July 5, 1960 O. F. SWANSON 2,943,786

VOTING MACHINE RECORD PRINTING MEANS

Filed July 19, 1957 5 Sheets-Sheet 1

FIG. 1

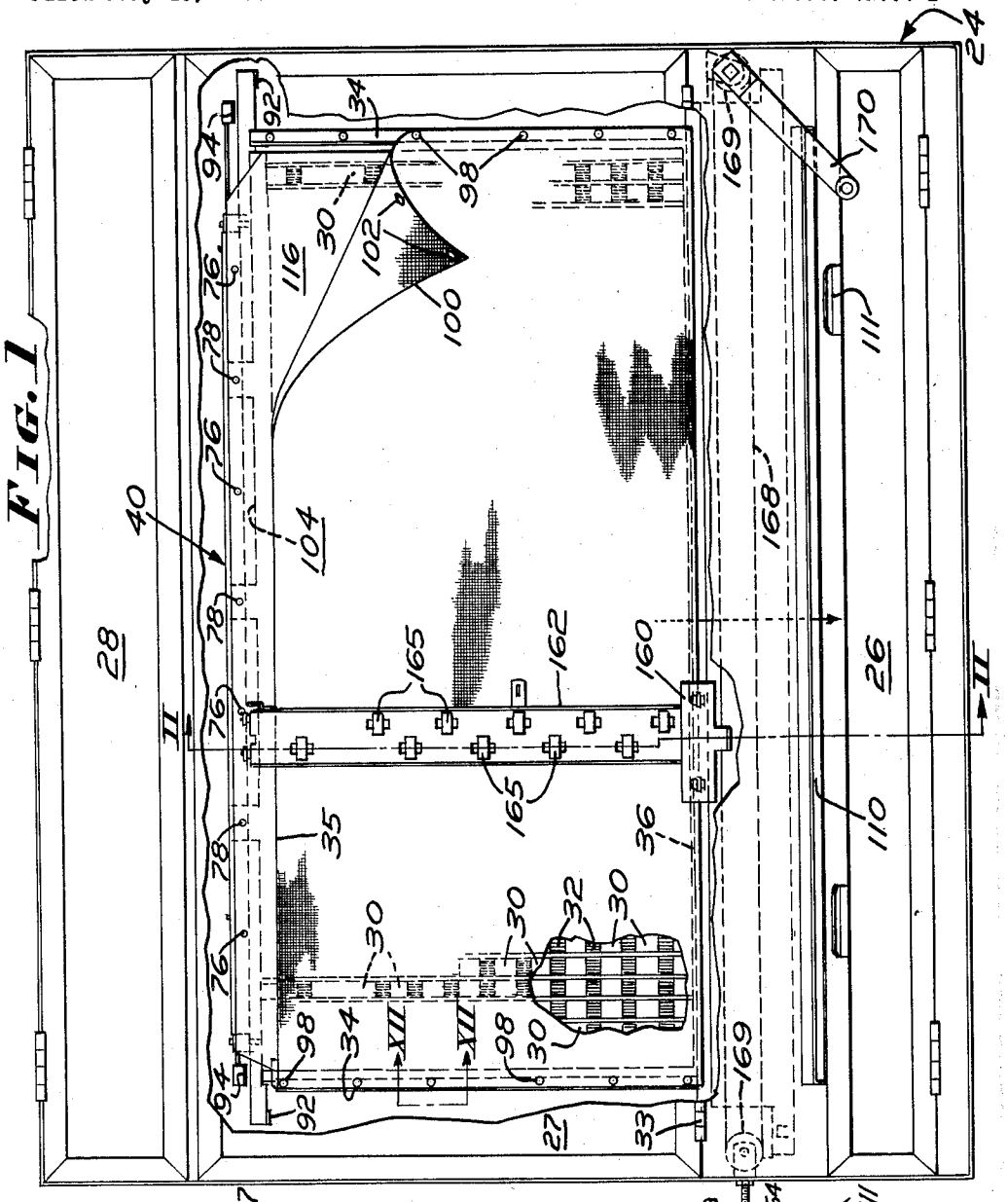
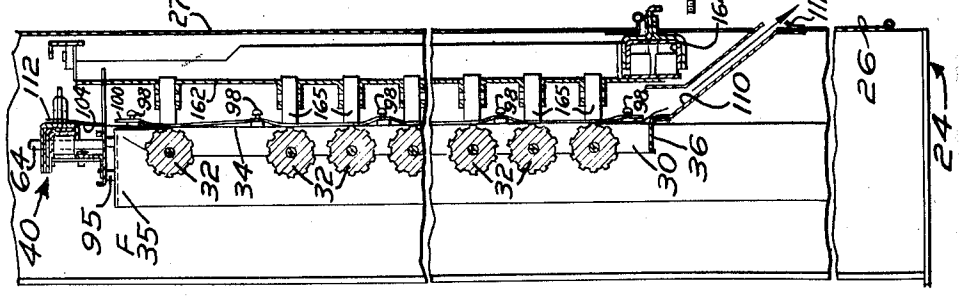


