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PATENTED MAR. 19, 1907.

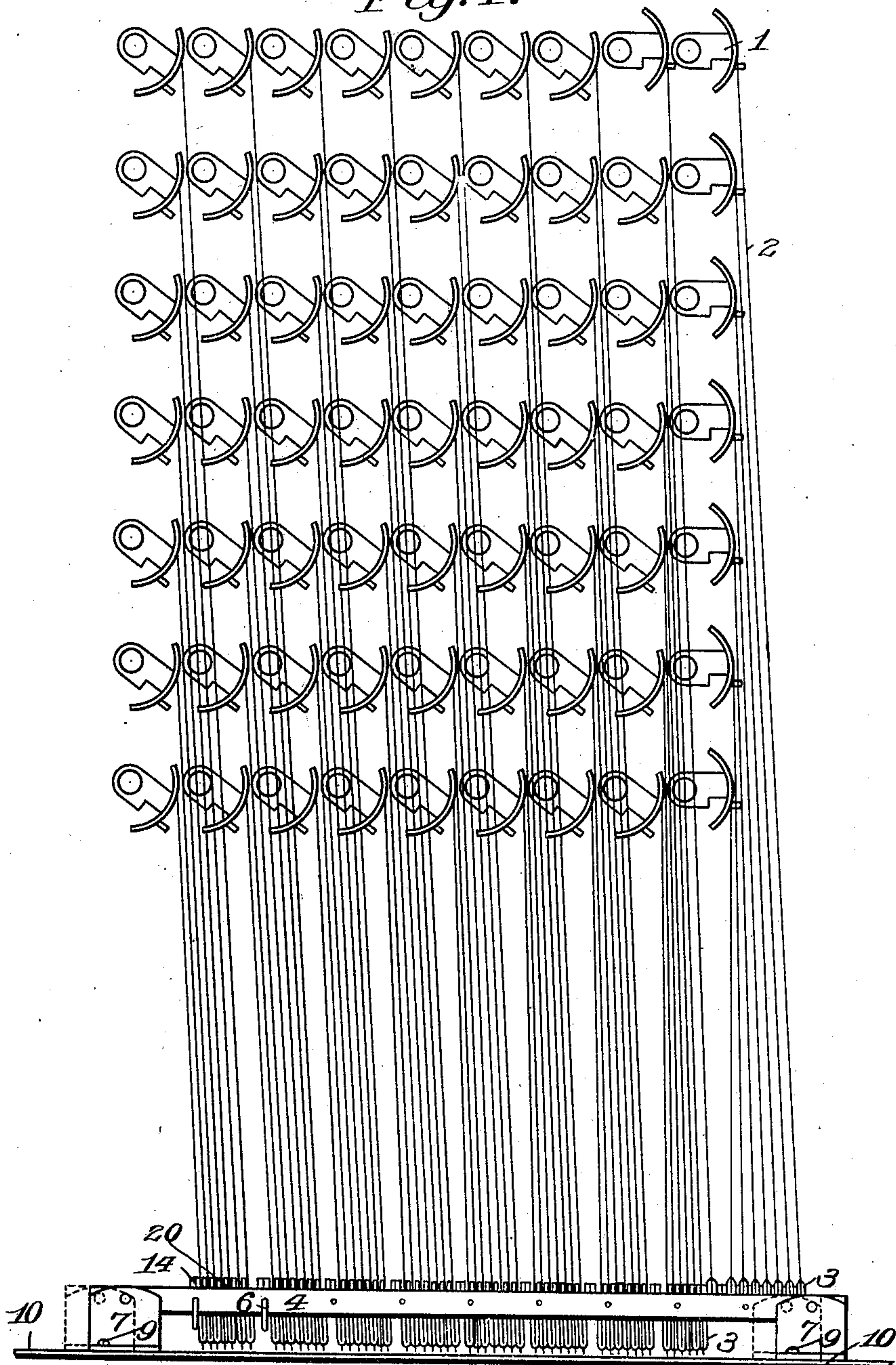
C. F. LOMB.

INTERLOCKING MECHANISM FOR VOTING MACHINES.

APPLICATION FILED AUG. 25, 1904.

2 SHEETS—SHEET 1.

Fig. 1.



