face 37, having one or more apertures 38 through which numbers displayed on numeral wheels are visible and with a hand or pointer 39 adapted to travel circularly to indicate the units counted, the periphery of the dial 37 being graduated and annotated for that purpose. A lock (not shown) is provided for the casing.

The actuating lever 40 (or a lever to which it is connected) projects into the casing 35 beneath the register. In proximity to it is a lever 41 suitably pivoted at 42 on a bracket 43 secured to the casing and provided with a pawl 44 at its upper end. A retracting spring 45 is adapted to restore the lever 41 to its normal position after actuation, and a retracting spring 450 serves to hold the pawl 44 against the wheel 46.

A toothed units wheel 46 is rigidly mount-

ed on a central shaft 47 on the front end of which is mounted the pointer 39. There is also mounted on the same shaft at the rear of the units wheel a cam 48. A spring pressed pawl 49 of usual construction engages the teeth of the units wheel to prevent its accidental backward rotation.

Arranged around the units wheel 46 at suitable intervals, and each pivoted on small shafts set in the casing, are the registering wheels 50, 51 and 52, each provided with a suitable number of teeth and with numbers corresponding thereto on their faces. The wheel 50 is adapted to be moved one notch or tooth to indicate a complete revolution of the units wheel 46, the wheel 51 is similarly adapted to be moved one notch or tooth to indicate a complete revolution of the wheel 50, and the wheel 52 is similarly adapted to be moved one notch or tooth to indicate a complete revolution of the wheel 51.

On a pivot 60 conveniently located is mounted a bell crank lever made in two pieces, one 61 provided at its outer end with a hammer 63 adapted to strike a gong 64 pivoted at 65 to the casing 35 and the other 62 provided at its outer end with an elastic tooth 66 and at one side with a pin 67 adapted to be engaged by the cam 48 on the units wheel 46. The two arms 61 and 62 are not in the same vertical plane but are connected by the rods 600 (see Fig. 10).

When the lever 40 is moved as hereinafter described, the pawl lever 41 is moved and its pawl tooth 44 engaging one of the teeth of the units wheel 46 moves that wheel one notch or tooth, backward rotation from any cause being prevented by the pawl 49. As the units wheel turns, the cam 48 turns with it, and engaging the pin 67, on the arm 62, of the bell crank lever lifts the latter and the hammer 63 until the units wheel has made a complete revolution when the pin 67 snaps by gravity from the surface of the cam 48 and the hammer 63 strikes the bell 64 to signal the operator that the revolution of the units wheel 46 has been accomplished. In falling, however, the elastic tooth 66 on the arm 62 engages the edge of the wheel 50 and moves the latter one notch or tooth, thus causing to be indicated on the dial the fact that a complete revolution of the units wheel has been made. As the units wheel continues to be rotated, the arm 62 is gradually lifted and an elastic member 660 upon which the tooth 66 is mounted (and which is secured to the arm 62) allows the tooth 66 to slip over the wheel 50 and to move to a new engaging position (see Fig. 9).

Any suitable means may be provided for carrying from the wheel 50 to the wheel 51 and from the latter to the wheel 52. The means shown comprise a pawl 501 secured

on the shaft of the wheel 50 and which is in the plane of the wheel 51 so that when the wheel 50 makes a complete revolution, this pawl strikes a tooth of the wheel 51 and moves it one notch. Over-rotation of the wheel 50 is prevented by a spring detent 503. In a similar way a pawl on the shaft of the wheel 51 carries to the wheel 52 and the wheel 51 is prevented from over-rotation by a spring detent.

On the shaft of each wheel 50, 51 and 52 is a small gear wheel, that of the wheel 51 not being in the same plane with those of the others. These are indicated in diagram in Fig. 8 and are designated 505, 515 and 525 respectively. On the wheel 51 is mounted a button 517. The wheel 515 is normally spring pressed out of the plane of the wheels 505 and 525. This button 517 being moved, the wheel 515 is thrown into the plane of and into engagement with the wheels 505 and 525 and, being rotated, it restores all of the wheels to zero, serving as a simple resetting mechanism.