FIG. 2



July 5, 1960 O. F. SWANSON 2,943,786

VOTING MACHINE RECORD PRINTING MEANS

Filed July 19, 1957 5 Sheets-Sheet 2

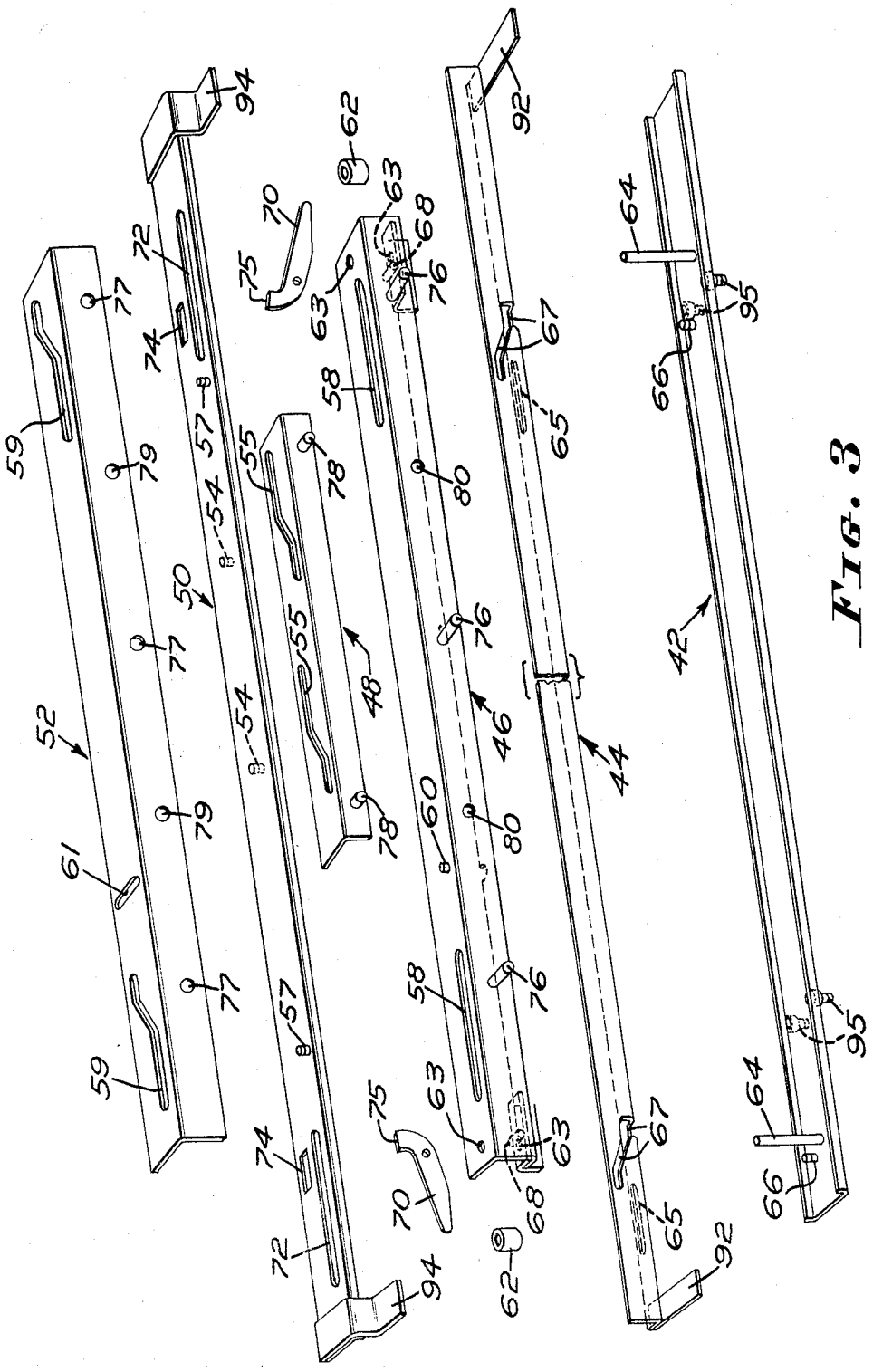


FIG. 3

July 5, 1960 O. F. SWANSON 2,943,786

VOTING MACHINE RECORD PRINTING MEANS

Filed July 19, 1957 5 Sheets-Sheet 3

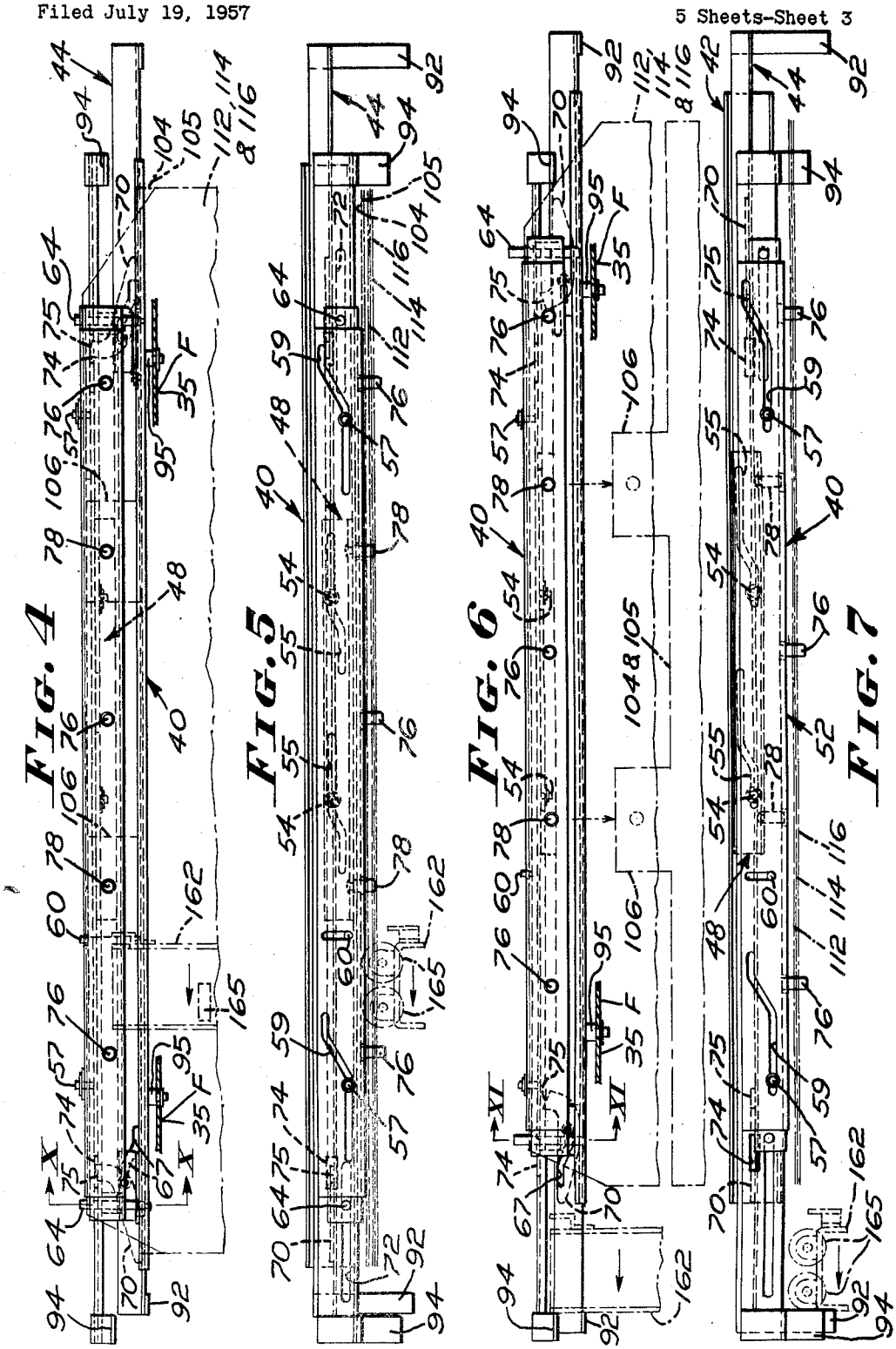


FIG. 4

FIG. 5

FIG. 6

FIG. 7

July 5, 1960 O. F. SWANSON 2,943,786

VOTING MACHINE RECORD PRINTING MEANS

Filed July 19, 1957 5 Sheets-Sheet 4

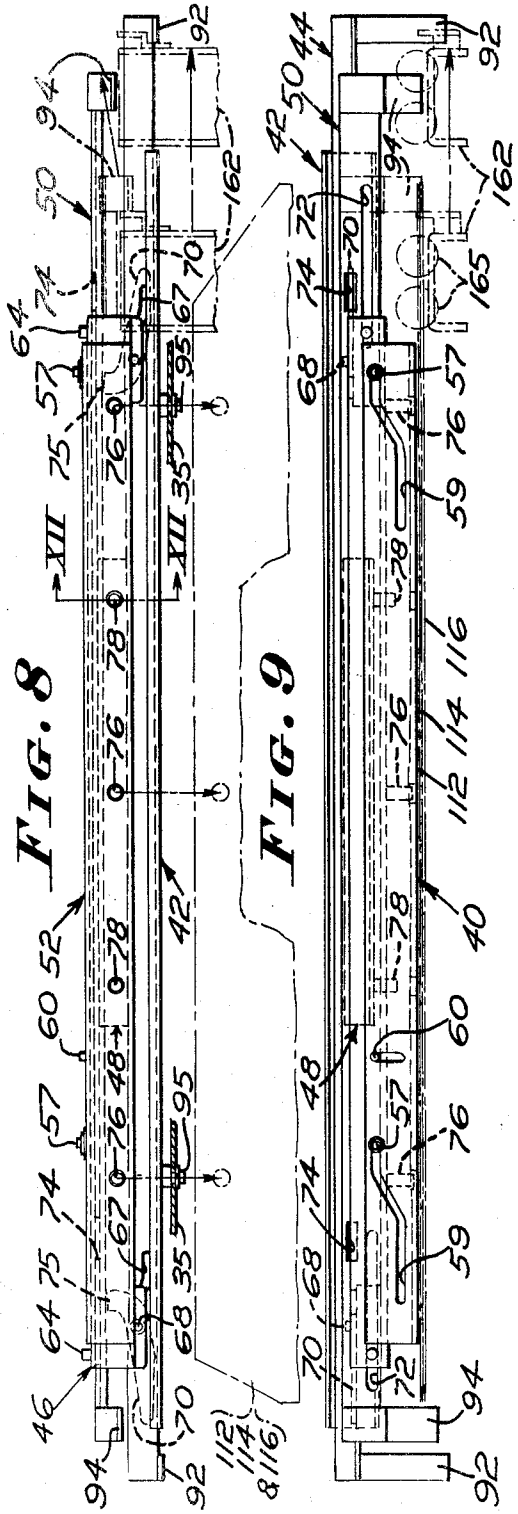


FIG. 8

FIG. 9

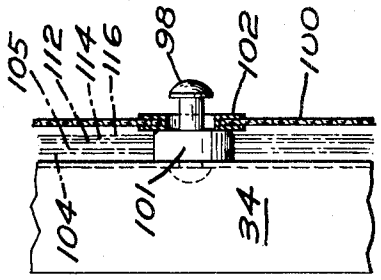


FIG. 12

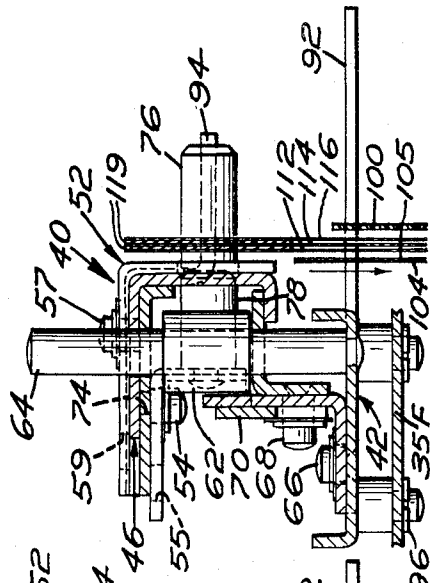


FIG. 11

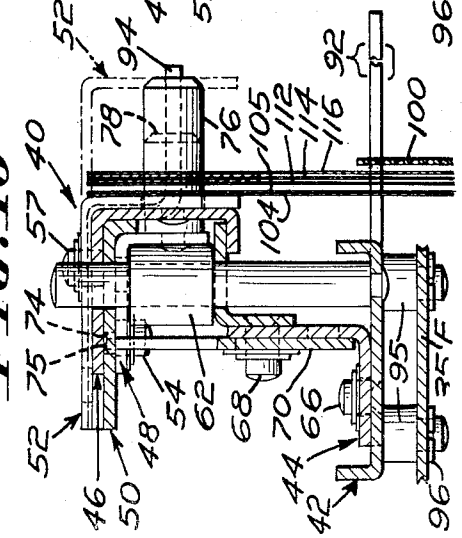


FIG. 10

July 5, 1960 O. F. SWANSON 2,943,786

VOTING MACHINE RECORD PRINTING MEANS

Filed July 19, 1957 5 Sheets-Sheet 5

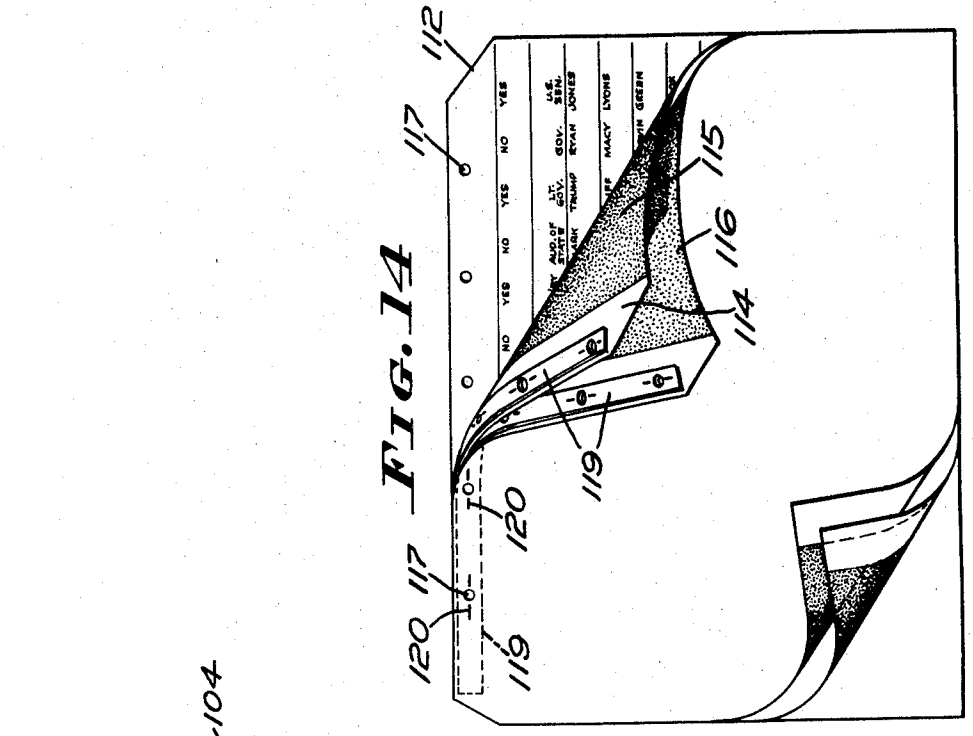


FIG. 14

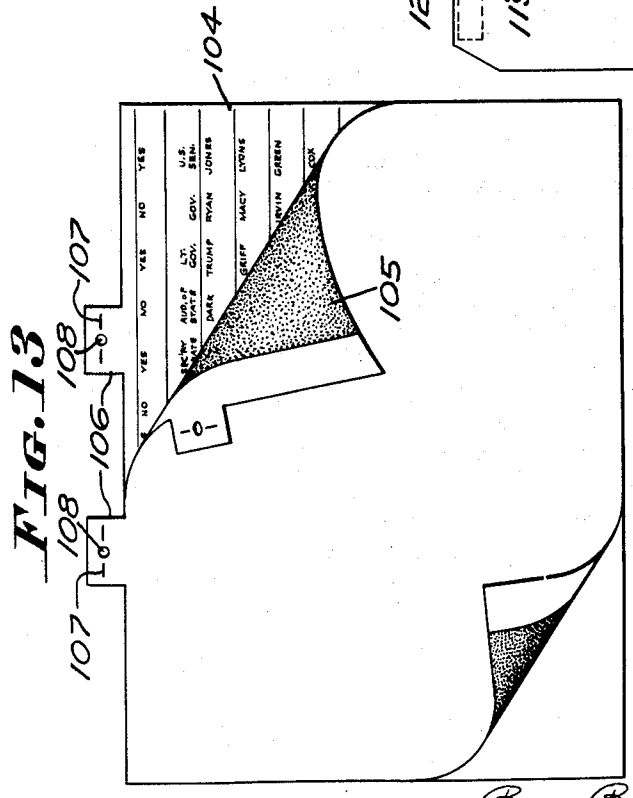


FIG. 13

INVENTOR:
OSCAR F. SWANSON
BY:
Beau, Brooks, Buckley & Beau,
ATTORNEYS.

United States Patent Office

2,943,786

Patented July 5, 1960

2,943,786

VOTING MACHINE RECORD PRINTING MEANS

