

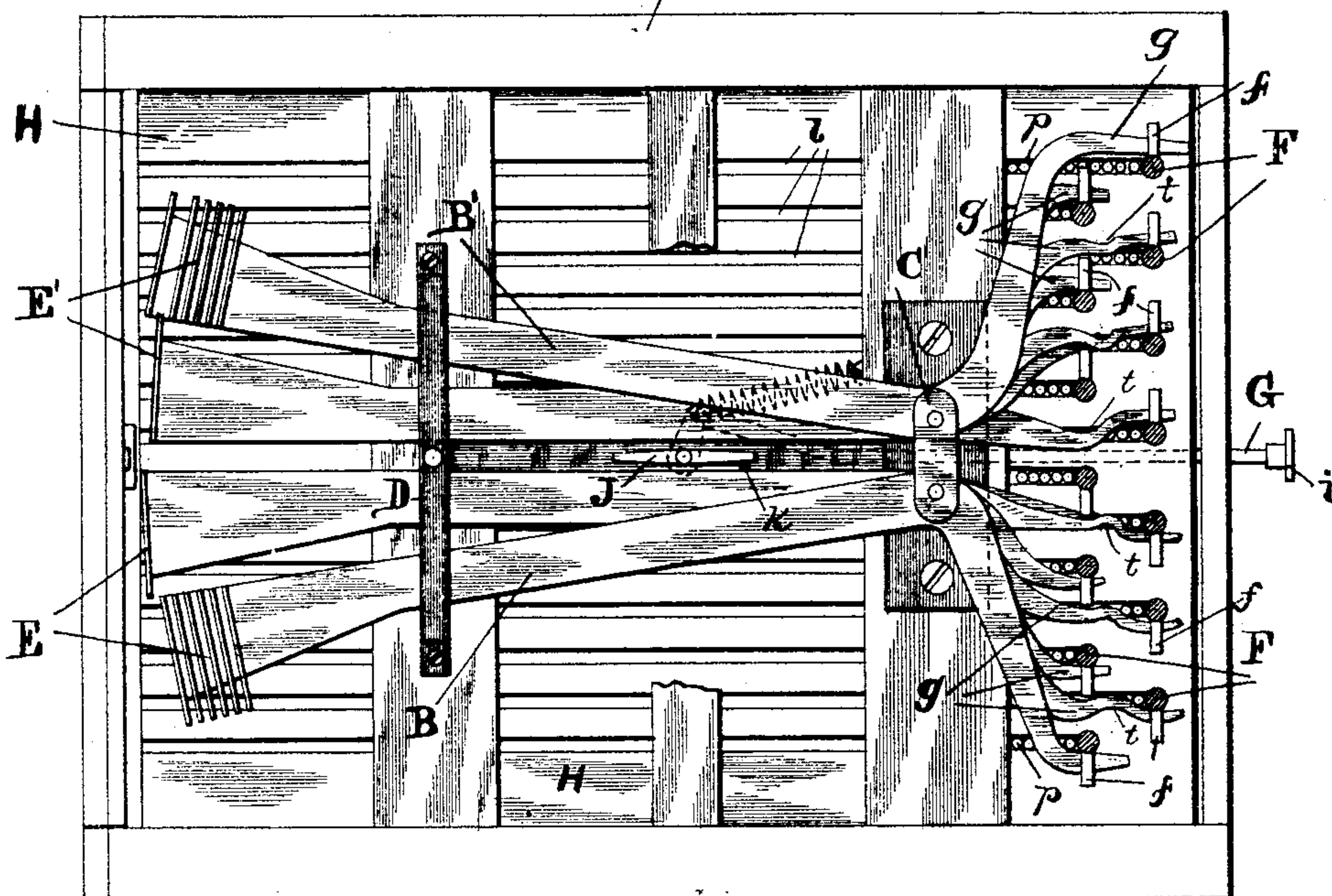
