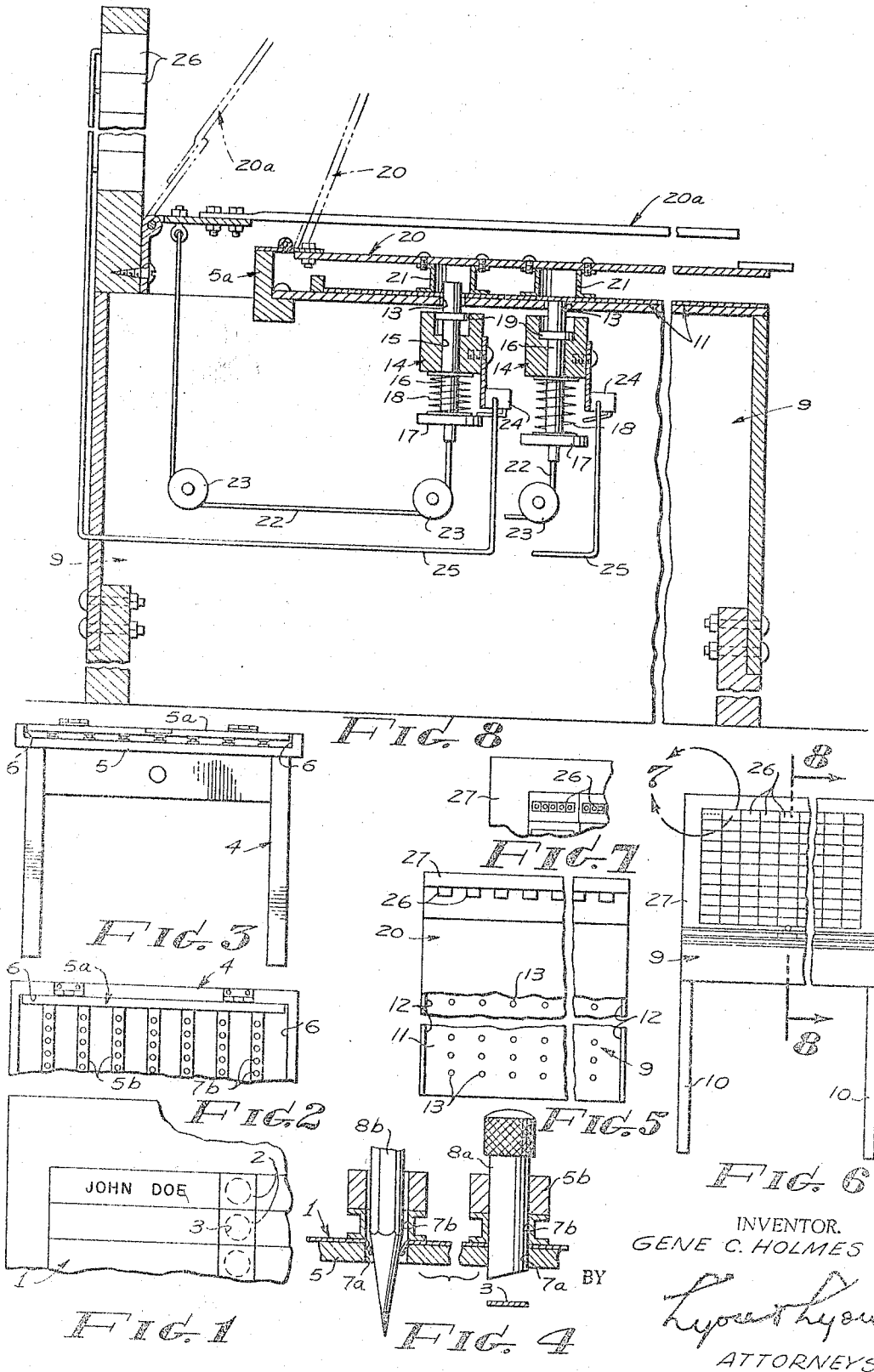


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VOTE COUNTING MACHINE
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VOTE COUNTING MACHINE
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This invention relates to vote counting machines.

An object of this invention is to provide a vote counting machine which is adapted to use an essentially standard ballot, that is, one which need be modified only superficially. More specifically, the ballot is arranged so that the voter punches holes in designated areas of the ballot rather than marking the ballot with a rubber stamp. To facilitate punching the ballot, the voting booth is provided with a table top having holes so located as to correspond to the locations of the areas designated to be punched. The punching operation would be done with a die fitting the holes in the table top.

A further object is to provide a vote counting machine which is arranged to receive the punched ballots in sequence and by simple manipulation of the pins to sense the punched areas and tabulate the results.

A still further object is to provide a vote counting machine which is simple of construction, small in size, light in weight, low in cost and up-keep and easily manipulated so as to warrant the use of several machines at voting headquarters. Or, if desired, a single machine may be employed to tabulate the results from a group of precincts, and in counties or cities of low population, a single machine may be sufficient.

With the above and other objects in view as may appear hereinafter, reference is directed to the accompanying drawings, in which:

FIGURE 1 is a fragmentary plan view of a ballot prepared for use with the vote counting machine and the table top at the precinct.