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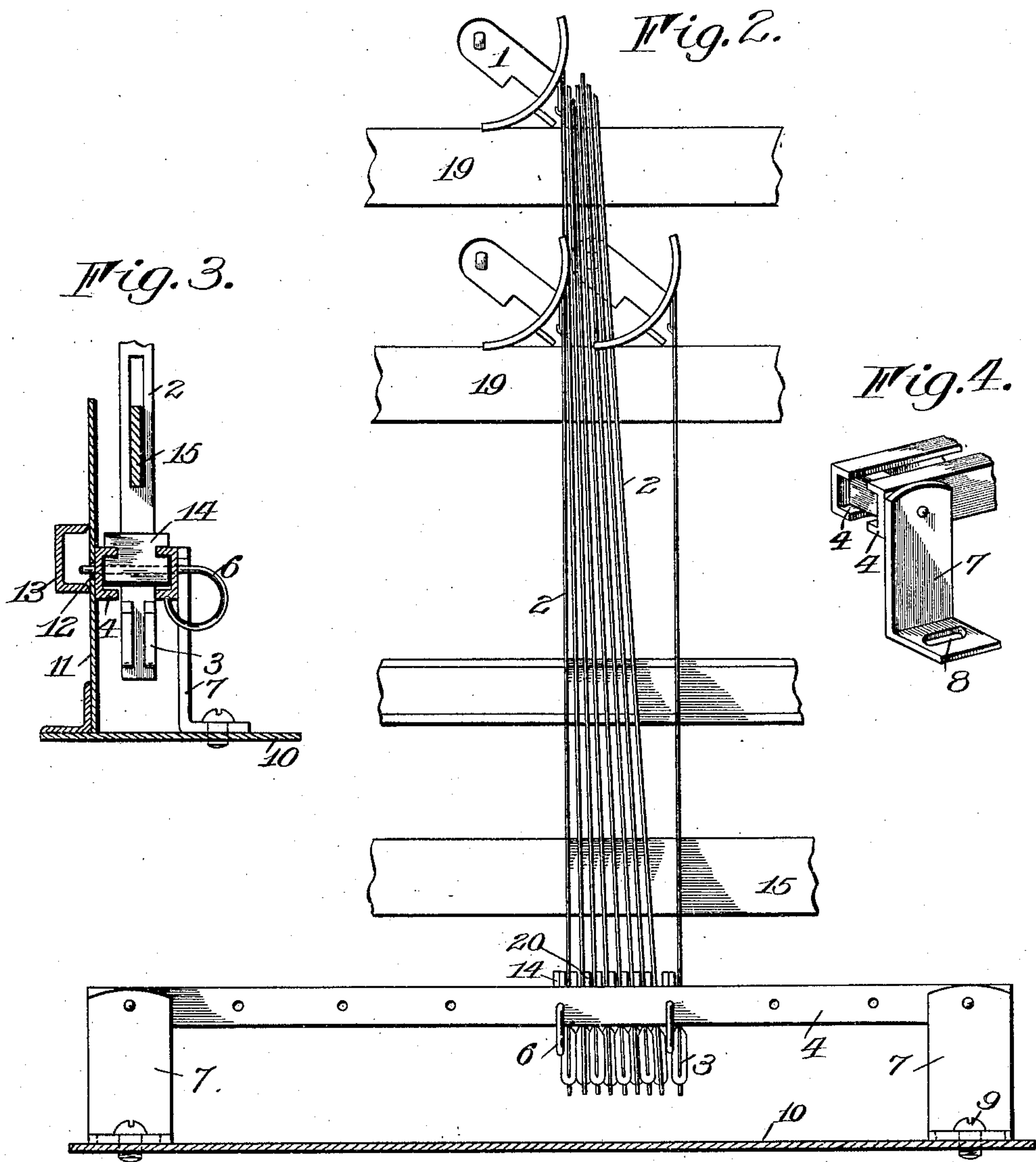
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2 SHEETS—SHEET 2.



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INTERLOCKING MECHANISM FOR VOTING-MACHINES.

No. 847,347.

Specification of Letters Patent.

Patented March 19, 1907.

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To all whom it may concern:

Be it known that I, CARL F. LOMB, of Rochester, in the county of Monroe and State of New York, have invented certain new and useful Improvements in Interlocking Mechanism for Voting-Machines; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and to the reference-numerals marked thereon.