Oscar F. Swanson, Jamestown, N.Y., assignor to Automatic Voting Machine Corporation, Jamestown, N.Y.

Filed July 19, 1957, Ser. No. 672,984

8 Claims. (Cl. 235—50)

This invention relates to automatic voting machines of the type shown and described in my prior U.S. Patent 2,787,414, issued April 2, 1957; and more particularly to improvements in connection with proof sheet and return sheet mounting and printing and delivery means thereof.

A primary object of the present invention is to provide improved means in voting machines as aforesaid for furnishing printed proof and return sheets therefrom.

Another object of the invention is to provide in a machine as aforesaid improved proof and return sheet mounting means.

Still another object of the invention is to provide improvements as aforesaid in combination with automatic interlock means preventing tampering with the machine control mechanism and/or the vote recording mechanism and/or the printed return sheets.

Other objects and advantages of the invention will appear in the specification hereinafter.

In the drawings:

Fig. 1 is a fragmentary rear elevational view of a voting machine embodying a proof and return sheet mounting and printing arrangement of the invention;

Fig. 2 is a fragmentary sectional view taken along line II—II of Fig. 1;

Fig. 3 is an "exploded" view in perspective of a return and proof sheet mounting subassembly component of the machine;

Fig. 4 is a front elevational view of the device of Fig. 3, in sheet printing position;

Fig. 5 is a plan view of the device of Fig. 4;

Fig. 6 is a view similar to Fig. 4, but showing the device adjusted to proof sheet released condition;

Fig. 7 is a plan view of Fig. 6;

Fig. 8 is a view similar to Figs. 4, 6, but showing the device in return sheet released position;

Fig. 9 is a plan view of Fig. 8;

Fig. 10 is a section, on enlarged scale, taken along line X—X of Fig. 4;

Fig. 11 is a section similar to Fig. 10, but taken along line XI—XI of Fig. 6;

Fig. 12 is a fragmentary section taken along line XII—XII of Fig. 1;

Fig. 13 is an elevational view of the proof sheet pack; and

Fig. 14 is an elevational view of the return sheet pack.