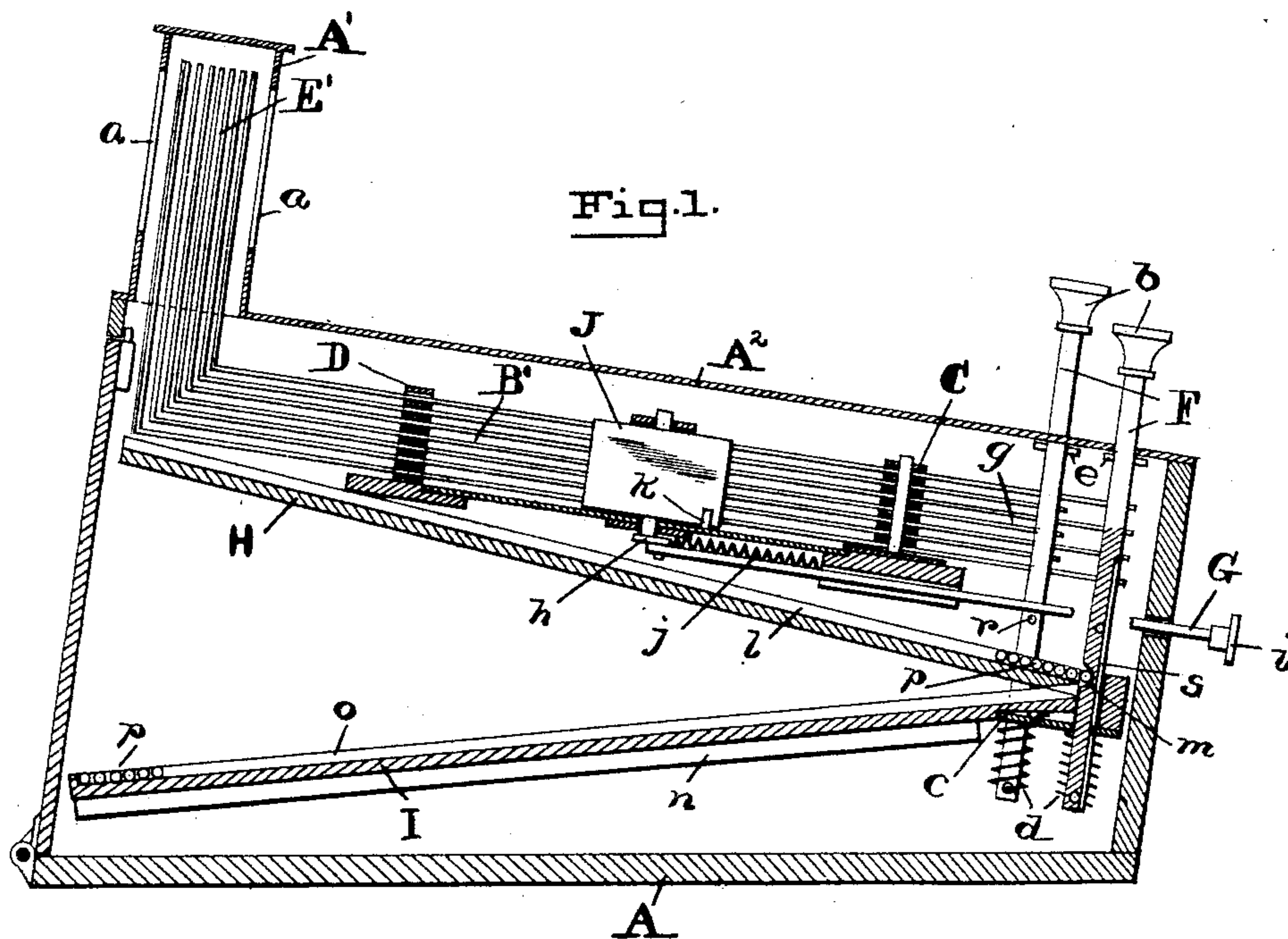
(No Model.)

