

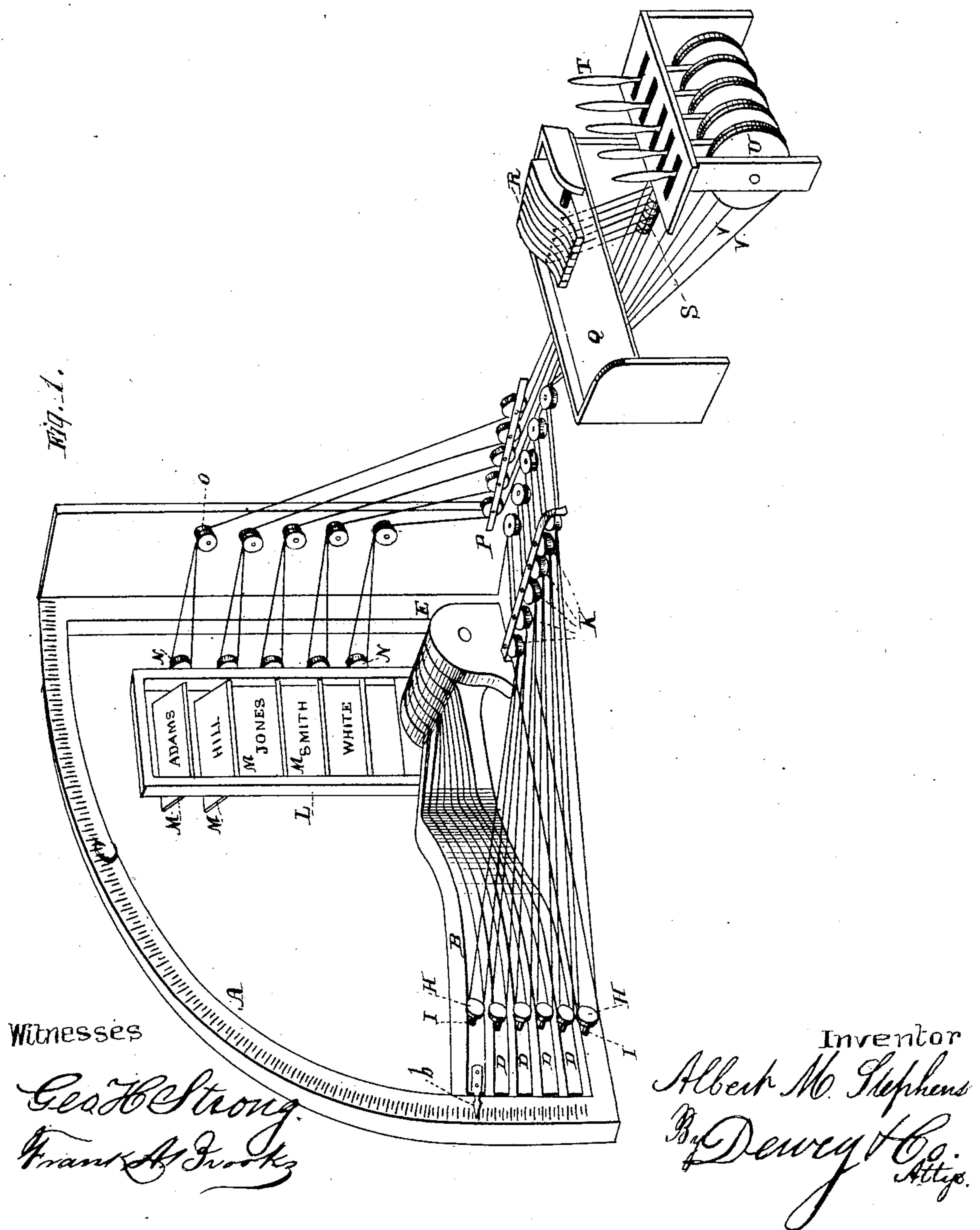
(No Model.)

2 Sheets—Sheet 1:

A. M. STEPHENS.
Voting Machine.

No. 238,314.

Patented March 1, 1881.