The present invention contemplates generally, improved means in a voting machine as disclosed in my aforesaid prior patent for mounting, printing and delivering "proof" and "return" sheets subsequent to printing thereon by contacts with the machine counterwheels. Thus as shown for example in the drawing herewith, the invention may be embodied in conjunction with a voting machine comprising a vertically standing voting machine frame as indicated generally at 24 (Fig. 1). At its rear, the lower end of the machine frame 24 is provided with a hinged cover panel as indicated at 26 to provide the "custodians" compartment. Also, a central hinged panel or door 27 is arranged to be normally locked in closed position so

that only the machine custodian may obtain access therein for the purpose of checking or resetting the machine counters, such as may be required. Similarly, the upper end portion of the machine frame 24 is also arranged to be normally closed by means of a lockable hinged panel 28.

The central body portion of the machine frame 24, when uncovered at the rear, exposes to view the bank of "stacks" or "columns" of counterwheels of the voting machine, so that the election officers may read the results of a voting period. Thus, as shown in Fig. 1 the counter stacks or columns will appear when viewed from the rear of the machine as indicated at 30; each stack being provided with a series of vertically spaced windows through which the peripheral portions of the counterwheels 32 mounted therein extend outwardly beyond the stack casings. The machine frame portion encompassing the bank of counter columns 30 is normally covered by means of the door 27 hinged to the machine frame, as by means of hinge devices as indicated at 33. The counter columns 30 are held in a register frame arranged perimetrically of the counter columns, and as shown in the accompanying drawing comprises a side post 34 at each end of the bank of counter columns and a top plate 35 and a bottom plate 36, whereby the posts 34—34 and the plates 35—36 comprises therebetween a rectangular frame encompassing the perimeter of the bank of counter columns as viewed from the rear of the machine. It is to be understood that the machine parts referred to so far are presently standard, and that the present invention relates only to mechanism for taking printed records of the counterwheel readings; and is not concerned with the mechanism whereby the voters register their votes into the counter mechanisms.

The mechanism of the present invention for mounting and delivering the proof and return sheets subsequent to printing thereof is mounted on top of the register frame top plate 35, and is indicated generally in the drawing at 40. The unit comprises an integral subassembly as shown in Fig. 3, including a mounting channel indicated generally at 42; an index angle 44; a main channel 46; a proof sheet angle 48; an actuator bar 50, and a stripper angle 52. To assemble the parts shown in Fig. 3, the proof sheet angle 48 is first mounted upon the actuator bar 50 by inserting the downwardly directed studs 54—54 thereof into cam slots 55—55 formed in the proof sheet angle. The unit comprising members 48—50 is then mounted relative to the main channel 46 by slip-fitting the upwardly extending studs 57—57 thereof through slots 58—58 formed in the upper level of the main channel 46. The stripper angle 52 is then set into position to overlie the assembly hereinabove recited by slip-fitting insertion of upstanding studs 57—57 through cam slots 59—59 formed in the stripper angle 52. At the same time upstanding stud 60 extending from the member 46 slip-fits into transverse slot 61 formed in the stripper angle 52. Spacer sleeves 62—62 (Figs. 3, 10, 11) are then slip-fitted into the opposite ends of the member 46 in line with apertures 63—63, whereupon the subassembly comprising the members 46—48—50—52 may be mounted upon the mounting channel 42 by downwardly slip-fitting thereof upon upstanding guide studs 64—64 threading through apertures 63—63 of the member 46 and through the spacer sleeves 62—62. Then, from the rear of the assembly the index angle 44 is slip-fitted into place (as shown in Fig. 10), during which operation side portions 65—65 of the member 44 are slip-fitted downwardly upon upstanding studs 66—66 of the member 42 while at the same time cam-slotted portions 67—67 of the member 44 slip-fit upon lateral extending studs 68—68 extending from the member 46.

Latches 70—70 are then fitted into pivotally mounted

relation upon the member **46** by sliding them laterally upon studs **68—68** extending from rearwardly of the assembly; the latches being held in position by any suitable locking rings, cotter pins, or the like. Member **50** is provided with longitudinally extending slots **72—72** which accommodate the guard studs **64—64** when the unit is assembled. Also, the member **50** is apertured as indicated at **74—74** to accommodate the locking corners **75—75** of the latches **70—70**, as will be explained more fully hereinafter. The member **46** is provided with a plurality of laterally extending studs **76** upon which will hang the voting return sheet as will be explained in more detail hereinafter; the member **52** being perforated as indicated at **77** to accommodate the studs **76** when the unit is assembled. Similarly, the member **48** carries a pair (or more, if preferred) of laterally extending studs **78** upon which will hang the proof sheet pack, as will be explained hereinafter; the member **52** being also perforated as indicated at **79** to accommodate the studs **78** extending from the member **48** when the unit is assembled. Likewise, member **46** is perforated as indicated at **80—80** to accommodate the pins **78—78** extending from the member **48** when the unit is assembled.

The member **44** is provided at its opposite ends with lateral extending pick-up tabs **92—92** to be acted upon by movement of the printing platen, as will be explained more fully hereinafter. Likewise, the member **50** is provided at its opposite ends with lateral extending pick-up tabs **94** for similar purposes. The parts of the subassembly are readily maintained in assembled functional relation by means of suitable E rings or cotter pins or the like, applied to the stud members extending through slotted portions of the other members, as explained hereinabove. The mounting channel **42** is provided at its bottom face with downwardly extending studs **95** which are adapted to slip-fit through apertured portions of the register frame **35** for mounting the proof and return sheet control assembly on the register frame (Figs. 10–11); the mounted assembly being held in place by means of locking rings or the like as indicated at **96**.

As shown in Figs. 1, 2, 12, the side posts **34—34** of the register frame mount in vertically aligned relation a series of headed pins **98** for mounting thereon a return sheet cloth **100**; the pins **98** being preferably provided with enlarged diameter portions **101** adjacent their mountings to the channels **34—34**. The cloth **100** is provided with corresponding apertures reinforced by grommets **102**, whereby the cloth may first be mounted upon the pins at one end of the machine and then stretched laterally into slip-fitted relation upon the pins at the other end of the machine so as to be thereby held in taut parallel relation to the banks of counterwheels described hereinabove.

