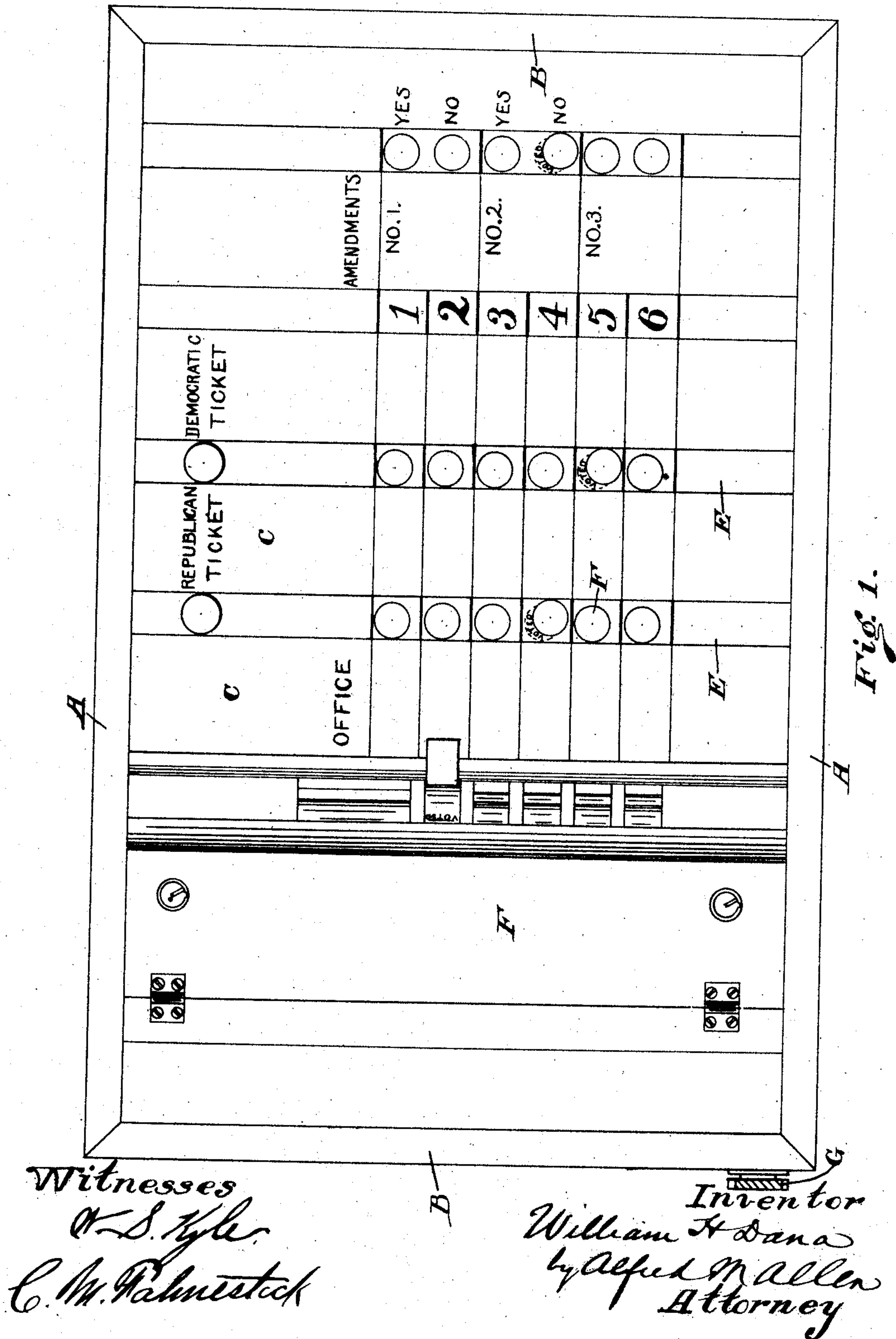


No. 885,981.

W. H. DANA.  
VOTING MACHINE.  
APPLICATION FILED AUG. 7, 1903.

PATENTED APR. 28, 1908.

6 SHEETS—SHEET 1.



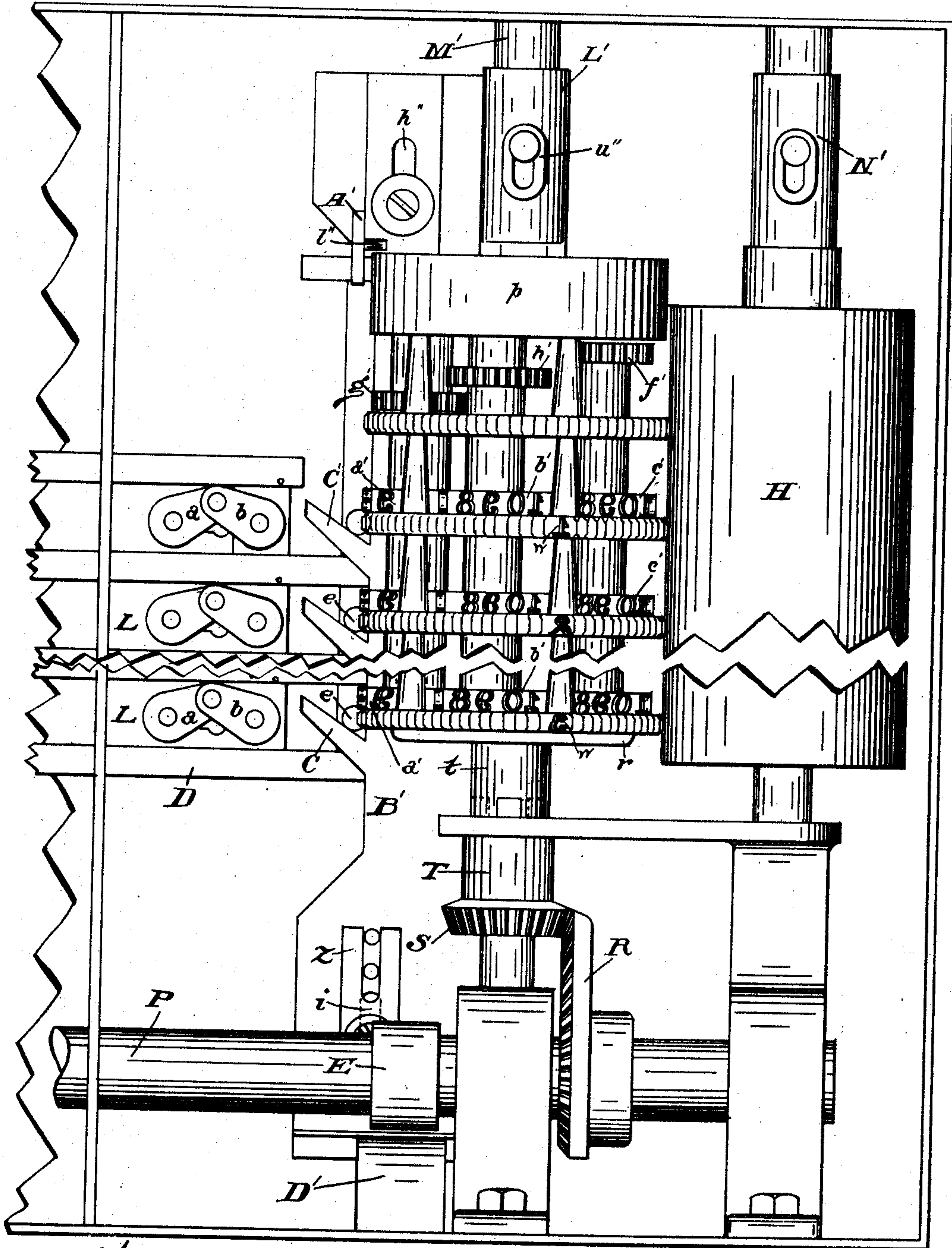
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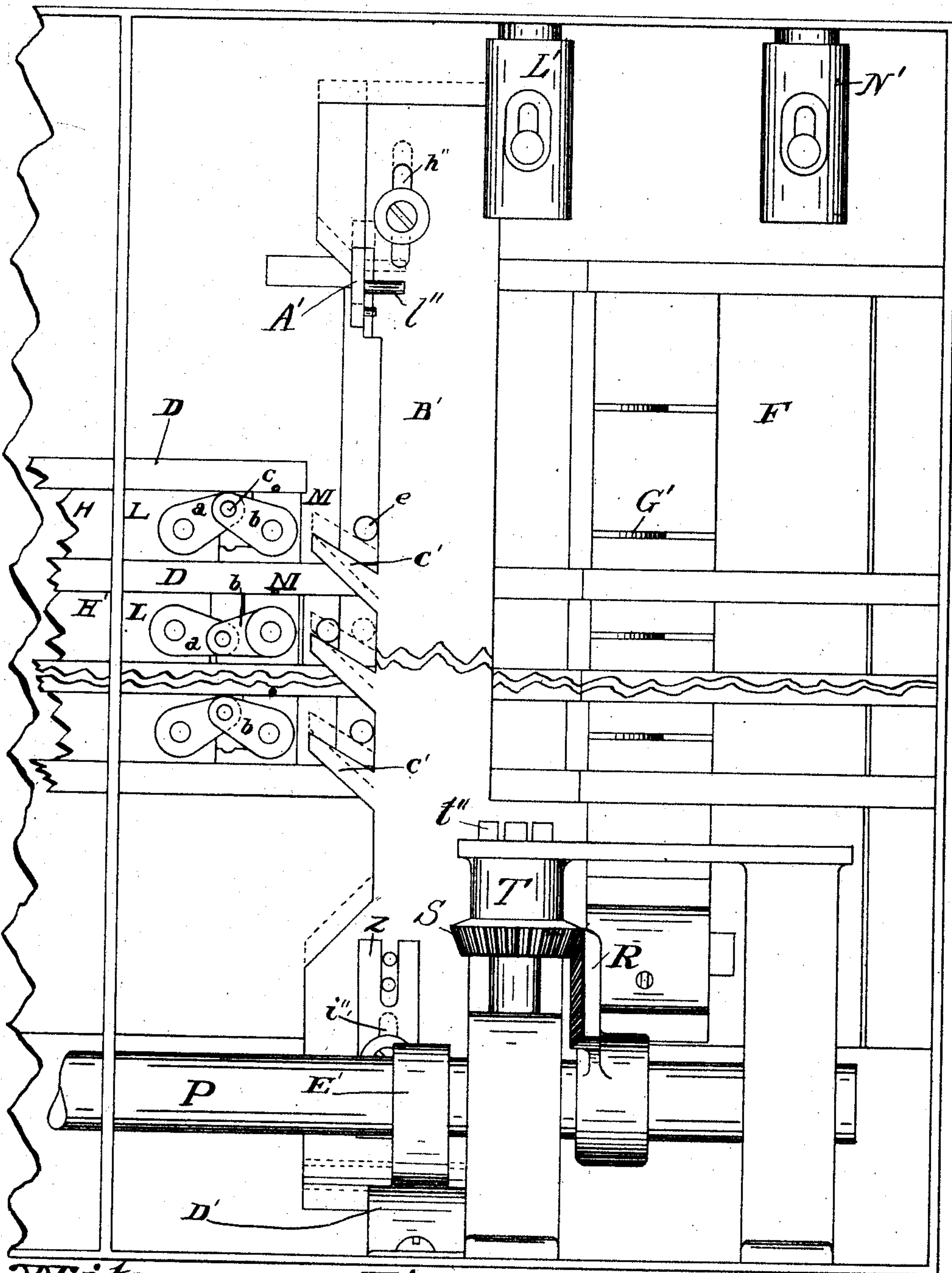
6 SHEETS—SHEET 2.



Witnesses  
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Fig. 2.

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Witnesses

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Fig. 3.