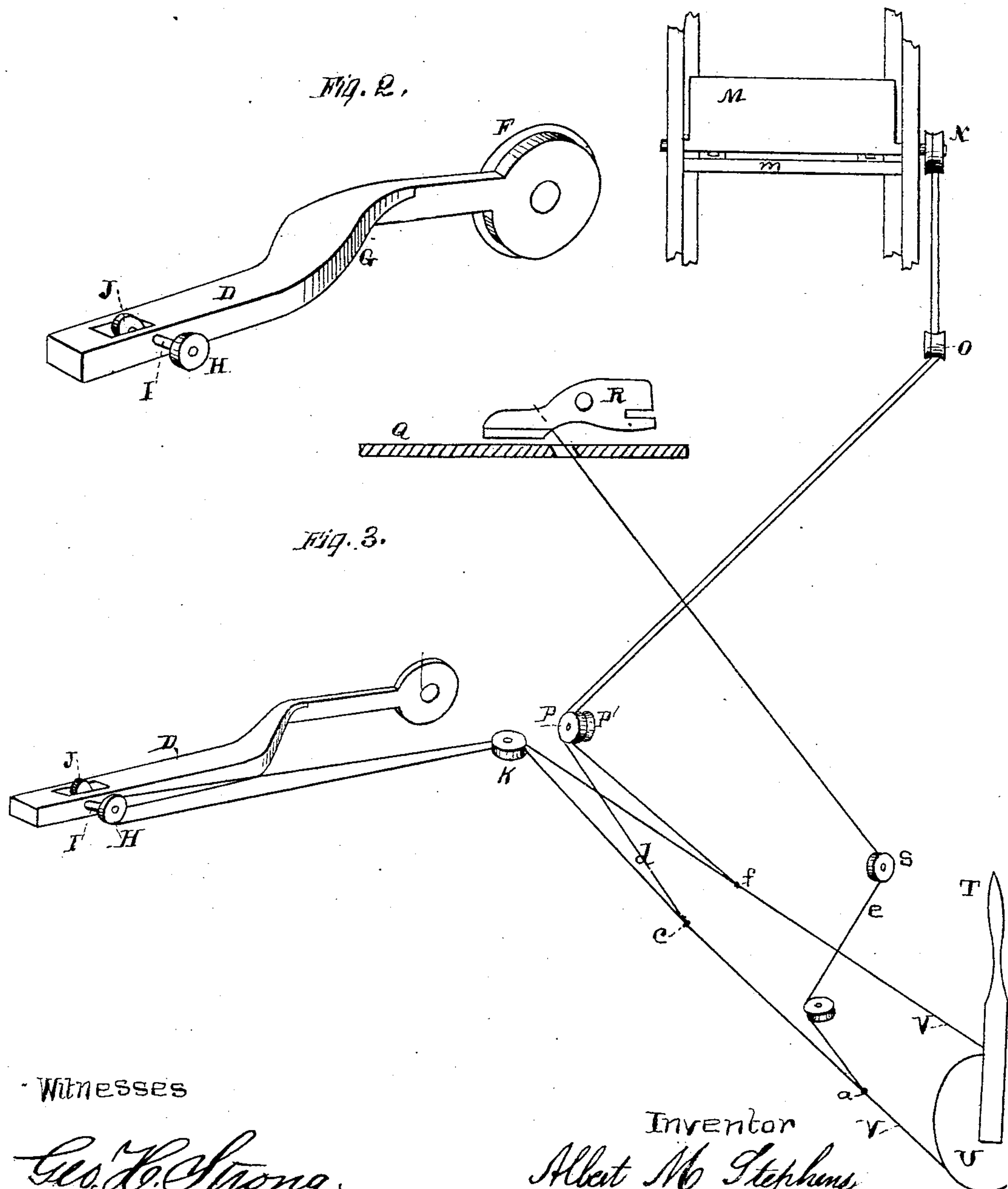
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WITNESSES

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UNITED STATES PATENT OFFICE.

ALBERT M. STEPHENS, OF LOS ANGELES, CALIFORNIA.

VOTING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 238,314, dated March 1, 1881.

Application filed November 5, 1880. (No model.)