2 Sheets—Sheet 1.

W. P. PUTNAM.
CASH REGISTER AND INDICATOR.

No. 515,481.

Patented Feb. 27, 1894.



WITNESSES:—

A. O. Babendreier.

Duke Davis.

Fig. 2.

INVENTOR:—

Wendell P. Putnam,

By
Chas B. Mann
att'y

(No Model.)

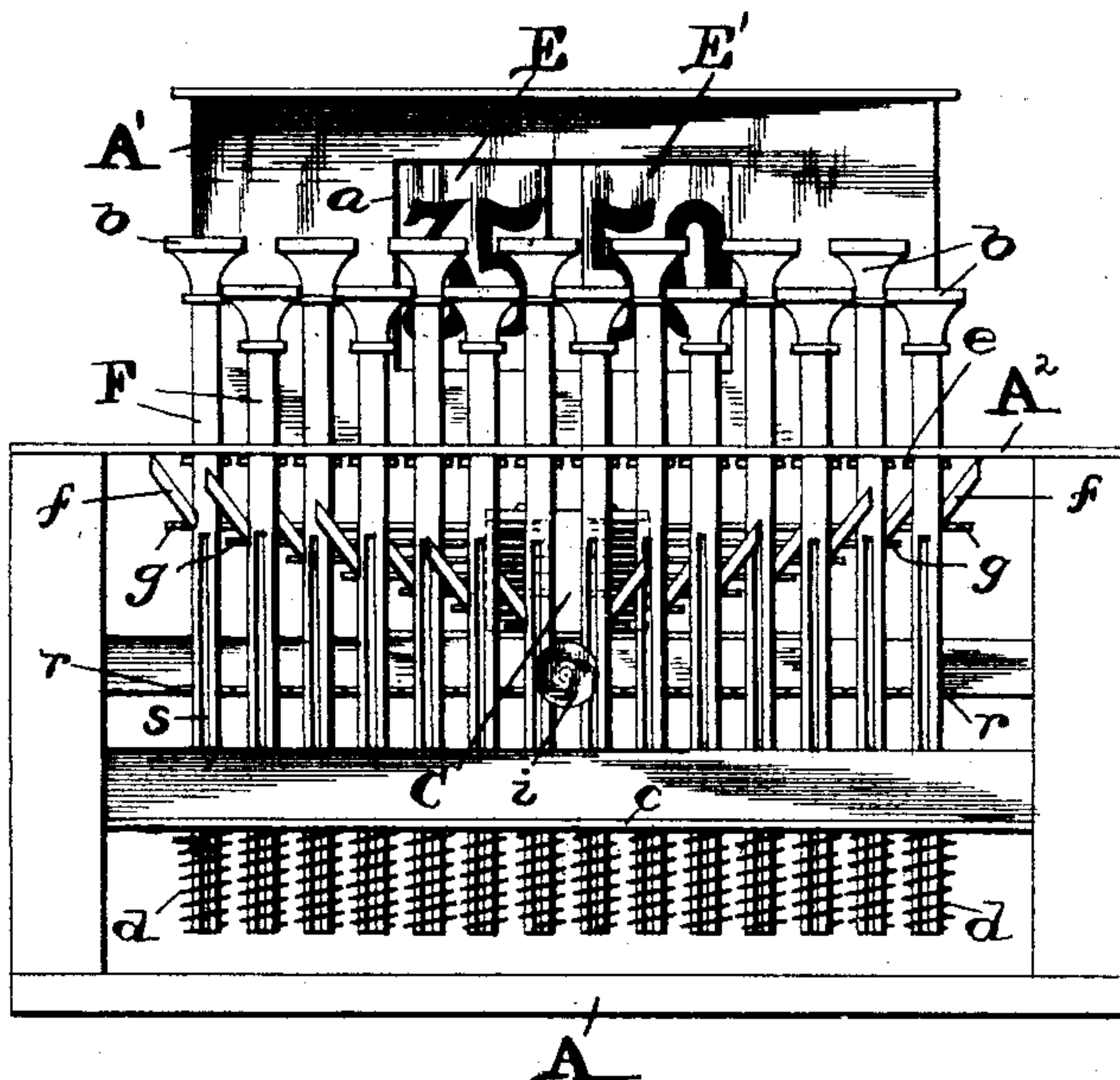
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Fig. 3.