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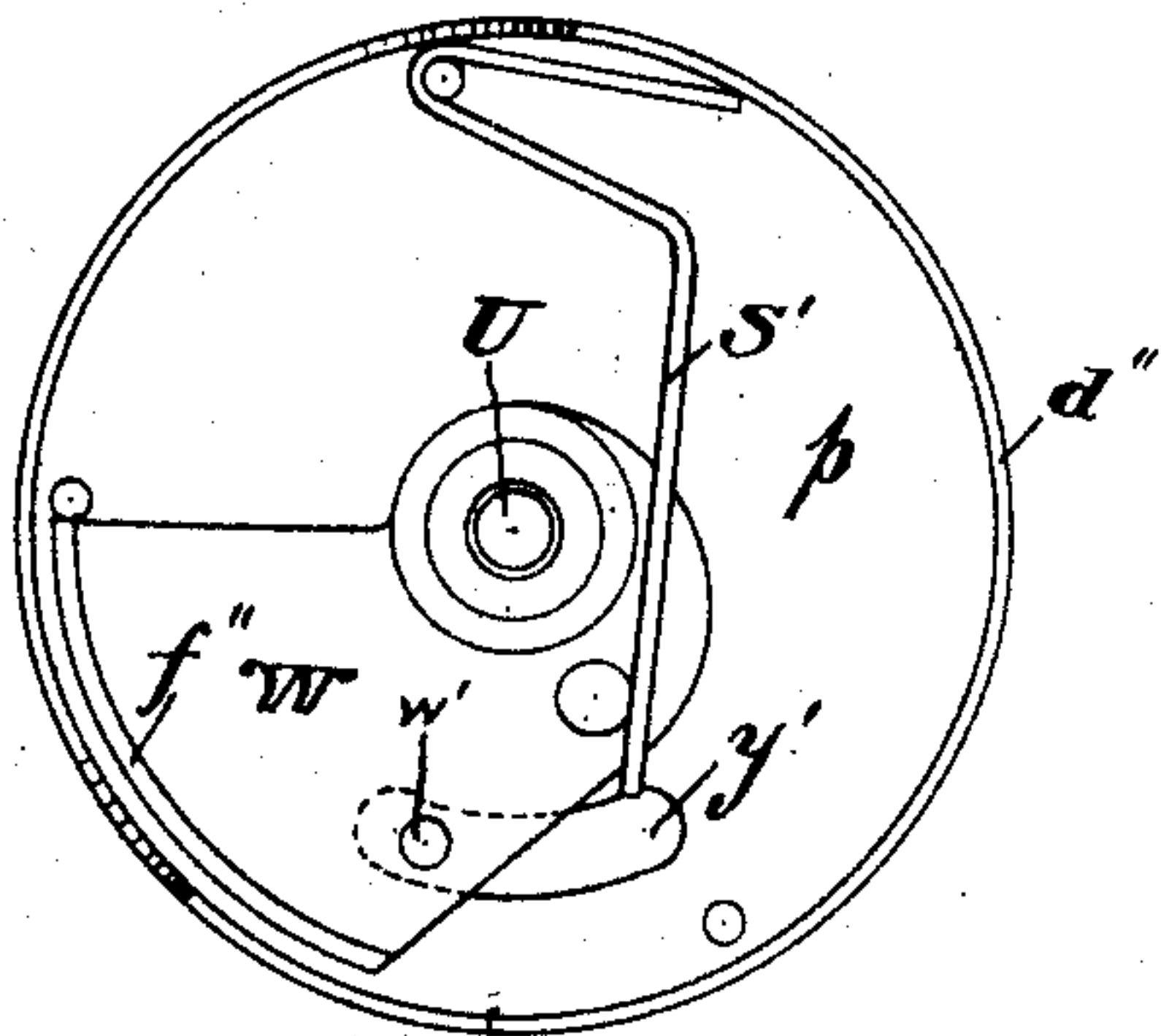


Fig. 4.

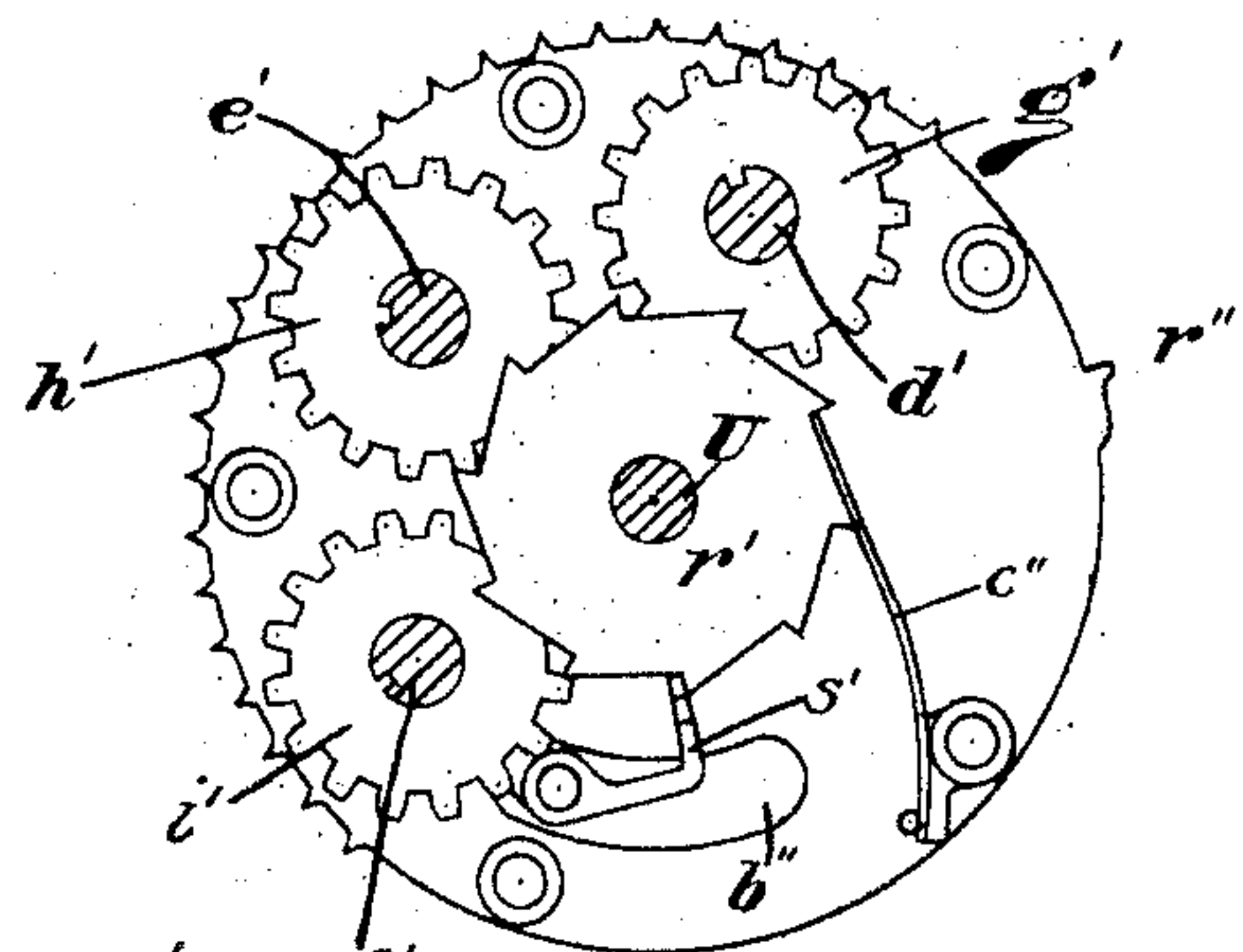


Fig. 5.

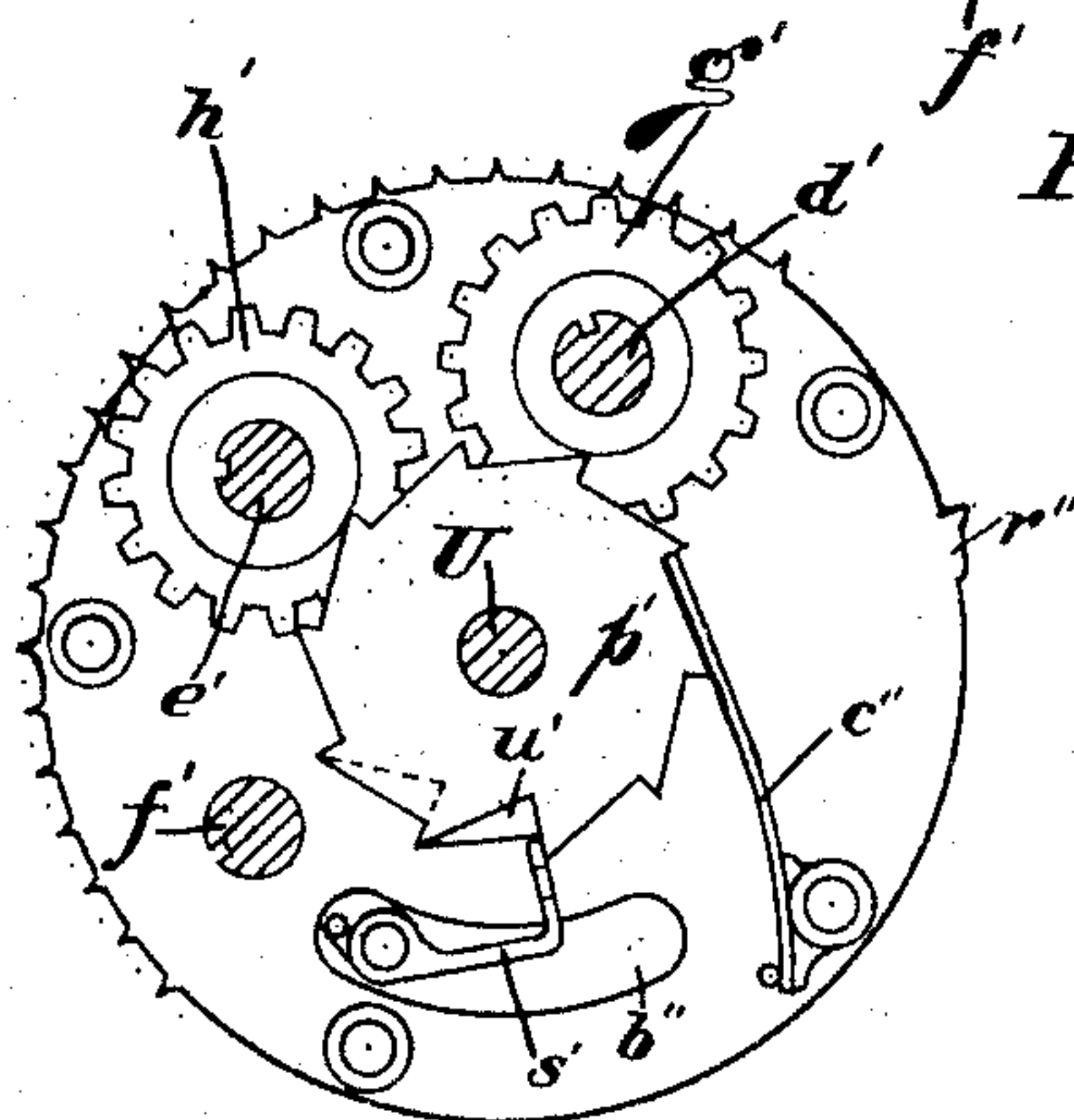


Fig. 6.

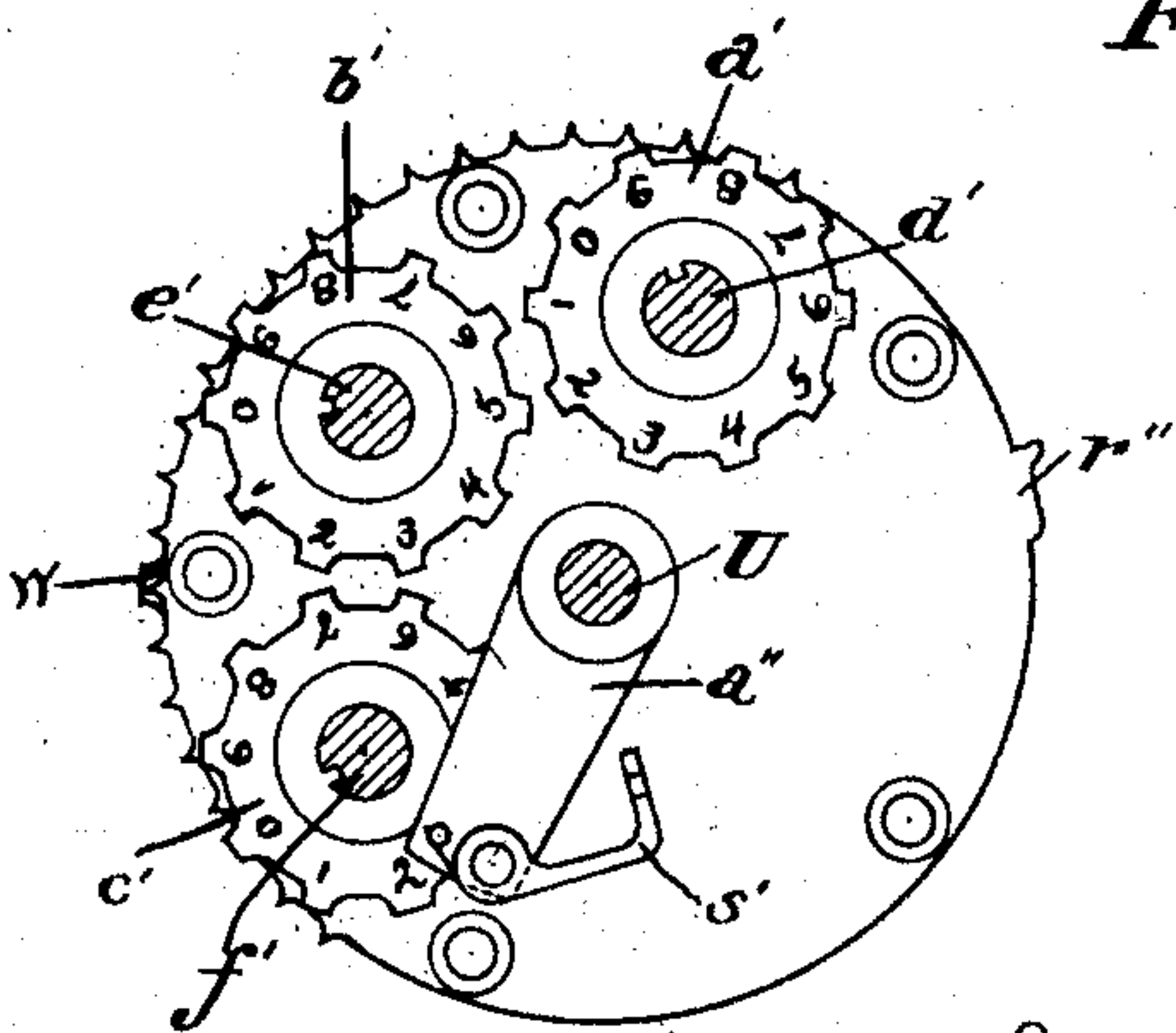


Fig. 8.