My present invention relates to interlocking or limiting mechanism particularly adapted for use in voting-machines of the general type illustrated in Letters Patent No. 647,657, in which the movable ballot-indicating devices or keys are provided with interlocking rods or straps having wedges or displacing devices arranged in a channel or device permitting the operation of a predetermined number either in single-candidate groups or multicandidate groups; and it has for its object to provide means for permitting the operation to voted position of a larger number of ballot-indicators in groups or otherwise than heretofore without increasing unduly the size of the machine or interfering with its operation and without unnecessary complication of parts.

To these and other ends the invention consists in certain improvements hereinafter described, the novel features being pointed out in the claims at the end of this specification.

In the drawings, Figure 1 is a rear view of the indicating and interlocking mechanism of a voting-machine of the type referred to and illustrating my invention. Fig. 2 is a similar view of some of the parts illustrated in Fig. 1 on a large scale. Fig. 3 is a vertical sectional view of the lower portion of the machine, taken on the line X X of Fig. 2. Fig. 4 is a perspective view of the end of the interlocking channel and one of its supports.

Similar reference-numerals in the several figures indicate similar parts.

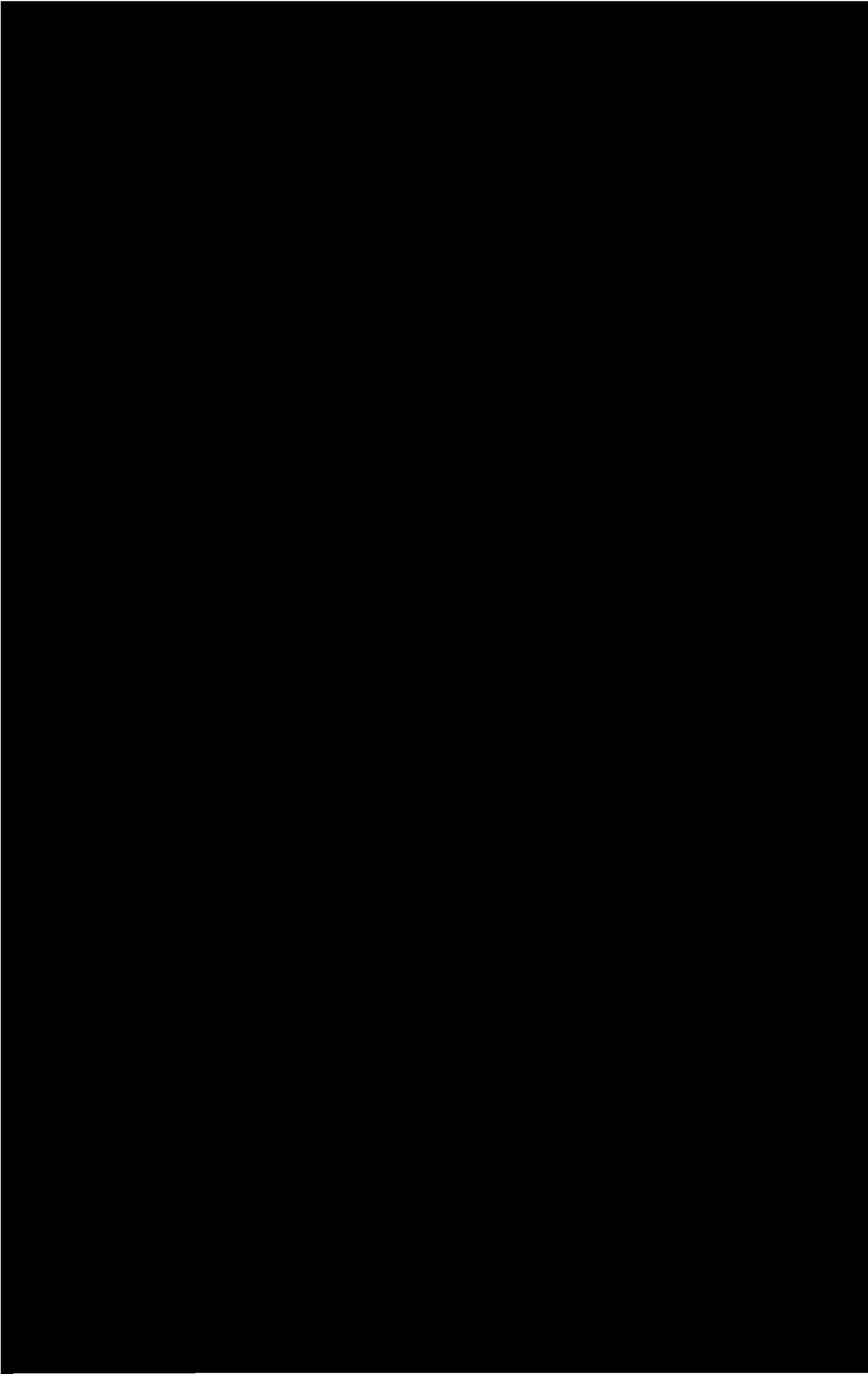
The ballot indicators or keys, (indicated by 1,) the interlocking rods or straps 2, having the wedges or enlargements 3 thereon, the channel-plates 4 4, the spacing-blocks 20 between the latter, and the grouping-pins 6, which by cooperation with the separating-blocks or limiting-abutments 14 divide the rods or straps into groups, the straight-ticket