In the form of the device above described, if the operator desires to use the cover 22 as a means for counting the tobacco leaves inspected, he moves the sliding actuator 26 until the knob 28 is in contact with the lever 30 (or some projection thereon) when the cover is depressed. Then at each downward movement of the cover the levers 30 and 32 are moved, the lever 40 is moved and the counting mechanism actuated as described. If he desires not to use the cover as the counting means, he fastens it to the table, slides the actuator 26 into the position indicated in Fig. 4 and inserts the button 25 in the cover. Then for each item he desires to register, he presses down the button 25 and this engaging the end of the actuator 26 and in turn the lever 30 moves the lever 40 as before.

In order to simplify the device and to enable the operator to separate the leaves inspected into those from which 1, 2 or 3 wrappers may be obtainable and in order to relieve the operator of the labor of making more than one stroke for each of such leaves, I have devised the multiple counter shown in Figs. 11 to 16 inclusive. In this form of the device, the table or platform 21 is provided with a series of depressions, each one of which contains a lever system, the levers being of different lengths. The shortest of the systems comprises a lever 30 normally pressed upward by a spring 31 and includes a lever 32, which in turn actuates the lever 40 of a counter (see Fig. 16). This corresponds to the lever system previously described. The longest of the systems (see Fig. 12) comprises a lever 30, a spring 31, a lever 32 and lever 40, but it also comprises additional levers 300 and 301. The intermediate lever system has similar additional

levers, but they are shorter. The cover 22 is also provided with three buttons 25, 250 and 251, the last two each coöperating with a separate lever system. There are provided
 5 three counting mechanisms, each connected with one lever system, and each actuated from a lever 40. These counting mechanisms are identical with that already described, but while on one of the units wheels
 10 is provided with 50 teeth and the dial 37 is correspondingly graduated, on another a dial 370 is graduated to 25 and the units wheel back of it provided with 25 teeth and on the third dial 371 is graduated to 17 and
 15 the units wheel back of it is provided with 17 teeth. In using this multiple device, the operator lays the tobacco leaf on top of the cover 22. If he estimates that one wrapper can be obtained from it, he lays it down and
 20 pushes the button 251, moving the pointer on the dial 37 one notch. If he estimates that two wrappers can be obtained from it, he lays it down in a separate place and pushes the button 250 and moves the pointer
 25 on the dial 370 one notch. If he estimates that three wrappers can be obtained from it, he lays it down separately from the other leaves and pushes the button 25 and moves the pointer on the dial 371 one notch. When
 30 he has 50 leaves in the first pile, the bell back of the dial 37 rings, when he has 25 leaves in the second pile the bell back of the dial 370 rings and when he has 17 leaves in the third pile the bell back of the dial 371
 35 rings. And in each pile there is thus material for 50 wrappers.

The motion of the lever 40 is shown as vertical. It will be noticed that the lever 41 is not straight but is provided with a
 40 curved tail adapted to be engaged by the lever 40. The result is that the motion of the lever 40 in a vertical plane is transmitted to the tail of the lever 41 with a rolling or sliding movement which is very easy
 45 and not abrupt and which renders the actuation of the counting mechanism simple.

What I claim is:

1. In a device of the character described, the combination with a counting mechanism,
 50 of an operating system therefor, and two means for separately operating the system, one including a depressible cover and a retracting device therefor and the other including a key and a retracting device there-
 55 for, the key being movable through the cover.

2. In a tobacco wrapper counter, a support, a counter, means for directly actuating
 60 the counter, including a movable member, two operating means, and an intermediate actuator movable to two positions in each of which it is adapted to coöperate with the movable member and one of said means.

3. In a tobacco wrapper counter, a sup-
 65 port, a counter, means for directly actuating

the counter, including a movable member, two operating means, and one intermediate actuator movable to two positions in each of which it is adapted to coöperate with one of said means, one of said means including a
 70 cover for the device.

4. In a tobacco wrapper counter, a support, a counter, means for directly actuating the counter, including a movable member,
 75 two operating means, and an intermediate actuator movable to two positions, in each of which it is adapted to coöperate with the member and one of said means, one of said means including a movable key.

5. In a tobacco wrapper counter, a support, a counter, means for directly actuating the counter including a movable member,
 80 two operating means, and an intermediate actuator movable to two positions, in each of which it is adapted to coöperate with the movable member and one of said means, both
 85 means being retractable after actuation.