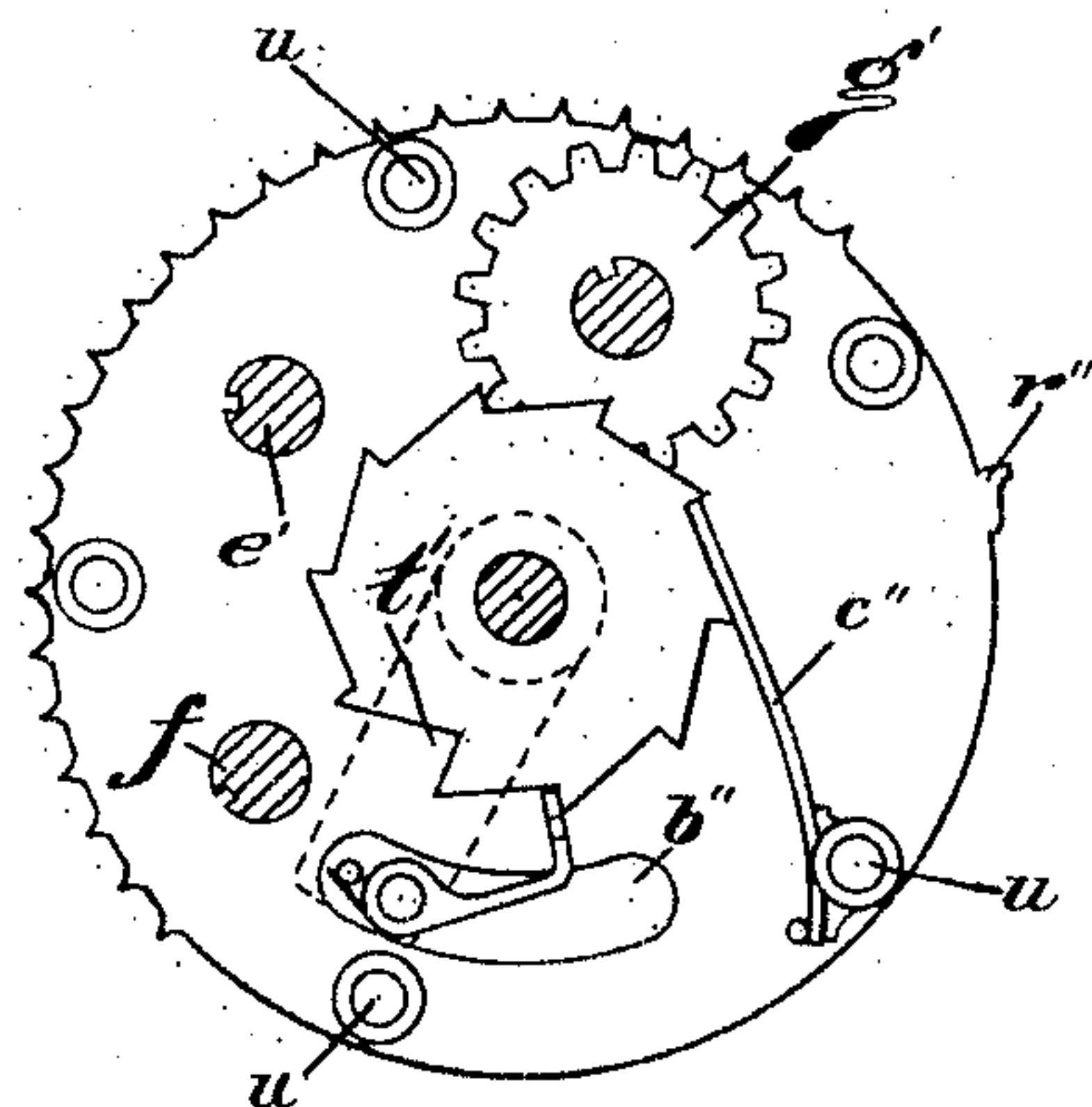


Fig. 7.

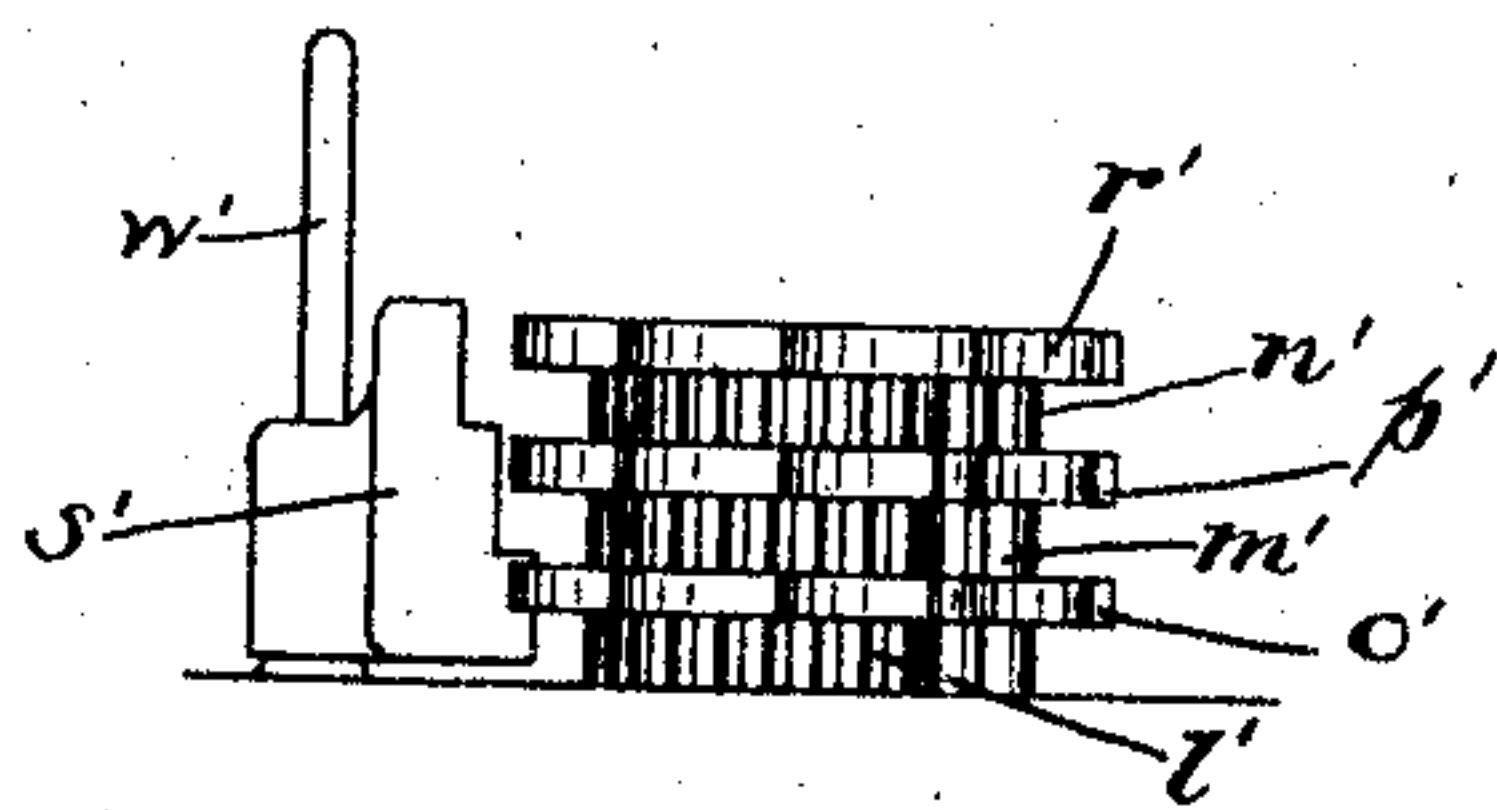


Fig. 9.

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No. 885,981.

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6 SHEETS—SHEET 5.

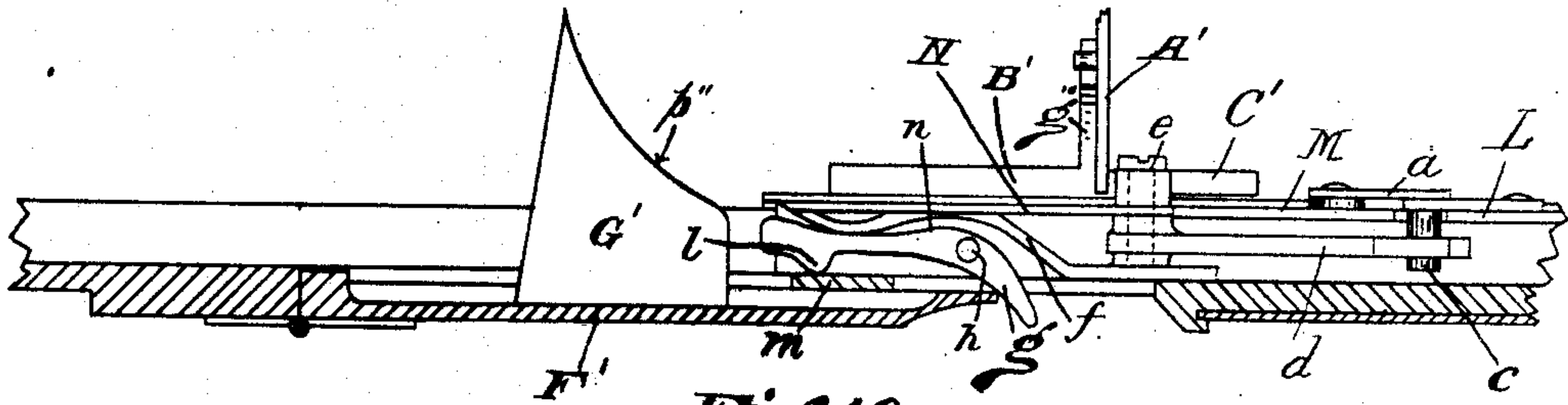


Fig. 10.

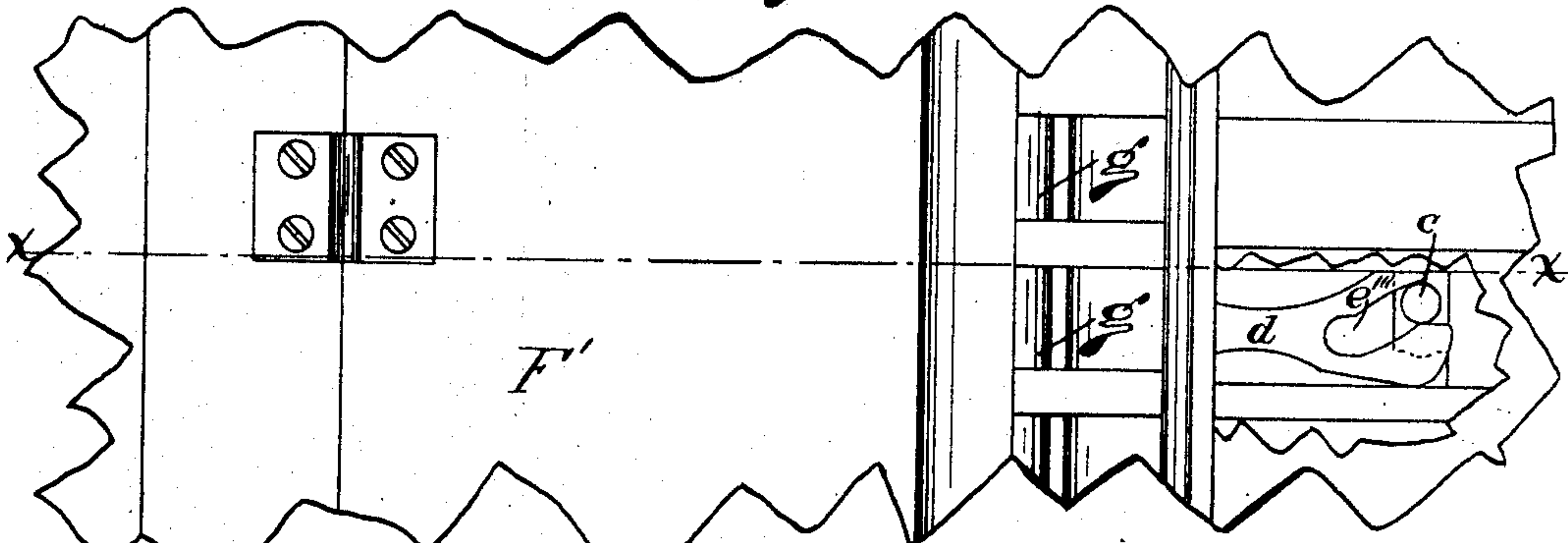


Fig. 11.