To all whom it may concern:

Be it known that I, ALBERT M. STEPHENS, of the city and county of Los Angeles, and State of California, have invented a Machine for Registering Votes; and I hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to a method of registering and declaring votes upon division in assemblies and declaring the number present on roll-call; and it consists of an apparatus by which each vote, whether negative or affirmative, may be indicated by means of a mechanism, connected with the seat of each member for the purpose, and an indicator, dial, or other suitable device placed in a conspicuous position in full view of the assembly.

This indicator may be in the form of two quadrants. One quadrant of the frame-work is for the affirmative votes and the other for the negative votes. The face of each is marked in a series of numbers indicating the number of votes cast, and which should be not less than the whole number of members of the assembly. Long arms or spokes are journaled independently on the central axis of the addition-arc or frame-work register, and lie upon one another. The top one is the dial-finger, having a pointer on its end which slips over the graduated register on the frame and indicates the number of spokes raised, one spoke being appropriated to each member. The spokes are provided with pulleys and intermediate cams, so that each one raises the upper one a point. Another such device, forming the other quadrant of the indicator, is used for the opposition vote. A bulletin-board having movable plates with the name of each voter thereon, stands near the clerk's desk, and is so operated by cords and pulleys that at the same time, and by the same force which moves the indicating-spokes, the plates are brought to view. Another such bulletin, on the other side of the clerk's desk, registers the opposite vote. On the clerk's desk, on each side, are a number of keys, with the names of the voters on their under side, serving as stamps, when pressed down by the same means which operates the spokes and bulletin-board, thus giving to the clerk a record of the votes. All these con-

trivances are operated at the same time by means of levers connected by cords therewith, one on each side of the desk of each member of the assembly. One denotes the affirmative votes; the other the negative. All this will hereinafter more fully appear.

The object of my invention is to save time in assemblies by dispensing with the roll-call, and to ascertain without calling the roll who is present and the number of votes cast ye or nay upon any question.

Referring to the accompanying drawings for a more complete explanation of my invention, Figure 1 is a view of my invention. Fig. 2 is a view of one of the spokes. Fig. 3 shows the arrangement of wires or ropes for working the different parts.

I will describe simply the "yes" register. The "no" register is similar in device and construction, and forms the other half of the whole machine.

Let A represent that quadrant of the addition-arc set against the wall in full view, and which is to register the "yes" votes. On its face, beginning at a point represented by the height of the dial-finger spoke B, is the graduated scale C, commencing with one and running to a number not less than the number of votes. I have shown ten numbers.

The spokes D are journaled in a horizontal plane upon the axis E of the quadrant A, and are separated by metal plates F on their hubs, as shown, for the purpose of giving them freedom of movement. These spokes D are so shaped as that their necks overlap, as seen at G, and becoming flat lie on one another at their outer ends. On the top spoke is the dial-finger spoke B, having the pointer b, which slips along the scale C.

At the front side of the outer ends of the spokes D are the pulleys H, turning the rods I and cams J, set in the spokes, the lowest one being set in the ground-work or base of the frame. These cams J are made by taking off a portion of a circular piece of metal. The rods I are in the center of the cams.

The device is for the purpose of raising each spoke a distance equal to one number on the indicator. Thus, if the cam in the frame-work or base of the quadrant A be turned up

it will raise all the spokes a distance which will be indicated by the dial-finger B by one number, and if the cam in the lowest spoke be turned also they will go up another number.

5 The manner of working these cams by cords or wires I will explain hereinafter.

Near the axle of the spokes D are placed the pulleys K, one for each spoke.

10 L shows the bulletin-board near the clerk's desk, with its plates M having the names of the voters printed thereon alphabetically, which I have indicated by "Adams," "Hill," "Jones," "Smith," "White." These plates are each hinged at their base to cross-pieces
15 m, so as to open or close, and are worked by the side pulleys, N, by means of cords or wires, as will hereinafter appear. Other pulleys, O, are placed in the side frame of the quadrant, as shown.

20 In the line of the axles of the quadrant, a little to the front of where the spokes D are journaled, are the double set of pulleys P P', each receiving a cord passing to the spokes and a cord passing up to the bulletin-board L.