bars 19, and the resetting-bar 15 are all of the same general construction as in the patented machine referred to. The arrangement of the indicators and the interlocking channel-plates, however, is different from the prior machine, in that said channel is arranged at the lower portion of the casing instead of at the side, and the indicators are in consequence arranged in horizontal party rows and in vertical office-columns.

The interlocking channel is supported at intervals in its length by brackets 7, which are secured to the channel at their upper ends and at their lower ends are supported immediately or immediately upon the bottom 10 of the casing, so as to permit the channel as a whole or any desired section thereof to have a limited longitudinal movement. In the present embodiment the lower ends or feet of the brackets rest upon the bottom 10 of the casing and are provided with slots 8, extending parallel with the channel and through which extend screws or studs 9, secured to said bottom. I prefer to employ screws, as these enable me to secure the brackets and the connected channel rigidly in position or to allow it to move as desired.

The front plate 11 of the machine is preferably provided with a slot 12, running the length of the machine to accommodate the forward ends of the grouping-pins 6 and permit the channel to travel, the pins being covered by a recessed plate or cover 13, rigidly secured in position. It is the capability of the interlocking channel or the support for the limiting-abutment therein to accommodate itself to the strains that may be put upon it by the various selections of the keys in voting that constitutes the important feature of my invention, as will now be explained.

It will be noticed that the straps connecting the interlocking wedges to their indicators or keys vary in length according to the party row to which they belong, the lowest party row having the shortest straps, and the straps of said lowest party row should normally stand perpendicular to the interlocking channel. If now a group of eight be formed and the indicators are all voted at the right end of the group, the interlocking straps of the voted and unvoted keys will all be deflected toward the left, the deflection



course move freely in and with the channels and it is the abutments which form the ends of the groups, whether single candidate or multicandidate, and that cause and determine the amount of the movement necessary to be given to their support, in this instance the channel-bars.

Although I prefer to employ the channel-bars in which the blocks operate, my invention is not necessarily confined to this construction and arrangement, but comprehends, broadly, the automatic adjustment of the interlocking device to accommodate itself to the operations to which it may be subjected without strain or liability to operate improperly.

This interlocking mechanism while particularly adapted for use in voting-machines is manifestly capable of use in other connections.

I claim as my invention—

1. In an interlocking mechanism, the combination with a plurality of movable members, of a support having abutments thereon between which a limited number of said members are operable said support being freely movable with and by said members in the plane of the abutments.

2. In an interlocking mechanism, the combination with a plurality of movable members, of a support having limiting-abutments thereon between which a limited number of the members are operable said support being freely movable with and by the members in a direction transversely to that of the movement of the members.

3. In an interlocking mechanism, the combination with a plurality of movable members, of a support having two or more relatively-adjustable abutments secured thereto, between which a limited number of the members are operable, said support being adjustable in a direction transverse to that of the movement of the members and means for securing it in adjusted position.

4. In an interlocking mechanism, the combination with a plurality of series of movable members of different lengths, a support having limiting-abutments thereon between which the members are operable, said support being freely movable with and by said members transversely of the plane of their movement.

5. The combination with the longitudinally-movable interlocking rods having enlargements thereon, of limiting-abutments between which said rods are arranged, said abutments being adjustable transversely of the plane of movement of the rods without however, varying the distance between them and means for securing said abutments in adjusted position.