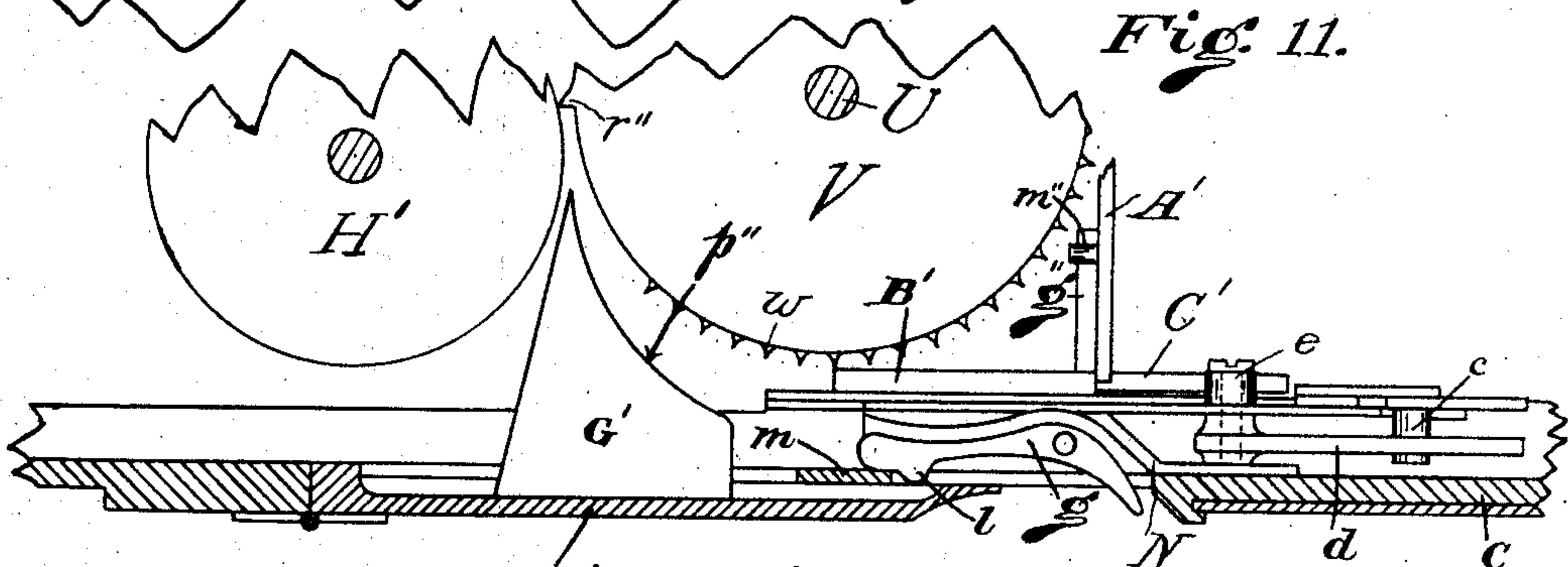


Fig. 12.

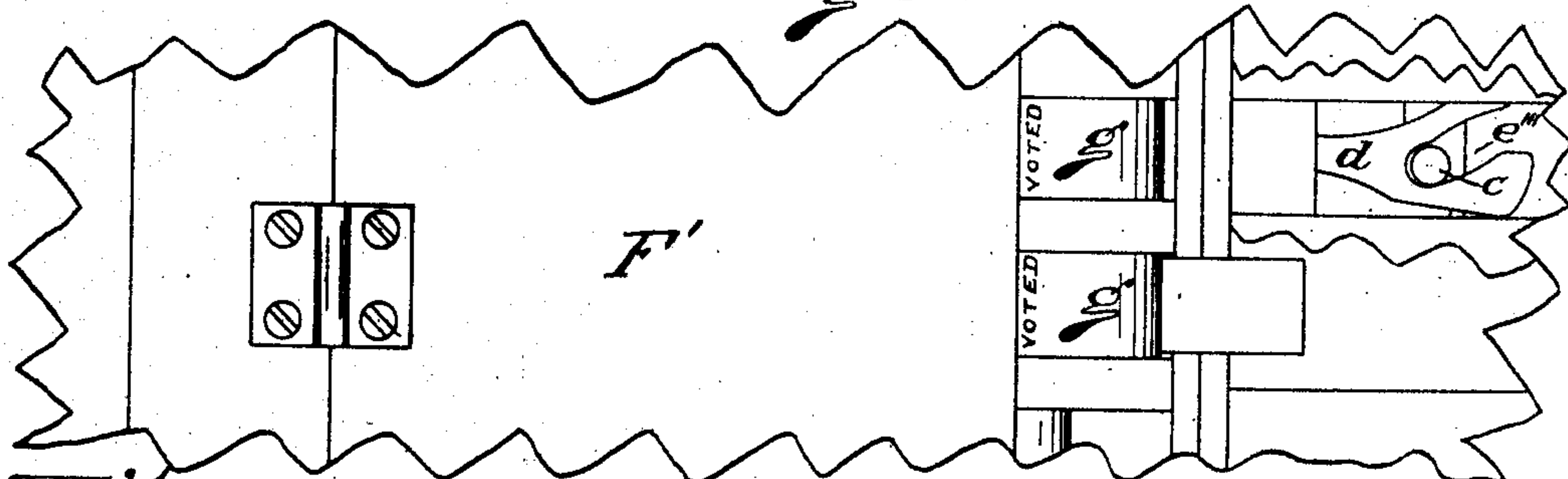


Fig. 13.

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6 SHEETS—SHEET 6.

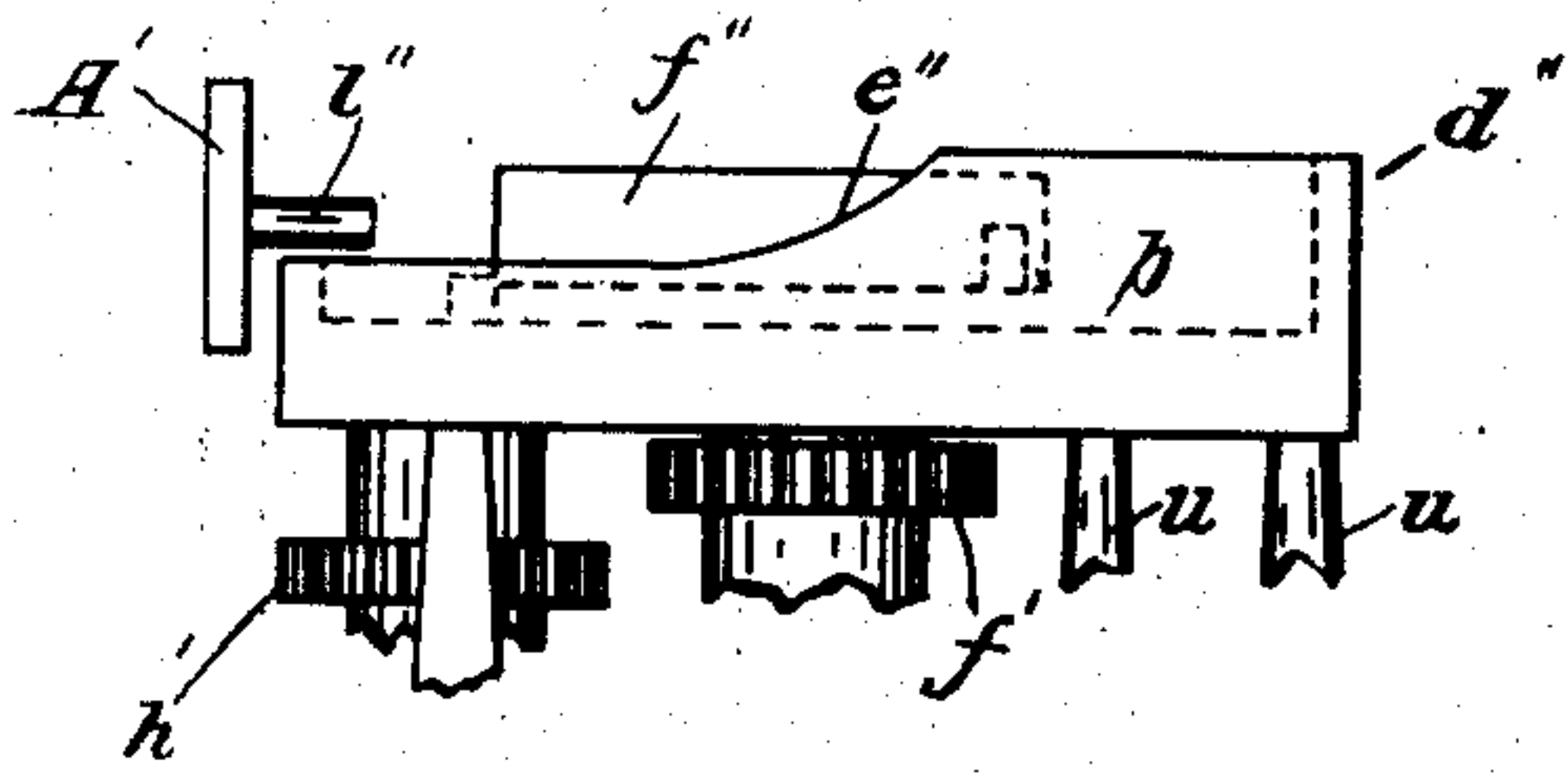


Fig. 14.

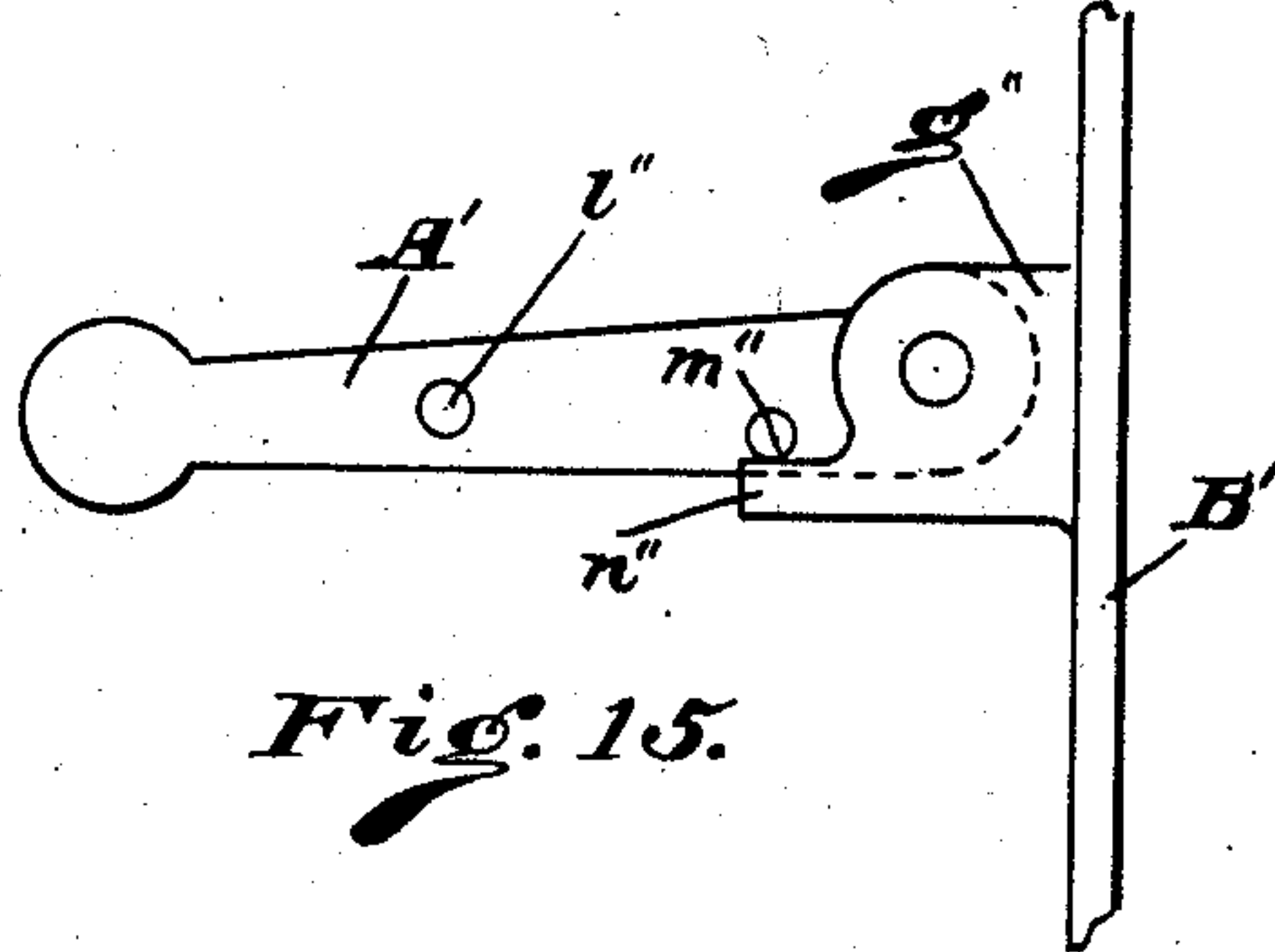


Fig. 15.