As illustrated in Fig. 13, a proof sheet assembly is provided comprising a prime paper printing sheet **104** and a carboned cover sheet **105**, both of which are provided with upstanding ears **106** and are stapled or otherwise held together as indicated at **107**; the ears **106** being apertured as indicated at **108** for slip-fitting upon the laterally extending studs **78—78** of the member **48** referred to hereinabove. As shown in Fig. 2, the proof sheet assembly **104—105** is of greater vertical length than the return sheet pack so that they normally extend at their lower edges into the upper end of the return chute **110** which is provided with an upstanding lip **111**. As shown in Fig. 14, the "return" sheet pack comprises a printed form sheet **112**; a second printed form sheet **114** carboned at its rear face as indicated at **115**; and a carboned tear sheet **116**; all of which are the same shape and size and apertured in horizontal alignment along their upper edges as indicated at **117** for slip-fit mounting upon the studs **76, 78** of the members **46, 48** referred to hereinabove. As shown in Fig. 14, the upper edges of the return sheets are preferably reinforced by strips **119** formed of paper or the like. The return sheets **112, 114, 116** of each "pack" unitized by means of staples or the like as indicated at **120**.

Thus, it will be appreciated that in order to prepare a machine for voting, the proof sheet pack **104—105** will first be mounted upon the pins **78** in position next to the counterwheels. The return sheet pack **112—114—116** will then be slip-fitted upon the pins **76—78** into position behind the proof sheet pack and the return sheet cloth **100** will then be stretched and mounted in position upon the pins **98** at the opposite ends of the register frame as explained hereinabove. Then, subsequent to taking printed recordings of the readings of the counterwheels before and after the voting period (as will be explained hereinafter) the proof and record sheets may be separately released from the machine by selective displacements of the proof and record sheets from the pins **78—76**. Means for so releasing the proof and return sheets will also be referred to and described in detail hereinafter.

In order to print the readings of the counterwheels upon the proof and return sheets there is provided a traveling platen which is generally in the form of an upright bracket comprising a base plate portion **160** and a vertical post portion **162** rigidly attached thereto. The base plate portion **160** is mounted for horizontal sliding engagement upon a fixed rail **164** (Fig. 2) extending transversely of the rear of the machine and comprising an integral portion of the rigid frame structure thereof; and the platen post portion **162** mounts a series of platen rollers **165** upon vertical axle means in such manner that the rollers **165** are in horizontal registry with the exposed peripheral portions of the counterwheels as indicated at **32** (Figs. 1–2). The platen post **162** is disposed rearwardly of the exposed portions of the counter columns, and the rollers **165** are so dimensioned and arranged thereon that when the paper packs referred to hereinabove are hung upon the pins **78—76** and the platen device is moved from side-to-side of the machine as viewed in Fig. 1, the roller devices **165** will thereupon press the paper packs firmly against the exposed raised numerals of the counterwheels, thereby causing the carbon papers to print the counterwheel readings upon the proof and return sheets of the paper pack (Figs. 13 and 14).

Movements of the platen post **162** from one end of the machine to the other are provided for by means of an endless chain or cable-sprocket mechanism as indicated at **168, 169** and a hand crank **170** (Fig. 1). Thus, the election officer may turn the crank to cause the platen to travel from one end of the machine to the other for printing the readings of the counterwheels upon the proof and return sheets referred to hereinabove.

For example, the machine custodian preferably will first "set up" the machine by pushing finger **94** to left causing stripper angle **50** to be cammed inwardly as to make the pins **76, 78** protrude in position to receive proof and return sheets. The latches **70, 70** operate by gravity to project their jaw portions **75** through the slots **58** and into the locking apertures **74—74** of the bar **50** following the camming action; thereby blocking any accidental shifting of bar **50** relative to angle **48**, such as would otherwise unintentionally strip the sheet packs from the mounting pins. Then the proof and return sheet packs and the retaining cloth **100** are loaded on the pin **78, 76**, and **98**, respectively. He will then set up the interlocks of the machine (not shown) but disclosed in my prior Patent 2,787,414, and will then close and lock the rear doors of the machine. Just prior to opening of the polls the election officer will first turn the crank **170** to thereby cause the platen **162** to move from the right hand end of the machine as shown in Fig. 1 to the left hand end thereof. This operation causes both the proof sheet and the return sheets to be printed against the counterwheels **32** so as to provide thereon a printed record of the "start" or "zero" readings of the counter-

wheels. The last portion of travel of the platen post toward the left as explained hereinabove causes the platen post to engage the finger **92** at the left hand end of the index angle (Fig. 5), to be thereby displaced to the left as to the position shown in Figs. 6, 7. This operation causes the actuator bar **52** to be cammed partially outwardly as to the position shown in Fig. 7, whereby the proof sheet pack **104, 105** is shoved off the pins **78—78**, and thereupon falls by gravity as illustrated in Figs. 6, 11 downwardly into and out of the slot **110**. The lip **111** (Figs. 1, 2) normally interferes with free slideout of the proof sheet pack, but the latter may be manually lifted over the lip **111** and then withdrawn by the election officer for reading of the "zero" settings of the counterwheels. At the same time the platen bears against the finger **94** at the left hand end of the actuator bar **50** and displaces the latter relative to the rest of the assembly, whereby the cam slots **67, 67** cause the members **52, 46, 50, 48** to lower relative to members **44, 42** of the device. This indexes the elevation of the return sheet pack to a lower level as illustrated in Figs. 4, 6, as distinguished from the relative positions of the parts as shown in Fig. 8. More specifically, the downward indexing of the device is illustrated by comparison of Figs. 10, 11.

When the platen reaches its extreme left hand position of travel it actuates the machine interlock latches (as explained in my earlier patent) thereby permitting the election officer to unlock the machine operating handle and the voting mechanism. Voting then takes place in the previously conventional manner whereby the vote tallies are reflected in cumulative rotations of the counterwheels corresponding to the respective candidates. At the end of the voting period the election officer locks the machine against further voting and then cranks the platen toward the right hand end of the machine as viewed in the drawing. This operation causes the rollers **165** of the platen to press the record sheet pack against the counterwheels so as to print upon the record sheets the final readings of the counterwheels along horizontal lines slightly elevated above the earlier printed "zero" readings of the same counterwheels, due to the interim indexing of the mechanism as explained hereinabove.