| 11 | 22 | 33 | 44 | 55 | 66 |
|----|----|----|----|----|----|
| 10 | 20 | 30 | 40 | 50 | 60 |
| 9 | 18 | 27 | 36 | 45 | 54 |
| 8 | 16 | 24 | 32 | 40 | 48 |
| 7 | 14 | 21 | 28 | 35 | 42 |
| 6 | 12 | 18 | 24 | 30 | 36 |
| 5 | 10 | 16 | 20 | 25 | 30 |
| 4 | 8 | 12 | 16 | 20 | 24 |
| 3 | 6 | 9 | 12 | 15 | 18 |
| 2 | 4 | 6 | 8 | 10 | 12 |
| 1 | 2 | 3 | 4 | 5 | 6 |

Fig. 5.

Fig. 4.

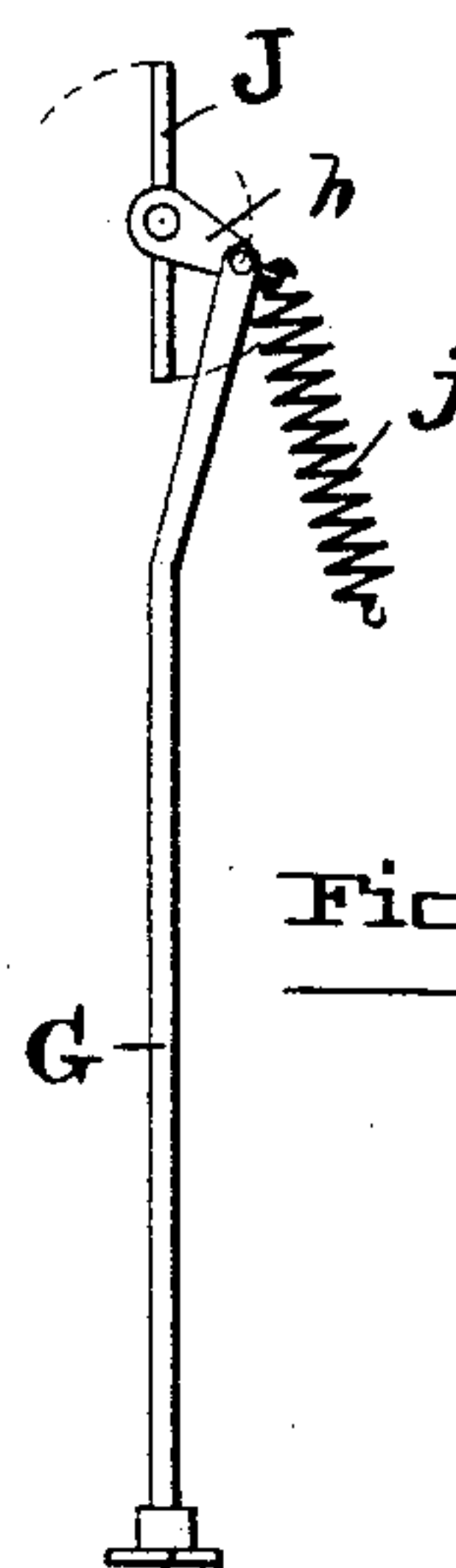
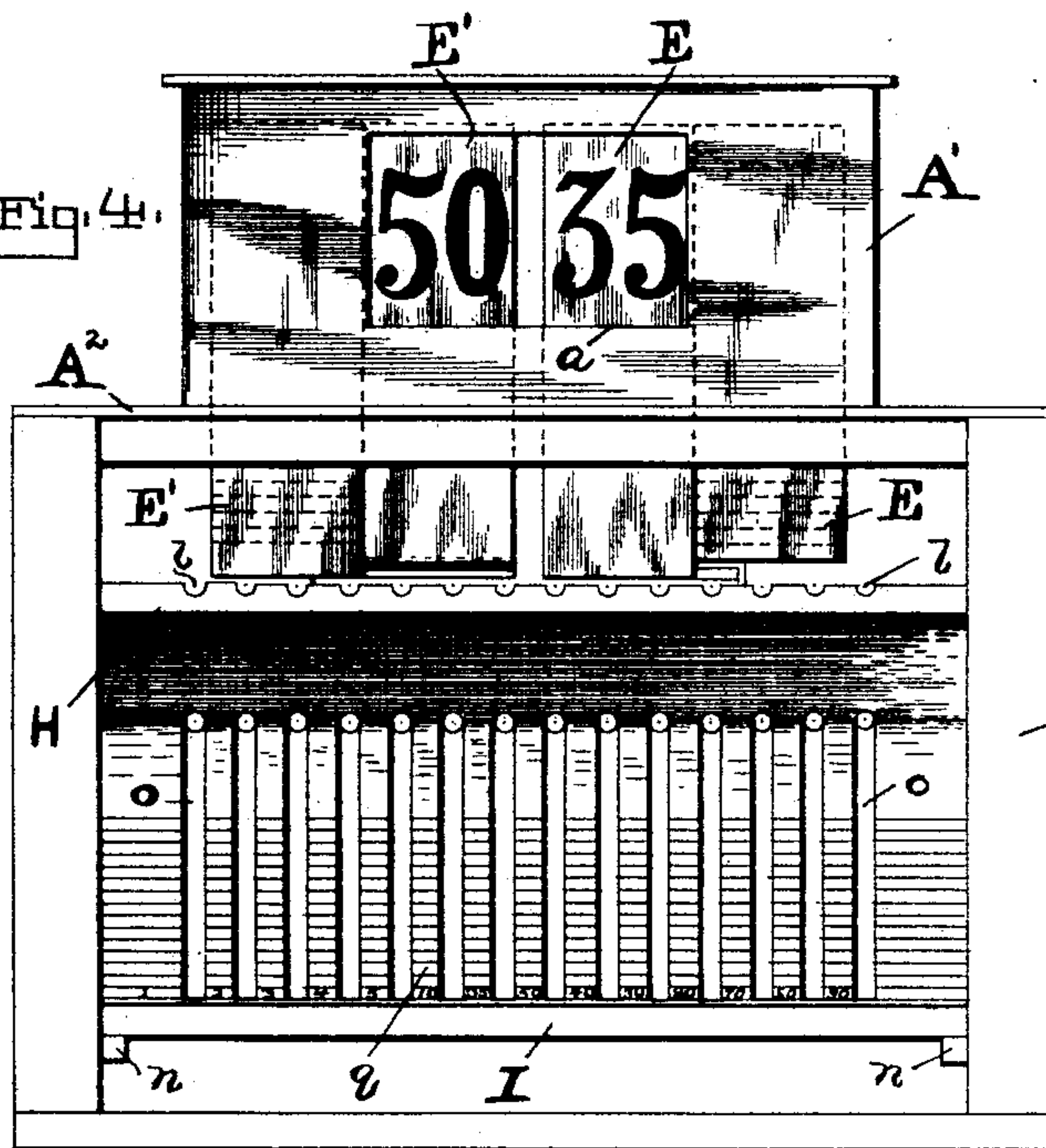