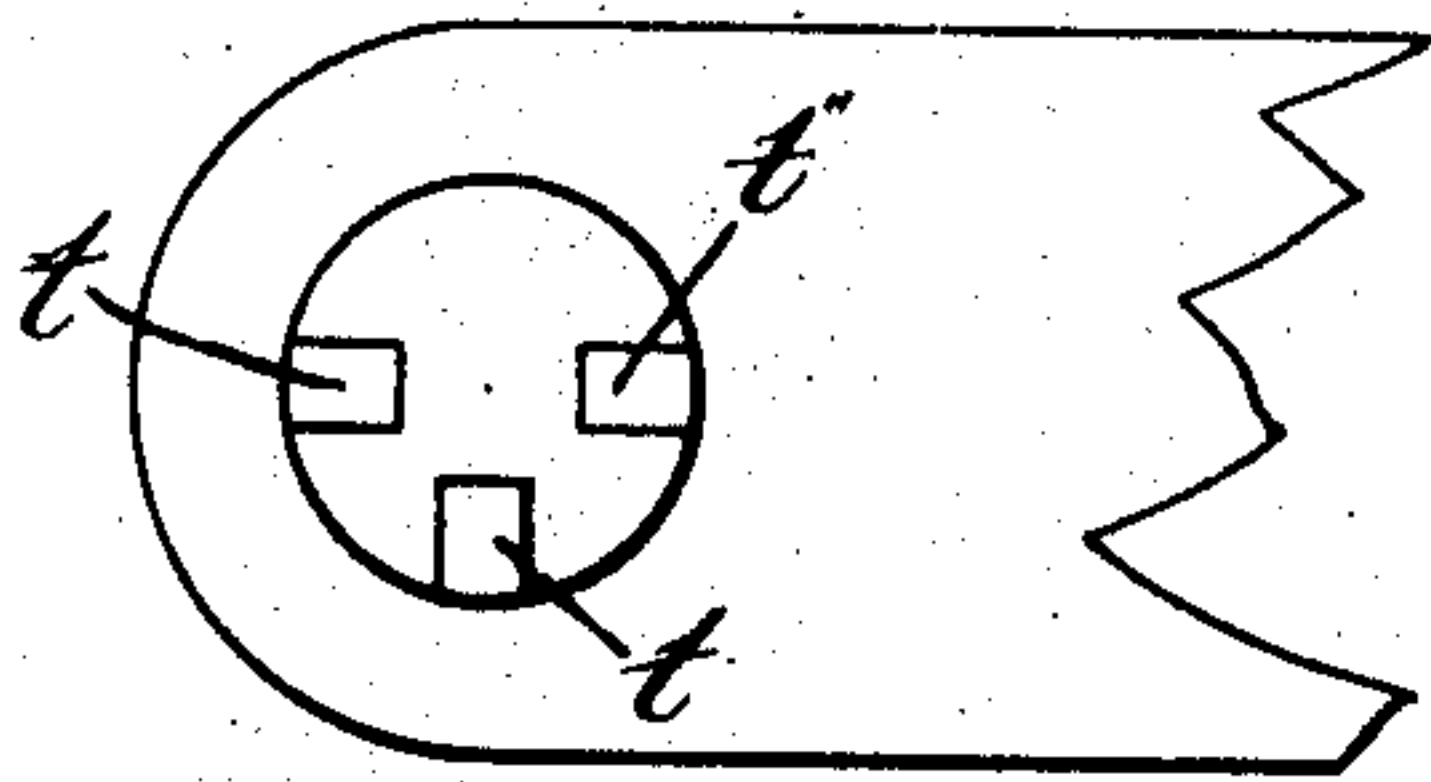


Fig. 16.

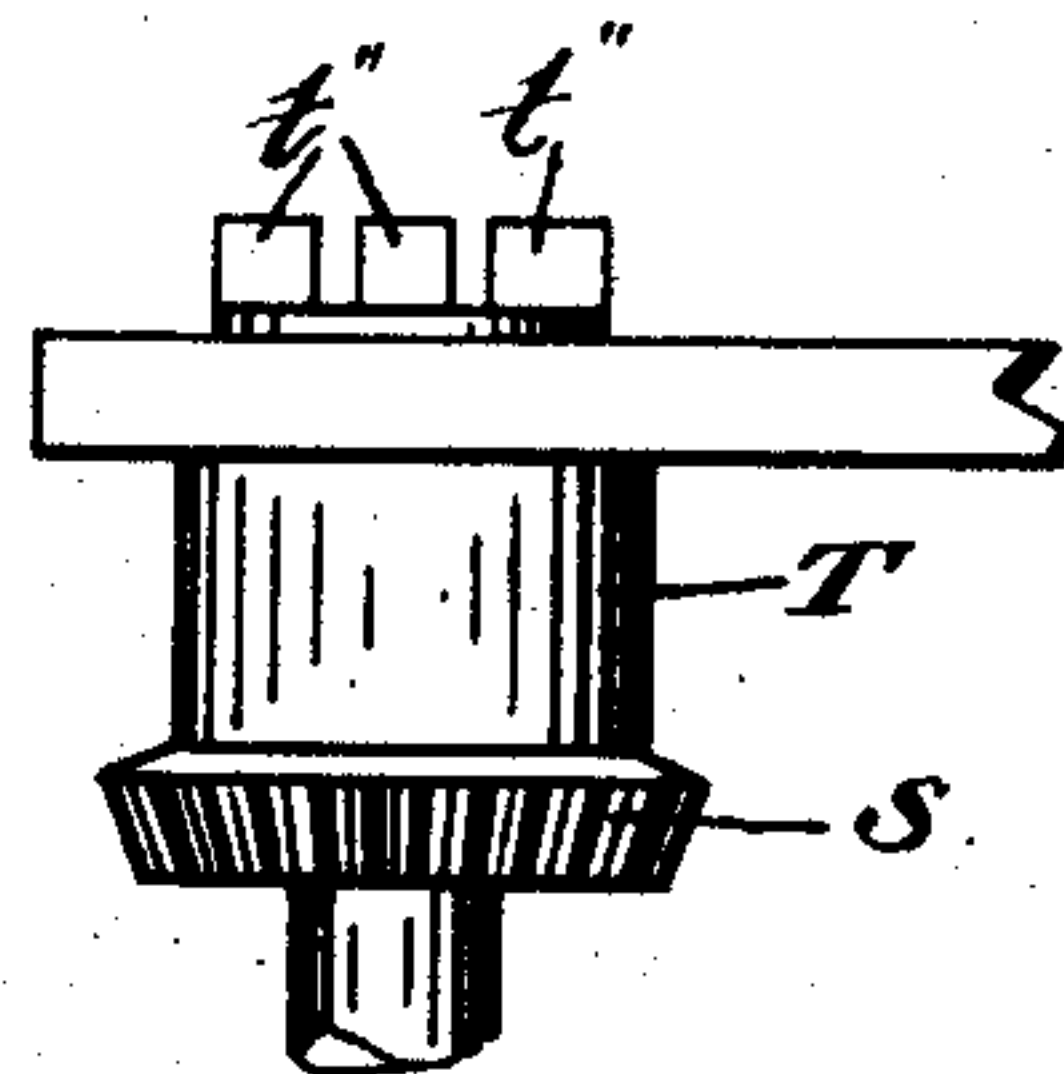


Fig. 17.

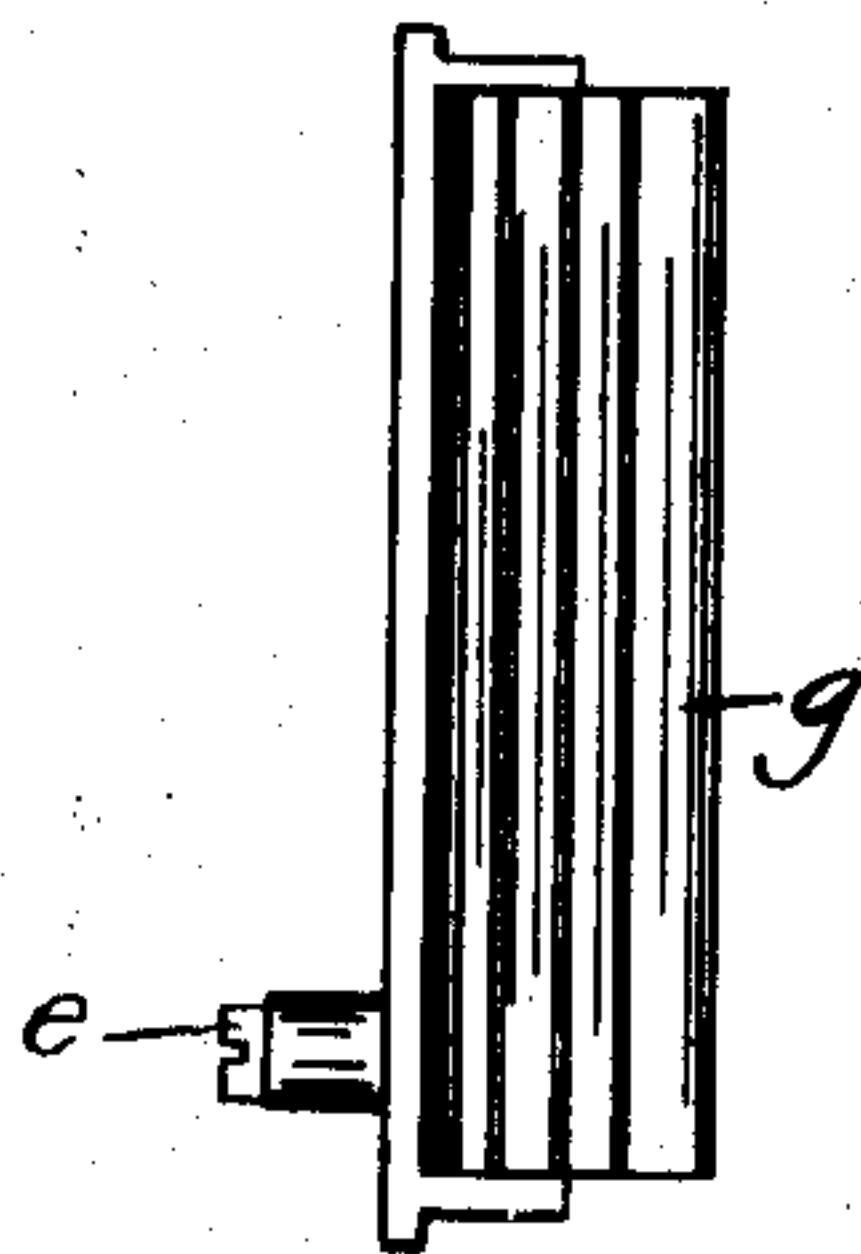


Fig. 18.

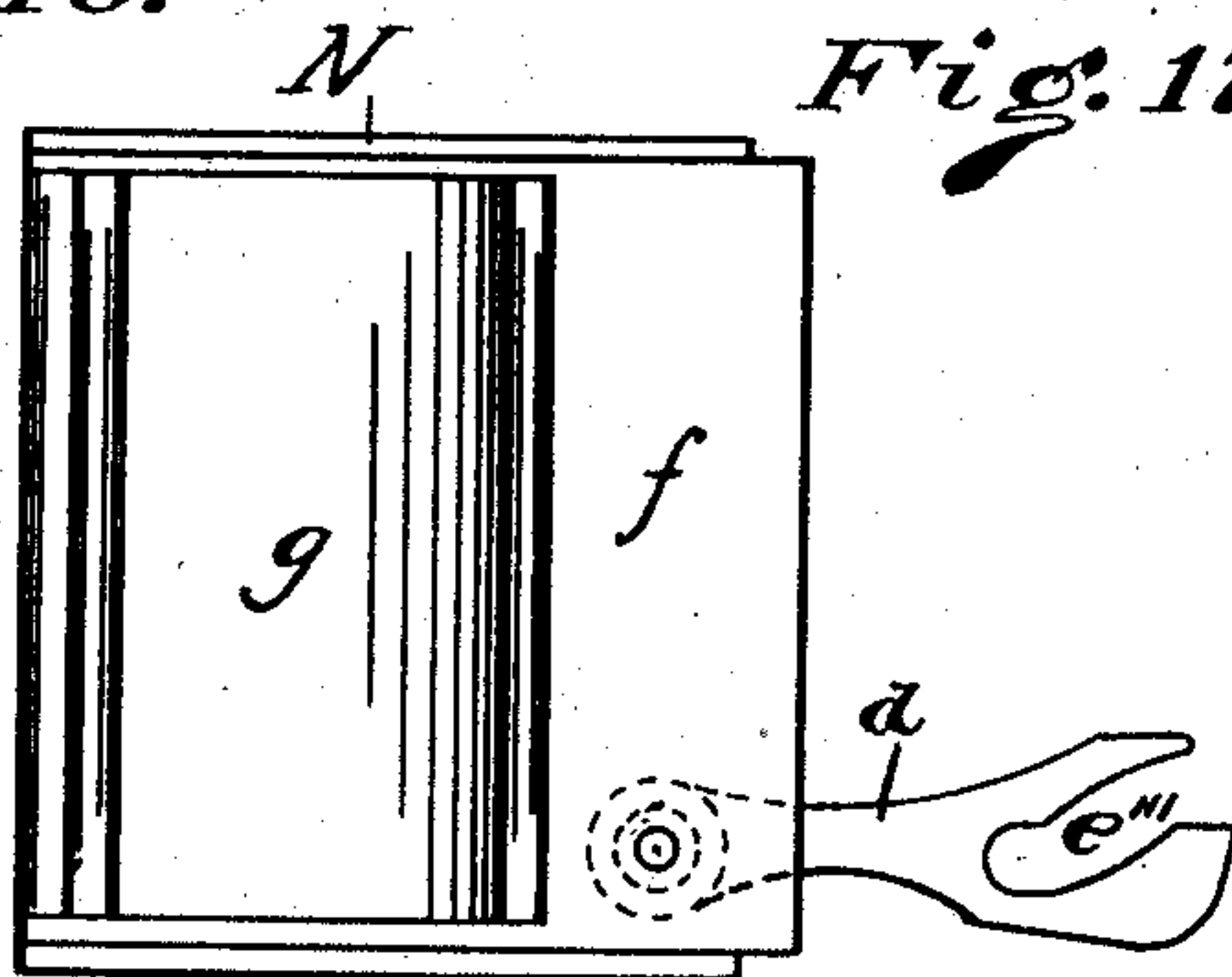


Fig. 19.