6. The combination with a plurality of series of interlocking rods, having enlargements thereon, of a freely-movable support separators on the support and limiting-abut-

ments adjustably secured to the support between which the rods and separators are arranged.

7. The combination with a plurality of series of movable supports, interlocking rods connected to the supports and having enlargements thereon, of a support freely movable in a plane transversely of that of the series, adjustable abutments secured thereto between which the interlocking rods are arranged.

8. The combination with a series of indicators, each having a limited movement and interlocking rods connected thereto provided with enlargements, of a support having limiting-abutments secured thereto between which the rods extend, said support being adjustable transversely of the plane of movement of the rods and means for securing said support in adjusted position.

9. The combination with a series of movable indicators, interlocking rods connected thereto having enlargements thereon, of a freely-movable support having limiting-abutments thereon between which the rods are arranged.

10. The combination with a series of movable indicators interlocking rods of different lengths connected thereto and having enlargements thereon of a support movable freely in a plane transversely of that of the rods and limiting-abutments on said support between which the rods are movable.

11. The combination with a plurality of series of movable indicators, the indicators in each series having interlocking rods of different lengths connected thereto, each provided with enlargements, of a support freely movable transversely of the rods and adjustable limiting-abutments secured thereon between which the rods extend.

12. The combination with a series of indicators, interlocking rods of different lengths pivotally connected thereto and having enlargements thereon, of a support and limiting-abutments thereon between which the rods extend said support and abutments being freely movable by and with the rods transversely of the plane of the series of indicators.

13. The combination with the pivoted indicators and the interlocking rods connected thereto having the enlargements thereon, of a support freely movable transversely of the planes of the rods having the limiting-abutments between which the rods extend.

14. The combination with a plurality of series of indicators, a corresponding series of interlocking rods connected to the indicators, having enlargements thereon, each series comprising rods of different lengths, of a support and adjustable limiting-abutments thereon between which the rods extend, said support being freely movable by and with the rods transversely of their plane of longitudinal movement.

15. The combination with a plurality of series of pivoted indicators, each having an interlocking rod pivoted thereto provided with an enlargement thereon, and each series comprising rods of different lengths, of a support having adjustable limiting-abutments thereon between which the rods extend, said support and abutments being freely movable longitudinally by and with the interlocking rods.

16. The combination with a plurality of longitudinally-movable interlocking rods having enlargements thereon, of a movable support and adjustable limiting-abutments thereon between which the rods are arranged, said support being freely movable by and with the enlargements on the rods and transversely of the normal plane of movement thereof.

17. The combination with the interlocking rods having the enlargements thereon, of a support, adjustable limiting-abutments thereon between which the rods extend and means for securing the support in different positions relatively to the machine-frame.

18. The combination with the interlocking rods having the enlargements thereon, of a movable support having the limiting-abutments adjustably secured thereto and the separating-plates between the rods carried by said support.

19. In a voting-machine, the combination with the interlocking rods having enlargements thereon, of a freely-movable support having the limiting-abutments thereon and the separating-plates between which the rods extend.

20. The combination with the pivoted indicators arranged in a plurality of rows, the interlocking rods pivoted thereto having enlargements thereon, of a support, the limiting-abutments adjustable thereon and the

separating devices between the rods, said support being freely movable by and with the rods in a plane parallel with the rows of indicators.

21. The combination with the interlocking rods having the enlargements, of a stationary support, the movable channel, the limiting-abutments and the separating-plates in the channel and the brackets carrying the channel and adjustable upon the stationary support and means for securing the brackets to said support.

22. The combination with a plurality of rows of pivoted indicators, and interlocking rods having enlargements thereon and pivotally connected to the indicators, the rods in each row being of the same length and those in different rows of different lengths, of a support freely movable in a plane parallel with that of the rows having adjustable limiting-abutments thereon between which the rods extend and separating-plates said support being movable by and with the rods when acting upon the limiting-abutments.

23. In a voting-machine the combination with interlocking rods having enlargements thereon, of a freely-movable interlocking channel having adjustable limiting-abutments with which the enlargements cooperate.

24. The combination with the casing or support, the interlocking rods, having the enlargements, of the channel having the limiting-abutments, the brackets supporting the channel freely movable on the support and means for limiting the movements of the brackets.

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