Fig. 6.

WITNESSES:—

A. O. Babendreier.

Charles Davis,

INVENTOR:—

Wendell P. Putnam,

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UNITED STATES PATENT OFFICE.

WENDELL P. PUTNAM, OF BALTIMORE, MARYLAND, ASSIGNOR TO HANNAH GRIFFITHS, OF SAME PLACE.

CASH REGISTER AND INDICATOR.

SPECIFICATION forming part of Letters Patent No. 515,481, dated February 27, 1894.

Application filed October 11, 1892. Serial No. 448,510. (No model.)

To all whom it may concern:

Be it known that I, WENDELL P. PUTNAM, a citizen of the United States, residing at Baltimore city, in the State of Maryland, have
5 invented certain new and useful Improvements in Cash-Registers, of which the following is a specification.

This invention relates to an improvement in cash-registers and has for its object to provide a simple and inexpensive machine which
10 will satisfy all ordinary requirements of such an apparatus.

The invention is illustrated in the accompanying drawings, in which—

15 Figure 1 shows a longitudinal section of the machine. Fig. 2 shows a top or plan view with the cover-plate of the casing removed and two of the indicating levers in the indicating position. Fig. 3 shows a front-end
20 view with the end of the outside casing removed. Fig. 4 shows a rear-end view with the casing open and two indicators showing; Fig. 5, an enlarged detail view of end-portions of the registering board; Fig. 6, a detail
25 of a device for restoring the indicating levers to their normal condition.