As the platen reaches its extreme position of movement toward the right, it successively engages the fingers **94, 92** at the right hand end of the members **50, 44** to first cause the stripper angle **52** to be cammed outwardly so as to push the return sheet pack off the pins **76, 78**, thereby permitting them to fall by gravity into the delivery chute **110**. As explained hereinabove the chute lip **111** normally prevents the return pack from sliding to the floor, but it is readily lifted away from the lip and withdrawn from the chute for reading and further processing by the election officers. Finally the lateral displacement by the platen toward the right of the finger **92** causes the members **46, 48, 50, 52** to be cammed upwardly relative to the rest of the assembly so as to reindex the sheet holding devices to the original higher elevation, preparatory to another voting operation.

Thus, it will be appreciated that by virtue of the present invention the process of mounting and delivery of the return record sheet is substantially simplified and facilitated from the standpoint of the performance required of the machine custodian. Also, in the case of the present invention the paper return sheets are mechanically protected from damaging contact with the counterwheels by means of the cloth member **100**; and because the return sheets are not required to extend into connections with opposite side panel portions of the machine frame the sheet pack is of horizontally reduced dimension and more readily feeds by gravity through the delivery chute **110**. Furthermore, the return pack support and indexing and discharge unit is of mechanically simplified form.

Although only one form of the invention has been shown and described in detail, it will be apparent to those skilled in the art that the invention is not so limited but that various changes may be made therein without departing from the spirit of the invention or the scope of the appended claims.

I claim:

1. In a voting machine having a counter column with the counterwheels thereof protruding rearwardly beyond adjacent structure of the voting machine, a voting return printing device comprising, in combination, a composite bar assembly mounted upon said voting machine across the top of said counter column and including a bar element arranged to be vertically shiftable relative thereto, a return sheet pack comprising a return sheet and a carbon sheet in face-to-face relation, a cloth panel carried by the machine externally of said return sheet pack and extending beyond the opposite side edges thereof to protect the latter, means mounting said return sheet pack upon said bar to cover the rear surfaces of said protruding counterwheels, a printing platen comprising a member mounting a series of rollers, said platen being mounted upon said machine so as to be shiftable from end-to-end thereof across the rear faces of said counterwheels, said rollers being dimensioned and arranged upon said platen so as to be carried thereby in horizontally traveling directions and pressed firmly against the protruding segment portions of said counterwheels whereby to press said return sheet pack against the exposed segment portions of said counterwheels thereby impressing upon said return sheet facsimiles of the readings of said counterwheels, cam means carried by said machine and operable automatically upon arrival of said platen at one end of said machine to cam said bar vertically whereby to cause said return sheet pack to be positioned at one elevation during travel of said platen from one end of said machine to another while being disposed at a different elevation during travel of said platen from said other end of the machine to the first mentioned end thereof, and means connected with said means mounting the return sheet pack upon the bar operable automatically upon arrival of said platen at one end of the machine to release said return sheet to fall by gravity out of the machine.

2. In a voting machine having banks of counter columns arranged in upright side-by-side alignment with the counterwheels thereof arranged in horizontally aligned rows and with peripheral segment portions thereof protruding beyond adjacent structure of the voting machine, a voting return printing device comprising in combination, a proof sheet and return sheet support means mounted upon said voting machine across the top of said bank of counter columns, said support means comprising a sub-assembly of telescopically related slide members, two of said members mounting laterally extending pins and arranged to be vertically shiftable relative to other of said members, a return sheet pack and a proof sheet pack separately mounted upon the laterally extending pins of said members whereby said sheet packs are carried by said support means to cover the rear surfaces of said protruding counterwheels, a textile fabric sheet stretched over said return sheet pack and carried by the machine frame to extend beyond the opposite side edges of said return sheet pack to protect the latter, a printing platen comprising a roller device, said platen being mounted upon said machine so as to be shiftable from end-to-end thereof across the rear faces of said counterwheels, said roller device being dimensioned and arranged so as to be carried in horizontally traveling directions while being pressed firmly aginst the protruding segment portions of said counterwheels whereby to press through said textile sheet and to force said sheet packs against the exposed segment portions of said counterwheels thereby impressing upon said return sheets facsimiles of the readings of said counterwheels, cam means carried by said support means and operable automatically upon arrival

of said platen at one end of said machine to cam one of said pin mounting members to withdraw so as to release said proof sheet while the other pin mounting member is cammed vertically whereby to cause said return sheet pack to be indexed to another elevation, whereby when said platen is subsequently moved from said one end of said machine back to the starting end thereof it will cause the return sheet to be printed at a different elevation as said platen is moved from said one end of the machine to the starting end thereof, and cam means connected with said pin carrying member operable automatically upon arrival of said platen at the starting end of the machine to retract said pin carrying member to release said return sheet to fall by gravity out of the machine.

3. In a voting machine having banks of counter columns arranged in upright side-by-side alignment with the counterwheels thereof arranged in horizontally aligned rows and with peripheral segment portions thereof protruding rearwardly beyond adjacent structure of the voting machine, a voting return printing device comprising, in combination, a member mounted upon said voting machine across the top of said bank of counter columns and arranged to be vertically shiftable relative thereto, a return sheet pack comprising a return sheet and a carbon sheet in face-to-face relation, means mounting said return sheet pack upon said member to cover the rear surfaces of said protruding counterwheels, a textile fabric sheet stretched over said return sheet pack and carried by the machine frame to extend beyond the opposite side edges of said return sheet pack to protect the latter, and a printing platen comprising a roller device, said platen being mounted upon said machine so as to be shiftable from end-to-end thereof across the rear faces of said counterwheels, said roller device being dimensioned and arranged so as to be carried in horizontally traveling directions while being pressed firmly against the protruding segment portions of said counterwheels whereby to press through said fabric sheet and to force said return sheet pack against the exposed segment portions of said counterwheels thereby impressing upon said return sheet facsimiles of the readings of said counterwheels.