FIGURE 2 is a front view with a portion shown in section showing a table top adapted for use at the precinct in connection with the ballot.

FIGURE 3 is a front view of the table.

FIGURE 4 is a fragmentary section view showing the manner in which the ballot may be changed by means of a die, pencil or similar pointed tool.

FIGURE 5 is a reduced fragmentary plan view of the vote counting machine.

FIGURE 6 is a front view thereof.

FIGURE 7 is an enlarged fragmentary front view taken within circle 7 of FIGURE 6.

FIGURE 8 is an enlarged fragmentary sectional view taken through 8-8 of FIGURE 6.

The vote counting machine utilizes a ballot 1 formed of paper in the manner of the conventional ballot. The ballot 1 differs from the conventional ballot only in that the squares 2 opposite the candidates' name have holes arranged in circles so as to define discs 3 which may be punched from the ballot.

For this purpose, a table 4 is provided having a table top 5 having marginal stops 6 to position a ballot thereon. Hinged to the table top is a template 5a having bars 5b registering with the columns of squares 2.

The table top and template bars are provided with aligned holes 7a and 7b so that selected discs 3 may be punched out with a suitable die 8a or by a pointed pencil 8b. The holes may be larger than the pencil or may be smaller. In the latter case, the sloping sides of the pencil press against the margins of the hole to sever the disc so that a clean hole is formed.

The ballot counting machine includes a housing 9 supported on legs 10 and having a ballot receiving plate 11 at its upper side. The plate 11 is dimensioned to receive

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the ballot and is provided with marginal stops 12 so as to fix the position of the ballot thereon. The plate 11 is provided with a plurality of holes 13 corresponding in position to the holes 7a so that the discs 3 or the holes formed by removal of the discs 3 register the holes 13.

Below each hole 13 is a guide block 14 having a bore 15 in coaxial relation with the corresponding hole. Each bore receives a hole sensing pin 16 which extends below the block 14 and is provided at its lower end with a disc 17. Between each disc 17 and block 14 and surrounding the pin 16 is a spring 18. Each spring 18 is attached to the block 14 and corresponding disc 17 and exerts an upward force on the disc so as to urge the upper end of the pin 16 into contact with the ballot; or if the pin is in registry with a perforation, the spring urges the pin upwardly through the ballot. A stop shoulder 19 limits downward movement of each pin 16.

Hinged to the rear side of the ballot receiving plate 11 is a cover 20 which is movable between a raised position indicated by broken lines in FIGURE 8 and a lowered position overlying the ballot receiving plate. The under side of the cover 20 is provided with a plurality of spacers 21 forming recesses overlying the holes 13 so that the pins 16 may move upwardly through the holes in the ballot. The margins of the spacers bear against the ballot and hold the ballot against displacement when engaged by a pin 16.

The hole sensing pins 16 are connected by cables 22 which pass over pulleys 23 and are connected to a handle 20a hinged at the rear side of the housing, back of the cover 20. The cables 22 are so adjusted that when the handle 20a is raised toward the broken line position shown in FIGURE 8, the cables 22 act in opposition to the springs 18 to retract the pins 16 so that their upper ends are essentially flush with the top of the plate 11.

Mounted adjacent to each guide block 14 is a switch 24 positioned so as to be engaged by a stop shoulder 19 when the corresponding pin 16 has penetrated the ballot.

The switches 24 are connected by leads 25 to a battery of counters 26 located in an upright panel 27 at the rear of the ballot counting machine.

Operation of the ballot counting machine is as follows:

When the cover 20 and handle 20a are in their raised condition, a ballot is placed on the plate 11. The cover 20 is then lowered to hold the ballot, and the handle 20a is lowered, releasing the cables 22 to permit the hole sensing pins 16 to move upwardly and either engage the ballot so as to be restrained thereby or pass through a hole previously formed in the ballot. If a pin senses a hole, then the corresponding switch 24 is operated and the corresponding counter 26 tabulates the vote represented by the hole.

In the case of absentee ballots, the disc 3 may be punched either using a pencil or other convenient tool without the use of the table shown in FIGURES 1, 2 and 3.

Having fully described the present invention, it is to be understood that it is not to be limited to the specific details set forth, but is of the full scope of the appended claim.

I claim:

A machine for counting votes cast on a punchable ballot, comprising:

- a ballot receiving plate having a plurality of holes underlying all of the punchable locations on the ballot;
- a plurality of pins mounted under said plate for movement upwardly through said holes;
- springs for urging said pins upwardly through punchings in said ballot, said springs having insufficient force to pierce said ballot whereby said pins

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- are restrained by said ballot in those locations which have not been punched;
- (d) counters for said pins, each responsive to movement of its corresponding pin through a punching thereby to tabulate the punchings on the ballot;
- (e) a cover for holding said ballot on said plate and having recesses overlying said apertures to receive pins which move through said ballot;
- (f) retaining cords attached to said pins;
- (g) and an operating member attached to all of said cords for retracting all of said pins for placement of a ballot on said plate.

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