6. In a tobacco wrapper counter, a support, a counter, means for directly actuating the counter, including a movable member,
 90 two operating means, and an intermediate actuator movable to two positions, in each of which it is adapted to coöperate with one of said means, one of said means including a movable cover for the device and means
 95 for retracting it to position.

7. In a tobacco wrapper counter, a support, a counter, means for directly actuating the counter, including a movable member,
 100 two operating means, and an intermediate actuator movable to two positions, in each of which it is adapted to coöperate the movable member and with one of said means, one of said means including a movable key and means for retracting it to position.
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8. In a tobacco wrapper counter, a support, a counter, means for directly actuating the counter, including a movable member,
 110 two operating means, one being the cover of the device and the other a key, each having suitable retracting means, in combination with a sliding actuator intermediate the movable member and both means and adapted to engage each.

9. In a device of the character described, comprising a counter, its actuating lever, a
 115 system of levers by which it may be actuated, a support for the latter, a cover for the support and levers, a slide mounted on the cover and engaging the lever system, a
 120 key adapted to contact with the slide, and means for retracting the cover to position after movement.

10. A device of the character described, comprising a counter, its actuating lever, a
 125 system of levers by which it may be actuated, a support for the latter, a cover for the support and levers, a slide mounted on the cover, and a key adapted to contact with the slide, said slide constituting means for re-
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tracting the key to position after its movement and also contacting with the lever system to operate the same.

11. A device of the character described, comprising a counter, its actuating lever, a system of levers by which it may be actuated, a support for the latter, a cover for the support and levers, a slide mounted on the cover, a key adapted to contact with the slide, said slide constituting means for retracting the key to position after movement and being adapted to contact with the lever system directly while in one position, an element carried by the slide and engaging the lever system when said slide is in another position and a pin adapted to contact with the slide when the element is in contact with the lever system.

12. A device of the character described, comprising a counter, its actuating lever, a system of levers by which it may be actuated, a support for the latter, a cover for the support and levers, a slide mounted on the cover, a key adapted to contact with the slide, said slide comprising a bar adapted to contact with the lever system directly while in one position, an element carried by the bar and engaging the lever system when the bar is in another position, and means for retracting the cover to position after movement.

13. In a tobacco wrapper counter, a support, a counter, means for directly actuating the counter, including a movable member, two operating means, and an intermediate actuator movable to two positions, in each of which it is adapted to cooperate with one of said means, and means for holding one actuating means inoperative while the other is employed.

14. In a tobacco wrapper counter, a support, a counter, means for directly actuating the counter, including a movable member, two operating means, and an intermediate actuator movable to two positions, in each of which it is adapted to cooperate with one of said means, one of said means including a cover for the device and means for holding it immovable.

15. In a tobacco wrapper counter, a support, a counter, means for directly actuating the counter, including a movable member, two operating means, and an intermediate actuator movable to two positions, in each of which it is adapted to cooperate with one of said means, one of said means including a movable and removable key.

16. In a device of the character described,

the combination with a counting mechanism, of an operating system therefor, and two means for separately operating the system, one including a depressible cover and the other including a key, and a common means for retracting either to position.

17. In a device of the character described, the combination with a counting mechanism, of an operating system therefor, and two means for separately actuating the system, one including a depressible cover and the other including a key, and a common means for retracting either to position, including a spring under the cover.

18. In a device of the character described, the combination with a counting mechanism, of an operating system therefor, and two means for separately operating the system, one including a depressible cover and the other including a key, and a common means for retracting either to position, including a spring under the cover.

19. In a device of the character described, the combination with a counting mechanism, of an operating system therefor, and two means for separately operating the system, one including a depressible cover and the other including a key, and a common device intermediate both means and the counting mechanism and with which both means contact when moved.

20. In a device of the character described, the combination with a counting mechanism, of an operating system therefor, and two means for separately operating the system, one including a depressible cover and the other including a key, and a common device intermediate both means and the counting mechanism and with which both means contact when moved, and means for retracting such common device.

21. In a device of the character described, the combination with a counting mechanism, of an operating system therefor, and two means for separately actuating the system, one including a depressible cover and the other including a key, and a common device intermediate both means and the counting mechanism and with which both means contact when moved, and means for retracting such common device, including a spring beneath the cover.

In testimony whereof I affix my signature in presence of two witnesses.

DAVID STRASSER.

Witnesses:

A. C. McDONNELL,
MARY H. LEWIS.