4. In a voting machine having a bank of counterwheels arranged in upright alignment with the counterwheels thereof arranged with peripheral segment portions thereof protruding beyond adjacent structure of the voting machine, a voting return printing device comprising in combination, a member mounted upon said voting machine across the top of said bank of counterwheels and arranged to be vertically shiftable relative thereto, a return sheet pack comprising a return sheet and a carbon sheet in face-to-face relation, means mounting said return sheet pack upon said bar to cover the rear surfaces of said protruding counterwheels, a textile fabric sheet stretched over said return sheet pack and carried by the machine frame to extend beyond the opposite side edges of said return sheet pack to protect the latter, a printing platen comprising a roller device, said platen being mounted upon said machine so as to be shiftable from end-to-end thereof across the protruding faces of said counterwheels, said roller device being dimensioned and arranged so as to be carried in horizontally traveling directions while being pressed firmly toward the protruding segment portions of said counterwheels whereby to press said return sheet pack against the exposed segment portions of said counterwheels thereby impressing upon said return sheet facsimiles of the readings of said counterwheels.

5. In a voting machine having a counter column with the counterwheels thereof protruding beyond adjacent structure of the voting machine, a voting return printing device comprising in combination, a member mounted upon said voting machine across the top of said counter column and arranged to be vertically shiftable relative thereto, a return sheet pack comprising a return sheet and a carbon sheet in face-to-face relation and a cloth panel externally thereof and carried by the machine frame to extend beyond the opposite side edges of said return sheet pack, means mounting said return sheet pack upon said member to cover the protruding surfaces of said counterwheels, a printing platen comprising a roller device, said platen being mounted upon said machine so as to be shiftable from end-to-end thereof across the protruding faces of said counterwheels, said roller device being dimensioned and arranged so as to be carried in horizontally traveling directions and pressed firmly against the protruding segment portions of said counterwheels whereby to press through said cloth panel and to force said return sheet pack against the exposed segment portions of said counterwheels thereby impressing upon said return sheet facsimiles of the readings of said counterwheels, cam means carried by said machine and operable automatically upon arrival of said platen at one end of said machine to cam said member vertically whereby to cause said return sheet pack to be positioned at one elevation during travel of said platen from one end of said machine to another while being disposed at a different elevation during travel of said platen from the other end of the machine to the first mentioned end thereof, and means connected with said means mounting the return sheet pack upon the member operable automatically upon arrival of said platen at one end of the machine to release said return sheet to fall by gravity out of the machine.

6. In a voting machine having a counter column with the counterwheels thereof protruding beyond adjacent structure of the voting machine, a voting return printing device comprising in combination, a member mounted upon said voting machine across the top of said counter column and arranged to be vertically shiftable relative thereto, a return sheet pack comprising a return sheet and a carbon sheet in face-to-face relation and a cloth panel externally thereof and carried by the machine frame to extend beyond the opposite side edges of said return sheet pack, means mounting said return sheet pack upon said member to cover the protruding surfaces of said counterwheels, and a printing platen comprising a roller device, said platen being mounted upon said machine so as to be shiftable from end-to-end thereof across the protruding faces of said counterwheels, said roller device being dimensioned and arranged upon said platen so as to be carried thereby in horizontally traveling directions and pressed firmly against said cloth panel whereby to press said return sheet pack against the exposed segment portions of said counterwheels thereby impressing upon said return sheet facsimiles of the readings of said counterwheels.

7. In a voting machine having banks of counter columns arranged in upright side-by-side alignment with the counterwheels thereof arranged in horizontally aligned rows and with peripheral segment portions thereof protruding beyond adjacent structure of the voting machine, a voting return printing device comprising in combination, a return sheet support means mounted upon said voting machine across the top of said bank of counter columns, said support means comprising a sub-assembly of telescopically related slide members, one of said members mounting laterally extending pins and arranged to be vertically shiftable relative to other of said members, a return sheet pack slip-fitted upon the laterally extending pins of said member whereby said sheet pack is carried by said support means to cover the rear surfaces of said protruding counterwheels, a textile fabric sheet stretched over said return sheet pack and carried by the machine frame to extend beyond the opposite side edges of said return sheet pack to protect the latter, a printing platen comprising a roller device, said platen being mounted upon said machine so as to be shiftable from end-to-end thereof across the rear faces of said counterwheels, said roller device being dimensioned and arranged so as to be carried in horizontally traveling directions while

being pressed firmly against the protruding segment portions of said counterwheels whereby to press through said textile sheet and to force said sheet pack against the exposed segment portions of said counterwheels thereby impressing upon said return sheet facsimiles of the readings of said counterwheels, cam means carried by said support means and operable automatically upon arrival of said platen at one end of said machine to cam said pin mounting member vertically whereby to cause said return sheet pack to be indexed to another elevation, whereby when said platen is subsequently moved from said one end of said machine back to the starting end thereof it will cause the return sheet to be printed at a different elevation, and cam means connected with said pin carrying member operable automatically upon arrival of said platen at the starting end of the machine to retract said pin carrying member to release said return sheet to fall by gravity out of the machine.

8. In a voting machine having banks of counter columns arranged in upright side-by-side alignment with the counterwheels thereof arranged in horizontally aligned rows and with peripheral segment portions thereof protruding beyond adjacent structure of the voting machine, a voting return printing device comprising in combination, a proof sheet and return sheet support means mounted upon said voting machine across the top of said bank of counter columns, said support means comprising a sub-assembly of telescopically related slide members, two of said members mounting laterally extending pins and arranged to be vertically shiftable relative to other of said members, a return sheet pack and a proof sheet pack separately mounted upon the laterally extending pins of said members whereby said sheet packs are carried by said support means to cover the rear surfaces of said protruding counterwheels, a printing platen comprising a roller device mounted upon said machine so as to be shiftable from end-to-end thereof across the rear faces of said counterwheels whereby to press said sheet packs against the exposed segment portions of said counterwheels thereby impressing upon said return sheets facsimiles of the readings of said counterwheels, cam means carried by said support means and operable automatically upon arrival of said platen at opposite ends of said machine to cam said pin mounting members relative to other members of the sub-assembly so as to successively release said proof sheet and to cam the return sheet mounting member vertically and to release said return sheet to fall by gravity out of the machine.

References Cited in the file of this patent

UNITED STATES PATENTS

1,801,592	Dugdale	Apr. 21, 1931
2,787,414	Swanson	Apr. 2, 1957