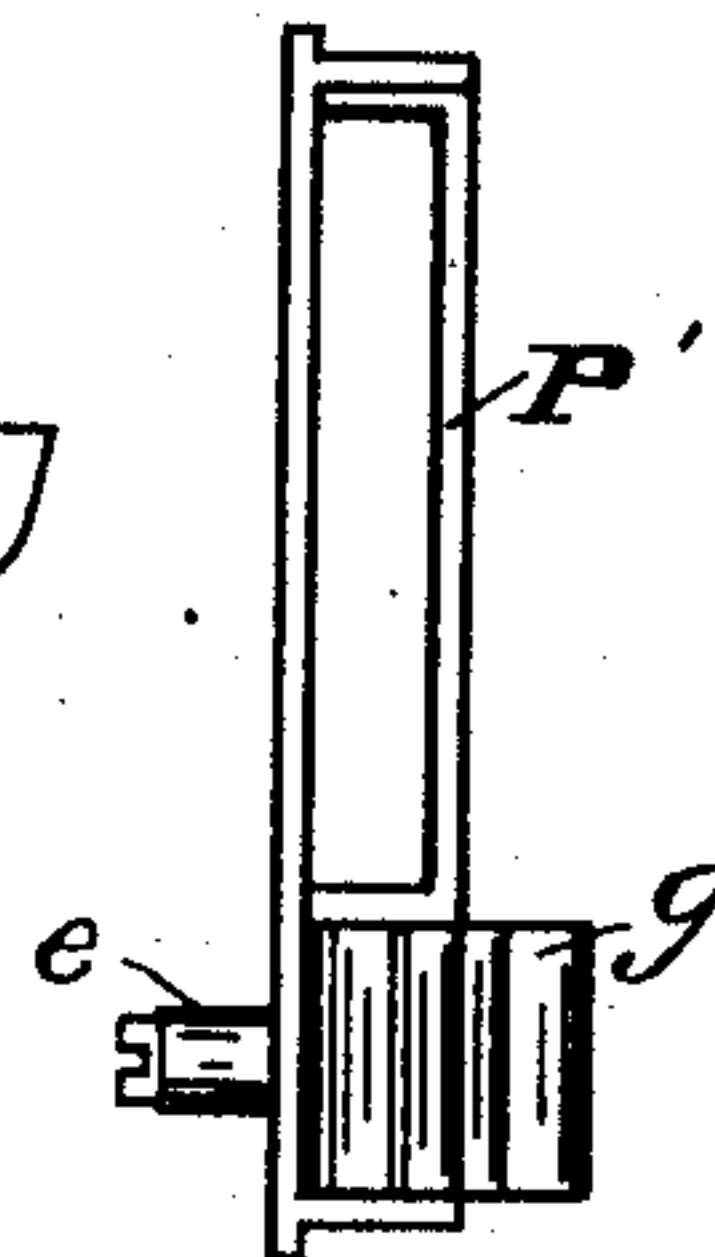


Fig. 20.

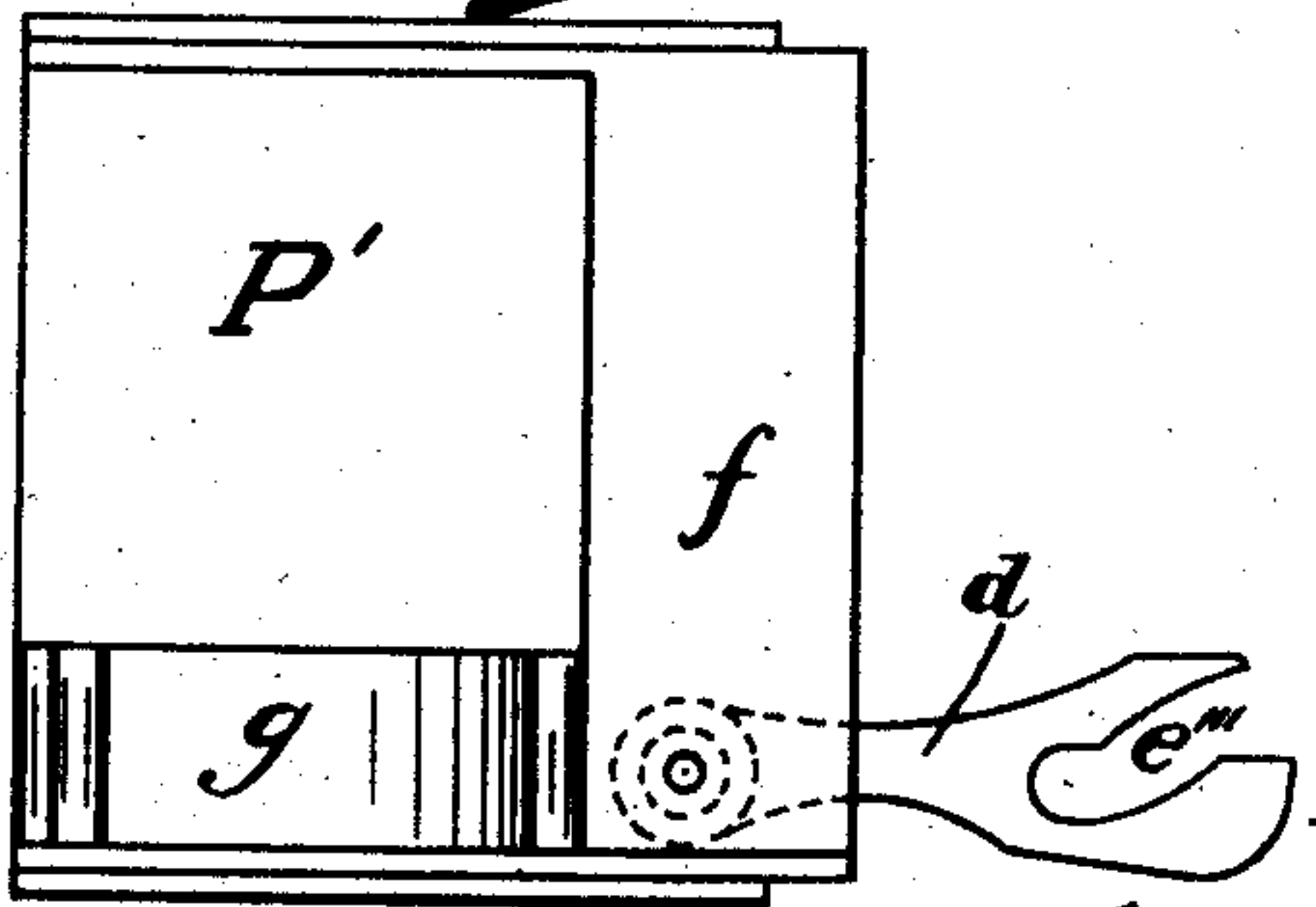


Fig. 21.

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# UNITED STATES PATENT OFFICE.

WILLIAM H. DANA, OF DAYTON, OHIO, ASSIGNOR TO LEOPOLD RAUH, OF DAYTON, OHIO.

## VOTING-MACHINE.

No. 885,981.

Specification of Letters Patent.

Patented April 28, 1908.

Application filed August 7, 1903. Serial No. 168,615.

*To all whom it may concern:*

Be it known that I, WILLIAM H. DANA, a citizen of the United States, residing at Dayton, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Voting-Machines, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My improvements relate to the mechanism in voting machines, designed to permit the voter to select and register his vote for any candidate, not on any regular ticket, that he may desire; a method of voting ordinarily called irregular voting. For this purpose it is usual to provide apparatus to permit the voter either to write his choice for any or all the offices on a roll of paper, or to provide means for the reception and registration of a paper ballot or ticket. It is this second method which I have selected for the plan upon which to construct my mechanism. Blank tickets are provided for the voter upon which to write the name of the irregular candidate, and the mechanism is designed to receive this ticket, guide it under a registry roll where it will be stamped or impressed with a numeral or sign to indicate the row in which it was voted, to prevent the voter from voting different irregular names for the same office. It is also impressed with a sign or numeral which will change with each vote to prevent the voter from voting more than once for the same name or person. The ticket or ballot then drops into any suitable receptacle within the machine to be counted at the conclusion of the election.

Provision is made to prevent voting for any of the regular candidates for the same office in case the voter selects an irregular candidate and to permit the voter to change his choice and withdraw his irregular ballot from the machine should he so desire before he leaves the voting booth.

The various features of novelty in construction and operation, will be hereinafter particularly pointed and claimed, but as illustrated in the drawings, the improvements are particularly designed for the construction of voting machine shown and described in my certain application for Letters Patent, filed May 6th, 1903, Ser. No. 155,898. My invention, however, is not limited to the particular form of voting machine in connection with which it is illustrated, but is equally

applicable to any voting machine in which the names of the candidates are arranged in rows.

In the drawings, Figure 1, is a front elevation of the voting machine showing the relative space occupied for irregular voting, two regular tickets and question voting. Fig. 2, is a rear elevation of the irregular voting mechanism. Fig. 3, is a similar elevation with the registry rolls removed. Figs. 4 to 9, are various views of the registry mechanism for the irregular voting device. Fig. 4, is a top plan view of this mechanism. Fig. 5, is a similar plan view with the top plate removed. Fig. 6, is a similar view with the upper registry and ratchet wheels removed. Fig. 7, is a similar view with the middle registry and ratchet wheel removed. Fig. 8, is a similar view with all the ratchet wheels and the division plate removed. Fig. 9, is a side elevation of the ratchet wheels. Figs. 10 and 11, are respectively a horizontal cross section and a front elevation of a portion of the front wall of the machine, showing the irregular ballot receiver in its normal unvoted position. Figs. 12 and 13, are similar sections and elevations of the same, showing the ballot receiver in its voting position. Fig. 14, is a detail side elevation of the upper portion of the irregular voting registry roll. Fig. 15, is a detail view of the lever for actuating the registry wheels. Figs. 16 and 17, are respectively a detail plan and side elevation, showing the construction for securing the registry roll and plate. Figs. 18 and 19, are respectively end and front elevations of the ballot receiver for a lengthy electoral ticket. Figs. 20 and 21, are similar end and side elevations showing the construction for reducing the sides of the electoral ballot receiver for non-presidential elections.

All of the figures, except Fig. 1, show only the various parts of the irregular voting mechanism, but to illustrate the connection between the other parts of a complete voting machine, I have shown in Fig. 1, the front of the voting machine arranged for the two regular tickets, and for question voting in addition to the irregular voting with spaces for six candidates on each ticket, and six questions. Of course the number of regular tickets and spaces for candidates and for questions in a full size voting machine, will be arranged to suit the requirements, and I have thought the arrangement shown will sufficiently illustrate the plan.



The voting machine as a whole, is inclosed in a rectangular frame-work, made up of bottom and top pieces A, A, and side pieces B, B, with vertical plates C, C, properly spaced apart and running from top to the bottom of the frame, to form the front wall of the machine, and with channel bars D, D, running from side to side and forming with the vertical plates the frame-work of the machine in which are mounted the operating parts. The lists of candidates forming the various regular tickets, are arranged in vertical rows for each ticket with the offices arranged in horizontal rows, the various tickets being printed on slips and secured in front of the vertical plates. Between the vertical plates are the vertical bars E, E, carrying the voting or key levers F, which, in the machine illustrated, consist of buttons, which are pulled down diagonally by the voter in making his selection. I have not illustrated as already stated, any of the regular or question voting mechanism, as my irregular voting device can be applied to any voting machine, and it will be sufficient to say that the voting levers are arranged to actuate suitable counters when the voter leaves the booth in which the voting machine is located, and raises the lever which is shown in section at G, Fig. 1, to pass from the booth. The key levers are also provided with a series of interlocking stops or blocks to prevent the operation of more than a single key in any one row, and arrangement is also made to couple together any desired series of rows to provide for multiple voting.

In the drawings, I have illustrated at H, H, Figs. 2 and 3, what is ordinarily the fixed end of the series of interlocking sliding blocks which prevent the operation of more than one voting lever at a time in any horizontal row of the regular tickets. Abutting against the ends of the series of interfering blocks H, mounted in the same channel bars D, are the sliding blocks L, which blocks are connected by the toggles *a*, *b*, with the fixed blocks M. The knuckle of the toggles *a*, *b*, is provided with a pin *c*, which is actuated by the arm *d*, having the diagonal slot *e*''', embracing the pin. This arm is pivoted by the pin *e*, to the sliding ballot receiver N, mounted to slide laterally between the bars D, D. The front of this ballot receiver is formed with an S-shaped or ogee curved portion *f*, and carries pivoted on the pin *h*, in front of this ogee curved portion, the ogee-shaped guide piece *g*. This pivoted guide piece, when in proper position forms with the curved surface of the receiver, a narrow curved vertical passage-way. The front of this curved guide piece *g*, is provided with a vertical lug or projection *l*, which, when the receiver is in its normal position, rests behind the vertical wall plate *m*, running from top to bottom of the frame.

In this position as shown in Fig. 10, the

curved passage-way will be closed but when the ballot receiver is moved in to the position shown in Fig. 12, the lug *l*, passes beyond the wall *m*, and the curved passage way *n*, will be open.