The letter, A, designates an outside casing which incloses the operating parts of the machine. A series of horizontal levers are arranged in the upper part of this casing; these
30 levers are in two sets, B and, B', one set being on each side of a longitudinal central line through the machine, and both said sets pivoted separately to a block, C, which is slotted to receive each lever and hold them apart at
35 this point. The two sets of levers diverge as they extend rearwardly and fit through a guide-and-separator plate, D, which has a slot for each lever. The rear ends of the levers
40 carry upward-projecting indicator-plates or cards, E, E', on each side of which are inscribed numbers denoting different amounts. The casing, A, has an upward extension, A', which incloses said indicator-plates and is
45 provided with an opening, a, in the front and back through which any one of the indicator-plates, or any two of them belonging to different sets, may appear when the levers carrying them are operated.

50 A number of vertical push-rods, F, equal to the number of levers, B, B', are mounted at

the front of the machine and have knobs or keys, b, on their upper ends bearing numbers of different denomination. These push-rods are held up by spiral springs, d, fitting
55 upon them at their lower ends and bearing against a plate, c, fastened within the casing. Stop-pins, e, limit the upward movement of the rods by coming against the cover-plate, A², of the machine. Each of the push-rods, 60
F, has a laterally-projecting upward-inclined pin, f, and the levers, B, B', have end-portions, g, extending alongside the push-rods, respectively, below the inclined pins. It will
65 now be seen that upon depressing one of the rods, F, its inclined pin, f, will push aside the end, g, of one of the levers, and thereby throw the opposite end of said lever inward and expose its indicator through the openings in the casing-extension, A'. The notches, 70
t, which appear in the levers are to prevent their movement being limited by contact with the push-rods behind them. The push-rods are prevented from turning by the engagement of projections on the plate, c, in
75 spline-grooves, s, in said rods.

The push-rods are numbered to correspond with the indicator-plates on the horizontal levers. That is, the key on a push-rod will
80 bear the same number as the indicator-plate on the lever with which said push-rod co-acts.

If an amount to be indicated is the sum of two key-numbers both keys are depressed and both corresponding indicator-plates show side-by-side through the openings in
85 the casing, but the two indicator-plates must be from the two different sets and not both from the same set. Each indicator-plate bears the same number on each side so that it may be read from both the front and back
90 of the machine. The showing in Figs. 3 and 4 is to be read as "85," the sum of the two numbers which appear.

It will be obvious that with such an arrangement as here described purchases ranging
95 from the smallest up to a considerable amount may be registered by the use of comparatively few keys.

The means employed to restore the levers to their normal position comprise a vertical
100 spreader-plate, J, pivoted at its middle between the two sets of levers, a crank-arm, h,

on the pivot of said plate, a push-rod, G, jointed to said crank-arm and having a knob, *i*, on the outer side of the casing, a spring, *j*, connecting the crank-arm with a stationary part of the machine, and a stop-pin, *k*, to hold the spreader-plate normally in a line longitudinal of the machine. It will now be seen that upon pushing in the knob, *i*, the spreader-plate will be thrown cross-wise of the machine and thereby spread apart the levers and restore them to their normal position. The spring, *j*, returns the spreader-plate to its normal position where it stands against the stop-pin, *k*. This spreader may be readily operated from the front of the machine just before a purchase is to be registered.