25 Q is the clerk's desk, having the set of keys R, as shown. Each of these keys R has a stamp of the name of a voter. They are drawn down to make the impression upon properly-prepared paper by other cords, as will be seen
30 hereinafter. These keys represent the yes-votes. Others on the desk are designed to record the no-votes. A set of pulleys, S, are placed under the clerk's desk to receive the cords connected with the keys R.

35 On each side of the desk of each member and within his reach are the levers T, one connected with and operating cords to the yes-register, the other with cords to the no-register. These levers are formed with the seg-
40 ment U, around which pass the cords. A single cord or wire, V, passes around each segment U, and thence proceeds, taking its lower part first, from the member's desk to a point shown at a, where it has another cord, e, attached to it, which passes up over one of the pulleys S
45 through the clerk's desk to one of the keys R. The main cord V continues to a point, c, where it is again joined by another cord, d, and the two proceed over the pulleys at P P', where
50 the cord d goes up over the pulleys O and over the top of the turning-pulleys N, and around the bottom back over the pulleys O and P P', and joins the upper portion of the main cord V at the point f. The two portions of cord V
55 pass the pulleys K and around those at H, whereby the cams J are turned and the spokes D raised.

It will thus be seen that a member wishing to vote "yes" has but to operate his yes-lever
60 at his desk, when the operating-cords will pull down his stamped key at the clerk's desk, thus giving a record of his name and vote, while the same motion will bring his plate on the bulletin-board in sight, and the spoke belong-

ing to him will increase the general result of 65 the register by one. To set the whole machine back for a new vote the lever has but to be turned the other way. For the no-register he operates the other lever.

In this manner an instantaneous vote may 70 be taken.

To protect the actuating cords or wires they are conducted along the floor in hollow tubes, and where necessary to make elbow the cords revolve around separate wheels acting on a 75 common spindle perpendicularly placed instead of each pulley being separate. The pulleys are flanged, so that the cords will not jump the wheels. These cords, except at the wheels and pulleys, should be made of tough fine wire. 80 The cords for each lever are conducted in separate tubes to a common center in front of the register. There they all unite under one flat box, which is let into the floor.

I can, if found best, place false spokes in the 85 addition-arc A. Then there would be two cams on each real spoke, one on the upper side and another on the lower side. These false spokes would be similar in form to the real spokes at the outer end. There would be one between 90 every two real spokes, alternating therewith. Instead of extending to the center of the arc, these false spokes would extend only about half-way, and on the inner end of each of them a hinge would be attached, so that the joint in 95 the hinge would be against the side of the spoke, and the two flanges, when shut, would lie flat between the real spokes toward the center of the arc. When expanded these flanges would be slightly opened. 100

I would have the levers at the voter's desk under lock and key, the key to be kept by the voter.

The spokes D can be made light and thin, their inner ends of metal and outer ends of 105 wood; but where they have the cams they must be thick enough to allow them to act.

The paper used under the keys at the clerk's desk will be so marked as to indicate that which is used on the no-side and that which 110 is used on the yea-side, and will be so headed and numbered as to indicate the question upon which each particular vote is taken, which papers will be filed as records.

Having thus described my invention, what 115 I claim as new, and desire to secure by Letters Patent, is—

1. The arc or segment A, graduated, as shown, in combination with a series of radial spokes, D, provided with cams J, pulleys H, and cords 120 passing around said pulleys and leaders to the levers T, whereby each vote recorded moves the radial arms with an attached index-finger over one division of the arc, substantially as herein described. 125

2. The oscillating keys or type-carriers R, having the name of a voter upon each, and provided with cords leading to the lever or

levers T at said voter's desk, whereby his name is registered or printed upon a sheet beneath when he moves the lever to vote, substantially as herein described.

5 3. An indicating, registering, and counting or addition apparatus, consisting of the bulletin or frame L, with its hinged name-plate M, with actuating-pulleys and cords, the name-
10 are A, the radial arms or spokes D, with their cams, pulleys, and cords, in combination with

the levers T, to which the cords lead, so that the whole operation may be performed by a single movement of the voter, substantially as herein described.

In witness whereof I have hereunto set my hand.

ALBERT M. STEPHENS.

Witnesses:

M. J. WICKS,

WM. D. STEPHENS.

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