Blank ballots of flexible card-board or paper are provided upon which the voter can write his choice, and there is one ballot receiver for each office to be voted for at any election, each ballot receiver being connected by the arm *d*, toggle *a*, pin *c*, and sliding block L, with the interlocking block system of the regular ticket mechanism so that when any ballot receiver is pushed over to the right to permit the voter to insert the ballot, the interlocking block arrangement will prevent any voting in the same line on any of the regular tickets. In the same way, when the interlocking block system of the regular ticket mechanism is actuated by the voting of a regular key, the block L, will be prevented from moving and the ballot receiver will be locked. The passage-way *n*, is curved in order to prevent the insertion of any improper instrument to block the mechanism, and while it would be possible to insert flexible wire, it will be evident when all the parts have been described, that it will not be possible to block the apparatus by any piece of wire, or any flexible material which could be inserted instead of the proper ballot.

As has already been stated, the ballots are intended to be held in the machine after passing through the mechanism to be counted at the close of the election, and it is therefore necessary to identify the row or office for which the ballot has been cast, and also to identify the ticket or ballot cast, so that the voter cannot insert more than one ticket in any ballot receiver. To accomplish this identification, I provide as follows--

P, is a shaft mounted in the base of the frame-work of the voting machine, carrying the segment gear R, which meshes with the beveled gear S, secured on the vertical stub shaft T. This shaft P, is the same shaft which carries the actuating gear for actuating the registry frames of the regular voting mechanism as shown in my former application for Letters Patent above referred to, but where such regular registry frames are not employed, a separate shaft is to be used for the irregular voting mechanism, and this shaft is rocked a quarter revolution by the raising and lowering of the lever G, outside the machine, which operation is performed by the voter as he approaches and leaves the voting booth. This lever G, forms the means for opening and closing the booth. When the lever is raised the booth is open, when lowered, the booth is closed, the lever forming a barrier to the entrance.

The feeding cylinder or registry frame to draw the ballots into the machine and identify the ballot, is made up of the top disk *p*,



and bottom disk *r*, each of which is provided with a hub collar *s*, *t*, and *U*, is a shaft between these hub collars, while *V*, are intermediate plates or disks separated by the posts *u*, so as to separate the frame into a series of divisions—one for each office candidate.

*v*, is a nut screw-threaded on the shaft *U*, outside the top plate by which the disks and posts making up the frame are drawn together. The peripheries of each of the disks except for the top plate, are notched or toothed for about half the circumference, as shown at *w—w*, and each disk is formed with a different numeral or sign on the periphery to indicate the division of which it forms the bottom plate. Each of these divisions of the frame is provided with a set of three numbered wheels *a'*, *b'*, *c'*, carrying raised numbers from naught to nine, on the peripheries. These wheels represent units, tens and hundredths, and the units, tens and hundredths wheels of each division being strung on the units, tens and hundredths shafts *d'*, *e'*, *f'*. In the uppermost division of the frame, these units, tens and hundredths shafts carry the gear wheels *g'*, *h'*, *i'*, which gear wheels mesh respectively with gear teeth *l'*, *m'*, *n'*, on the lower face of the ratchet wheels *o'*, *p'*, *r'*. These ratchet wheels are actuated by the spring pressed pawl *s'*, provided with three teeth and the lower-most ratchet wheel is provided with a tooth *t'*, and the middle ratchet wheel with a tooth *u'*, half the depth of the lower-most ratchet wheel tooth, so that with each rotation of the lower-most ratchet wheel, the pawl *s'*, will be permitted to move the middle ratchet wheel one tooth, and with each rotation of the middle wheel, the uppermost ratchet wheel will be moved one tooth. The pawl *s'*, is mounted on the pin *w'*, which extends up through a slot *y'*, in the top plate *p*, which pin is carried by an arm *a''*, journaled on the central shaft *U*, underneath the division plate and the pin passing through the slot *b''*, in this division plate. The ratchet wheels are held from any back movement by the spring *c''*, secured on one of the posts *u*, and bearing against the ratchet teeth. The pin *w'*, passes through an opening in the pawl carrier *W*, which is a plate having a hub portion journaled on the shaft *U*, on the upper surface of the top plate. The top plate *b*, has an upwardly extending flange *d''*, which is cut away at *e''*, and the pawl carrier *W*, is also provided with a flange *f''*, which projects into this cut out portion of the flange of the top plate.

*A'*, is a lever pivoted on the lug *g''*, on the plate *B'*, which runs from top to bottom of the frame, and is capable of a longitudinal play by reason of the slots *h''*, *i''*, through which the securing screws are inserted. This plate *B'*, carries a series of lateral arms *C'*, extending diagonally upwards in the path

of the pins *e*, on the ballot carrier *N*, so that when the ballot carrier is moved to the right, the plate *B'*, will be moved downwards against the pressure of the spring *D'*, which normally holds it up. The lever *A'*, is provided with a pin (Fig. 14) *l''*, which projects over the top plate *p*, in the cut-away portion, but when the plate *B'*, is in its normal raised position, the lever *A'*, is held up by the pin *m''*, which rests on the projection *n''*, of the lug *g''*, so that the pin *l''*, will not contact with the flange *f''*, on the pawl carrier *W*. When any ballot carrier however, is shifted to the right, the pulling down of the plate *B'*, brings the pin *l''*, in the path-way of the flange on the pawl carrier, so that when the feeding cylinder is rotated by the voter raising the lever *G*, as he leaves the booth, the pawl carrier will be brought into contact with the pin *l''*, the pawl *s'*, actuated to advance the units wheels in each division one tooth. The pin *l''*, then rides up the inclined surface of the flange *d''*, and rests on the top edge of the flange until the next voter lowers the booth lever to close the booth when the frame is rotated back to its normal position.

There is a cam *E'*, on the shaft *P*, which, when the booth lever is in its closed position, depresses and holds down the spring *D'*, which normally holds up the plate *B'*, so that when the voter is in the closed booth, the spring pressure of the spring *D'*, is released. An arrangement for releasing the pressure of the spring *D'*, when the ballot receivers are to be operated is essential because the tension of this spring is very great as it is by this spring that the plate *B'*, is returned to its normal position, and with it all ballot receivers that may have been voted. In addition to this, the tension of the spring is purposely made powerful, so that the plate *B'*, cannot be shifted downwards by the pressure of the pins *e*, against the arms *C'*, of the plate as long as the spring *D'*, bears against the plate. In this way, the ballot receivers are all locked from movement when the bar *G*, which serves as a barrier, is up and the booth open. When the booth is closed, and the voter inside, the rotation of the shaft, *P*, has caused the cam *E'*, to depress the spring and then the plate *B'*, can be shifted by the ballot receivers as described. In order to hold the plate *B'*, in normal position until thus shifted after the pressure of the spring *D'*, is released, I provide a light friction spring *z*, which bears against the plate as shown in Figs. 2, and 3. The spring *D'*, also performs another important function. If any voter seeking to block the machine should insert a thin sheet of paper or metal not the regular ballot, so that this thin sheet would not feed into the machine as hereinafter described, but should remain in the passage-way of the ballot receiver, the



result would be when the plate B', was sought to be returned to its normal position, the particular ballot receiver thus blocked could not be returned to normal because the  
 5 lug L, on the pivoted piece g, would catch on the edge of the wall plate M, in this event the spring D', will give sufficiently to prevent breaking of the machine. If the plate B', were raised by some positive lever move-  
 10 ment, in case any ballot receiver was blocked from returning to its normal position, some portion of the mechanism would be broken.

Upon the voter leaving the booth and raising the lever G, the spring D', returns the  
 15 plate B', to its normal position, the arms C', returning to normal position the ballot receivers.

s'', (Fig. 14) is a spring bearing on the pawl carrier W, to return it to its normal position  
 20 and with it, the pawl s', as soon as it is released by the pin.

F', is a front plate which is preferably hinged to the machine frame to form a door through which convenient access may be had  
 25 to the irregular voting mechanism, which door can be locked with any ordinary lock, the key to which is retained by the election officers. This plate, F', is provided with a series of guide plates G' G', which extend  
 30 back horizontally one for each ballot receiver, just above the plane of the registry disks V. One edge p'', of these guide plates G' G', is cut segmentally to form with the periphery of the disks V, a passage way for  
 35 the ballot inserted in the ballot receiver, and r'', r'', are lugs or stops on the disks V, which are located in such position that when the registry frame is in voting position, the lugs r'' r'', will form a stop for the ballot. The  
 40 ballot furnished for the machine, is of sufficient length to permit the end of the ballot to project from the ballot receiver when inserted up to the stop r'', so that the voter, if he chooses, can withdraw his ballot at any  
 45 time before he leaves the booth. If, however, he leaves the ballot in the receiver, when he raises the booth lever, he rotates the registry frame as heretofore described, and the ballot is drawn into the machine by the  
 50 contact of the toothed disks V, with the roller H', which is journaled vertically in suitable bearings in the frame to serve as a feed roller in connection with the disks of the registry frame. As the ballot is thus fed  
 55 into the machine, the pressure of the disks V, and the wheels a' b' c', against the roller H', will impress on the ballot the number of the division roll and the number of the irregular vote cast. These numbers will in no way  
 60 identify the voter, but they will identify the ballot, and the finding of more than one ballot within the machine, with the same division number and number of vote, will indicate that such ballots have been illegally cast.  
 65 In order that the registry frame may be

readily removed at the conclusion of any election for storing away the mechanism, I mount the registry frame so that it can be easily removed, as illustrated in Figs. 16 and 17, the shaft T, of the gear S, is provided  
 70 with three teeth or lugs t'', which fit into corresponding recesses in the hub t, of the registry frame, while at the top a collar L', is mounted to slide on a stud M', secured to the top of the frame, and this collar takes over  
 75 the upper cylindrical portion of the nut v, and is held in position by the set screw u'', which takes through the vertical slot in the collar, so that by releasing the set screw, the collar can be raised and the registry frame  
 80 easily removed. The feed roll H', is secured in the same way by the collar N'.

The guide plates G', which form the guide up to the stops r'', on the registry frame for the ballots, are made quite thin, so that  
 85 while they serve as the proper guide for a comparatively broad piece of cardboard, they would not serve as a guide for a piece of wire inserted to block the mechanism through the ballot receiver, and such piece  
 90 of wire merely passes through in front of the feed roll H'.

In any event, should any effort be made to block the irregular voting mechanism, the election officer by merely opening the door  
 95 F', can readily get at the mechanism to remove any obstruction. Should any voter block the ballot receivers or any of them so that the ballot receiver cannot be returned to its normal position, this will be instantly  
 100 known when the next voter attempts to use the regular voting mechanism, for as already described, when any ballot receiver is in voting position, the connection with the interlocking block system prevents operation of  
 105 the regular ticket mechanism. The next voter therefore will advise the election judges that he cannot operate the regular mechanism and then by inspection of the poll book, the culprit can be at once detected.  
 110

The ballots furnished are of sufficient length for writing thereon a single name, but for presidential elections, I provide a wide ballot receiver such as is shown in Figs. 18 and 19, and the ticket to be inserted in this  
 115 ballot receiver is of sufficient length to receive all the necessary names for an electoral vote, and the arrangement is such that but one ballot is inserted for all the electors, this for such States as allow a single ballot for all  
 120 the electoral candidates. For lengthy electoral tickets, this ballot is made so that it can be folded up for insertion in the receiver, otherwise even with a wide receiver, the ballot would be entirely too long. For non-  
 125 presidential elections, in order to utilize this wide ballot receiver, I remove the wide ogee-curved guide piece and provide a cap P', to be secured over the upper portion of the ballot receiver to make it of the same size as the  
 130



remaining ballot receivers, and then pivot a normal sized guide piece thereto.

The operation of the irregular voting mechanism, will probably be sufficiently clear from the foregoing description. When there is no voter in the booth, the booth lever is raised and the drop curtain thrown back so as to expose the machine to the election officers, and in this position all the mechanism is locked. The locking of the regular voting mechanism, can be done in any well known way, controlled by the bar G, and connecting mechanism, while the irregular voting devices are locked by the upward pressure of the spring D', against the plate B', with the arms C', bearing against the pins e, connected by the arms d, with the ballot receivers. The arm G, rotates the shaft P, to release or bring into action the spring D', and thus the mechanism of the entire machine is locked or unlocked, by the movement of the arm G. The voter upon entering the booth, lowers the booth lever and drops the curtain which movement of the booth lever rotates the shaft P, to release the ballot receivers by depressing the spring D' and releasing the plate B'. If the voter desires to vote for any person not on the regular tickets, he slides over to the right the ballot receiver in the line of the office for which he wishes to vote. He writes his selected name on the card-board ballot and inserts it lengthwise into the ballot receiver, until by reason of the guide plate G', it comes to a stop against the lug r'', the end of the ballot still projects from the ballot receiver and it can be withdrawn if the voter so desires. Having expressed his choice, either with the ballots or by voting for candidates on the regular tickets the voter then raises the booth lever to depart from the booth. This rotates the registry frame to the right, and the toothed disks press the ballot against the feed roll H' the ballot is fed into the machine, and drops down into the bottom or into a suitable receptacle. In passing between the disks and feed roll, the ballot is indented or embossed with the number of the row indicating the office and also with the number of the vote.

If no ballot receiver is operated by sliding same to the right to insert a ballot, no pin e is actuated, and the plate B', is not depressed, and while the registry frame rotates with each movement of the booth lever, the registry wheels are not actuated as this actuation only occurs when the plate B', is depressed by the movement of the ballot receiver to allow the pin l'', on the lever A', to contact with the flange f'', on the pawl carrier W. If this arrangement was not provided and the registry wheels were advanced one number for each operation of the frame, it would be an easy matter to identify the voter who voted an irregular ticket by

an examination of the poll book. If the registry wheels moved with each operation of the frame, the number impressed on any irregular ballot would of course correspond with the number of the voter on the poll book, but under my arrangement while the irregular ballots of different voters are impressed with a different number, all that is indicated is the order of voting the irregular ballots.