The registering mechanism is arranged as follows:—A board, H, is mounted on an incline in the casing below the indicating mechanism above described, and this board has a number of parallel longitudinal grooves, *l*, in its upper side. The key-board rods, F, engage notches in the lowest end of said inclined board and one of said rods is at the end of each groove. Each rod has a pocket, *m*, into which the groove leads, and said pocket has an inclined lower side. Another board, I, rests below the first-named board on slides, *n*, and is on the opposite inclination its highest end having notches which fit around the rods, F, immediately below the lowest end of the top-board, H. This under-board, I, has longitudinal grooves, *o*, corresponding with those in the top-board and directly under the same. Shot, *p*, is placed in the grooves of the top-board and the forward one of each line of shot will occupy the pocket in the rod at the end of the groove containing said line of shot. Upon depressing the rod this one shot in its pocket is carried down opposite the corresponding groove in the under-board, I, and falls out of the pocket into the said groove down which it rolls to the lower closed end. Thus every time a key is depressed to indicate a purchase a shot is carried to a groove in the lower board and deposited therein. The said board has graduated marks, *q*, between its grooves, and when the register is to be read, the board is removed and the amount of purchases will be found registered by the lines of shot in the several grooves standing at certain graduation-marks. Stops, *r*, are provided on the key-board rods to prevent said rods moving down too far and carrying the shot below the register-board, I.

It is evident my invention may be embodied in different form than that here shown.

The grooves, *l*, and, *o*, which contain the registering shot, *p*, may be properly covered to prevent the escape of the shot.

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

1. In a cash-register, the combination of an outside casing having an opening; two sets of levers pivoted so as to move in a horizontal

plane and carrying indicating figures,—those on one set of levers being at one side of the opening in the casing and those on the other set of levers being at the opposite side of said opening; key-pieces co-acting with said levers whereby any two indicating figures of different sets may be moved to a position where they both show through the opening in the casing; a pivoted spreader-plate between the two sets of levers; a push-rod to operate said plate; and a spring to restore it to its normal position.

2. In a cash-register, the combination of a casing; two sets of levers each lever carrying an indicating figure, and all the levers of each set having a common pivot and the indicating figures of one set being normally at one side and those of the other set being normally at the opposite side; a sliding key-rod provided with an incline co-acting with each lever; and a spreader device located between the two sets of levers to restore them to their normal position.

3. In a cash register, the combination of a number of inclined ways; a number of corresponding ways below the first-named ways and inclined in the opposite direction; and vertically-sliding depressible key-rods, one of which stands across the ends of each two of the inclined ways,—one of one set and the other of the other set of such inclined ways,—and each rod having a pocket at the lowest end of the upper way which pocket receives rolling objects singly from such upper way and may transmit such objects to the high end of the way below by the depression of the key-rod.

4. In a cash register, the combination of an outside casing having an opening; horizontal levers carrying vertical indicating figures arranged to show through the opening in the casing; a number of inclined ways; a number of corresponding ways below the first-named ways and inclined in the opposite direction; and vertically-sliding depressible key-rods one of which stands across the ends of each two of the inclined ways,—one of one set and the other of the other set of such ways,—and each rod having a pocket which receives rolling objects singly from said upper way and may transmit such objects to the high end of the way below by the depression of the rod,—said rod also having an incline to act on one of the horizontal indicating levers substantially as described.

5. In a cash register having a casing provided with an opening, the combination of two sets of horizontal levers pivoted in the casing and bearing indicating figures adapted to show through the said opening; key-rods vertically movable and each having an inclined pin adapted when the key-rod is depressed, to move one of the horizontal levers and thus cause one of the indicating figures to show through the opening in the casing; springs to return the key-pieces to their normal position after they have been depressed; a spreader-

plate pivoted between the two sets of levers; and means for operating the said spreader plate to restore the horizontal levers to normal position after they have been moved therefrom, substantially as described.

6. In a cash register, the combination of the casing having an opening; two sets of horizontal levers pivoted intermediate their ends in the casing and bearing indicating figures on one end arranged to show through said opening in the casing; key-rods alongside the ends of the horizontal levers opposite the ends on which the indicating figures are located, and having inclines whereby upon depressing a key-rod its incline moves one of the

horizontal levers to bring its indicating figure at the opening in the casing; and means for restoring the said horizontal levers to normal position, comprising a spreader plate pivoted between the two sets of levers a crank-arm on the pivot of said spreader-plate, a push rod jointed to said crank-arm and extending without the casing, substantially as described.

In testimony whereof I affix my signature in the presence of two witnesses.

WENDELL P. PUTNAM.

Witnesses:

JNO. T. MADDUX,
F. PARKER DAVIS.