In the machine as above described, I have avoided altogether the employment of any paper roll upon which to record the independent choice of a voter, because rolls of paper, especially where they must be handled vertically, are exceedingly awkward to manipulate, difficult to feed properly and continually cause trouble.

While I am aware that machines have been provided for the reception of irregular ticket ballots, I believe I am the first to provide mechanism to identify the ballot, both by indicating the office row in which it may be voted, and also by indicating the number of the irregular voting operation, while at the same time rendering it impossible to identify the voter who may have voted the ballot; and the first to provide mechanism to prevent the breakage of the machine in returning the voting devices to normal position should a dishonest or ignorant voter have in any way blocked the mechanism against such return. To accomplish these results, I have provided special mechanism as described, but in view of the novelty of the general principles of construction, I do not wish to be understood as limiting myself to the details of construction shown and described and the broad features of novelty will be readily applicable to many other forms of construction.

There is one feature which I believe I have heretofore failed to call attention to. It will be noticed that the registering wheels are so mounted on the cylinder with reference to the feeding function thereof, that the numbering wheels are operated before the ballot is fed into the machine so that the registry wheels are in fixed position at the time they are called upon to impress the ballot.

Having thus described my invention, what I claim and desire to secure by Letters Patent is:

1. In a voting machine, a plurality of movable devices for receiving the irregular ballots, regular key operated voting mechanisms, and intermediate mechanism directly connecting the irregular ballot receiving devices and the regular key operated voting mechanisms, and means operated by the voter in approaching and leaving the machine for simultaneously locking and unlocking the regular voting mechanisms, and the irregular ballot receivers.



2. In a voting machine, a plurality of movable devices for receiving the irregular ballots, regular key operated voting mechanisms, and intermediate mechanism directly  
5 connecting the irregular ballot receiving devices and the regular key operated voting mechanisms, and interlocking devices for limiting the operation of the regular voting mechanisms and the ballot receiving devices  
10 in corresponding rows.

3. In a voting machine, a regular ticket voting mechanism and interlocking devices for limiting their operation, a plurality of  
15 movable ballot receivers for receiving the irregular ballots, and intermediate mechanisms directly connecting the ballot receivers and regular voting mechanisms, whereby the movement of a ballot receiver will render inoperative the corresponding regular voting  
20 mechanism.

4. In a voting machine, a regular ticket voting mechanism and interlocking devices for limiting their operation, a plurality of  
25 movable ballot receivers, normally locked, for receiving the irregular ballots, and intermediate mechanisms directly connecting the ballot receivers and regular voting mechanism, whereby the movement of a ballot receiver will render inoperative the correspond-  
30 ing regular voting mechanism.

5. In a voting machine, regular ticket voting mechanisms, and interlocking devices for preventing their operation for more than a  
35 single candidate in any one office row, a plurality of movable ballot receivers for receiving and holding the irregular ballots, one for each office row, normally closed against the reception of a ballot, and intermediate mechanism directly connecting the ballot receivers  
40 and interlocking devices, whereby when the ballot receivers are moved for voting, the interlocking devices for the corresponding regular ticket mechanisms will be locked from movement.

45 6. In a voting machine, a plurality of movable devices for receiving and holding irregular ballots, having a curved passage-way therethrough, means for closing said passage-ways, when in normal position, and  
50 means operated by the voter in approaching and leaving the machine for locking and unlocking said ballot receivers.

7. In a voting machine, a series of ballot receivers arranged in a row, one for each  
55 office candidate, for receiving and holding the irregular ballots, mechanism for feeding the ballots into the machine, and means for imprinting on the ballot the number of the particular office row voted and a different  
60 number for each successive irregular voting operation.

8. In a voting machine, a series of movable ballot receivers arranged in a row, one for each office candidate for receiving and

holding the irregular ballots, a feeding cylinder, and means for rotating same, to feed the  
65 ballots into the machine, with type symbols on the feeding cylinder to imprint on the ballot the number of the particular office row voted.  
70

9. In a voting machine, voting mechanisms for the regular candidates and interlocking devices for limiting their operation, a series of movable ballot receivers arranged in  
75 rows one for each office candidate for receiving and holding the irregular ballots, connecting mechanism intermediate the ballot receivers and regular voting mechanism, whereby the actuation of any ballot receiver will render inoperative the corresponding  
80 regular voting mechanism, a feeding cylinder, and means operated by the voter in leaving the machine for operating the feeding cylinder to feed the ballots into the machine.  
85

10. In a voting machine, a series of ballot receivers arranged in a row, one for each  
90 office candidate, for receiving and holding the irregular ballots, a feeding cylinder, and means operated by the voter in leaving the machine for operating the feeding cylinder, to feed the ballots into the machine, with type symbols on the feeding cylinder to imprint on the ballot the number of the particular office row voted.  
95

11. In a voting machine, a series of ballot receivers arranged in a row, one for each  
100 office candidate, for receiving and holding the irregular ballots, a feeding cylinder, and means for rotating same to feed the ballots into the machine, with type symbols on the voting cylinder to imprint on the ballots the particular office row voted, and a series of sets of numbering wheels mounted on the cylinder, one series for each ballot receiver, and  
105 means for actuating said numbering wheels with each movement of the cylinder to impress successive numbers on the irregular ballots as they are voted.

12. In a voting machine, openings for the  
110 insertion of paper ballots, arranged in a row, one for each office candidate, a feeding cylinder, and means for rotating same to feed the ballots into the machine, a series of sets of numbering wheels mounted on the cylinder  
115 and means for actuating said numbering wheels with each movement of the cylinder to impress successive numbers on the ballots as they are voted.

13. In a voting machine, openings for the  
120 insertion of paper ballots, arranged in a row, one for each office candidate, a feeding cylinder and means operated by the voter in approaching and leaving the machine for operating the feeding cylinder, to feed the ballots  
125 into the machine, a series of sets of numbering wheels mounted on the cylinder, and means for actuating said numbering wheels



with each movement of the cylinder to impress successive numbers on the ballots as they are voted.

14. In a voting machine, a series of ballot receivers arranged in a row, one for each office candidate, a feeding cylinder, and means for rotating same for feeding the ballots into the machine, a series of sets of numbering wheels one set for each office candidate, a single shaft in the cylinder upon which the numbering wheels of the same denomination for each office row are mounted, and a single pawl for actuating same with mechanism intermediate said pawl and ballot receivers, whereby when the ballot receivers are operated for voting, said pawl will be brought into position to actuate the numbering wheels to give successive numbers to the ballots as voted.

15. In a voting machine, a series of ballot receivers arranged in a row, one for each office candidate, a feeding cylinder, and means for rotating same for feeding the ballots into the machine, a series of sets of numbering wheels one set for each office candidate, a single shaft in the cylinder upon which the numbering wheels of the same denomination for each office row are mounted, and a single pawl for actuating same, a movable bar upon which said pawl is mounted, with pins on the ballot receivers to contact with said bar and shift same to bring the pawl into operative position when the ballot receivers are operated for voting, and thus to actuate the numbering wheels to give successive numbers to the ballots as voted.

16. In a voting machine, a series of ballot receivers arranged in a row, one for each office candidate, a feeding cylinder, and means operated by the voter in approaching and leaving the machine for operating the feeding cylinder for feeding the ballots into the machine, a series of sets of numbering wheels, one set for each office candidate, a single shaft in the cylinder upon which the numbering wheels of the same denomination for each office row are mounted, and a single pawl for actuating same, with mechanism intermediate said pawl and ballot receivers, whereby when the ballot receivers are operated for voting said pawl will be brought into position to actuate the numbering wheels to give successive numbers to the ballots as voted.

17. In a voting machine, a series of ballot receivers arranged in a row, one for each office candidate, a feeding cylinder, and means for rotating same for feeding the ballots into the machine, a series of sets of numbering wheels one set for each office candidate, a single shaft in the cylinder upon which the numbering wheels of the same denomination for each office row are mounted, and a single pawl for actuating same, a movable bar upon which said pawl is mounted.

with pins on the ballot receivers to contact with said bar and shift same to bring the pawl into operative position when the ballot receivers are operated for voting, and thus to actuate the numbering wheels to give successive numbers to the ballots as voted, with spring for returning said bar to normal position, and means for holding said spring out of operation when the cylinder is in voting position.

18. In a voting machine, devices for receiving and holding ballots, having walls to form a passage-way therethrough, side walls having pivotal relation with each other, means for holding said walls in contact when said devices are locked from operation, and means for opening said passage-way when the receivers are unlocked.

19. In a voting machine, a movable device for receiving and holding ballots, having walls to form a passage-way therethrough, side walls having pivotal relation with each other, means for holding said walls in contact when in normal position, and means for opening said passage-way when the ballot receiver is moved into voting position.

20. In a voting machine, a device for receiving and holding ballots, consisting of a sliding plate having an ogee curved front, with an ogee curved guide piece pivoted on said plate in front of said curved surface, to form a curved passage-way for the ballot.

21. In a voting machine, a device for receiving and holding ballots, consisting of a sliding plate having an ogee-curved front, with an ogee-curved guide piece pivoted on said plate in front of said curved surface to form a curved passage-way for the ballot, and a flat guide plate to guide the ticket into the machine.

22. In a voting machine, for which ticket ballots are provided, mechanism for imprinting on the ballots successive numbers to indicate the number of ballots voted, and to identify the ballot, and means for preventing the movement of the numbering device when no ballot has been voted.

23. In a voting machine for which ticket ballots are provided, mechanism for imprinting on the ballots successive numbers to identify the ballot, and mechanism for shifting said numbering device before each succeeding ballot is voted.

24. In a voting machine for which ticket ballots are provided, mechanism for imprinting on the ballots successive numbers to identify the ballot, a pawl to actuate said printing mechanism, and means for holding said pawl out of engagement until a ballot is inserted into the machine.

25. In a voting machine, devices for receiving and holding irregular ballots, mechanism for imprinting thereon successive numbers, a pawl to actuate said mechanism, and mechanism intermediate said pawl and



the receiving devices, whereby the pawl is held out of engagement with the printing mechanism until the receiving devices are operated.

26. In a voting machine, devices for receiving and holding irregular ballots, registering wheels for imprinting thereon successive numbers, a pawl to actuate said wheels, and means for holding said pawl out of operation, with connecting mechanism for the receiving devices, to release the pawl when a ballot receiver is operated.

27. In a voting machine for which ticket ballots are provided, mechanism for imprinting on the ballots successive numbers to identify the ballot, a movable plate carrying a pawl to actuate said printing mechanism, and means for shifting said plate to bring the pawl into operative position upon the insertion of a ballot into the machine.

28. In a voting machine, ballot receivers for receiving and holding irregular ballots, mechanism for imprinting on the ballots successive numbers to identify the ballot, a movable plate carrying a pawl to actuate said printing mechanism, and means connecting said plate and ballot receivers, whereby the operation of a ballot receiver will actuate said plate to throw said pawl into operative position.

29. In a voting machine, devices for receiving and holding ticket ballots, a feeding cylinder with means for rotating same to feed the ballots into the machine, numbering wheels mounted on said cylinder for imprinting successive numbers on succeeding ballots, mechanism for actuating said wheels normally inactive, and connecting mechanism intermediate the ballot receivers and wheel actuating mechanism, whereby the reception of a ballot will throw said actuating mechanism into operation.

30. In a voting machine, devices for receiving and holding ticket ballots, a feeding cylinder, with means for rotating same to feed the ballots into the machine, numbering wheels mounted on said cylinder for imprinting successive numbers on succeeding ballots, a pawl for actuating said numbering wheels, a movable plate upon which said pawl is mounted, and means connecting said

plate and ballot receivers, whereby the operation of a ballot receiver will actuate said plate to throw said pawl into operative position.

31. In a voting machine, ballot receivers for receiving and holding irregular ballots, means for simultaneously returning all operated ballot receivers to normal and locking same, and yielding mechanism to actuate said locking means, whereby breakage may be prevented in the event of any improper blocking of the apparatus.

32. In a voting machine, ballot receivers for receiving and holding irregular ballots, means for simultaneously returning all operated ballot receivers to normal and locking same, and yielding mechanism to actuate said locking means, and means operated by the voter in approaching and leaving the machine to release and throw into operation said yielding mechanism.

33. In a voting machine, ballot receivers for receiving and holding irregular ballots, means for simultaneously returning all operated ballot receivers to normal and locking same, and a spring to actuate said locking means, with mechanism to release said spring when the ballot receivers are operated.

34. In a voting machine, ballot receivers for receiving and holding irregular ballots, means for simultaneously returning all operated ballot receivers to normal and locking same, a spring to actuate said locking means, and means operated by the voter in approaching and leaving the machine to release and throw into operation said spring.

35. In a voting machine, movable ballot receivers for receiving and holding irregular ballots, a sliding plate, with connection therefor with the ballot receivers, a spring bearing against said sliding plate to return same and with it the operated ballot receivers to normal and to prevent the operation of unvoted receivers, and means for releasing said spring operated by the voter in approaching the machine to permit the actuation of the ballot receivers.

WILLIAM H. DANA.

Witnesses:

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W. S. McCONNAUGHEY.