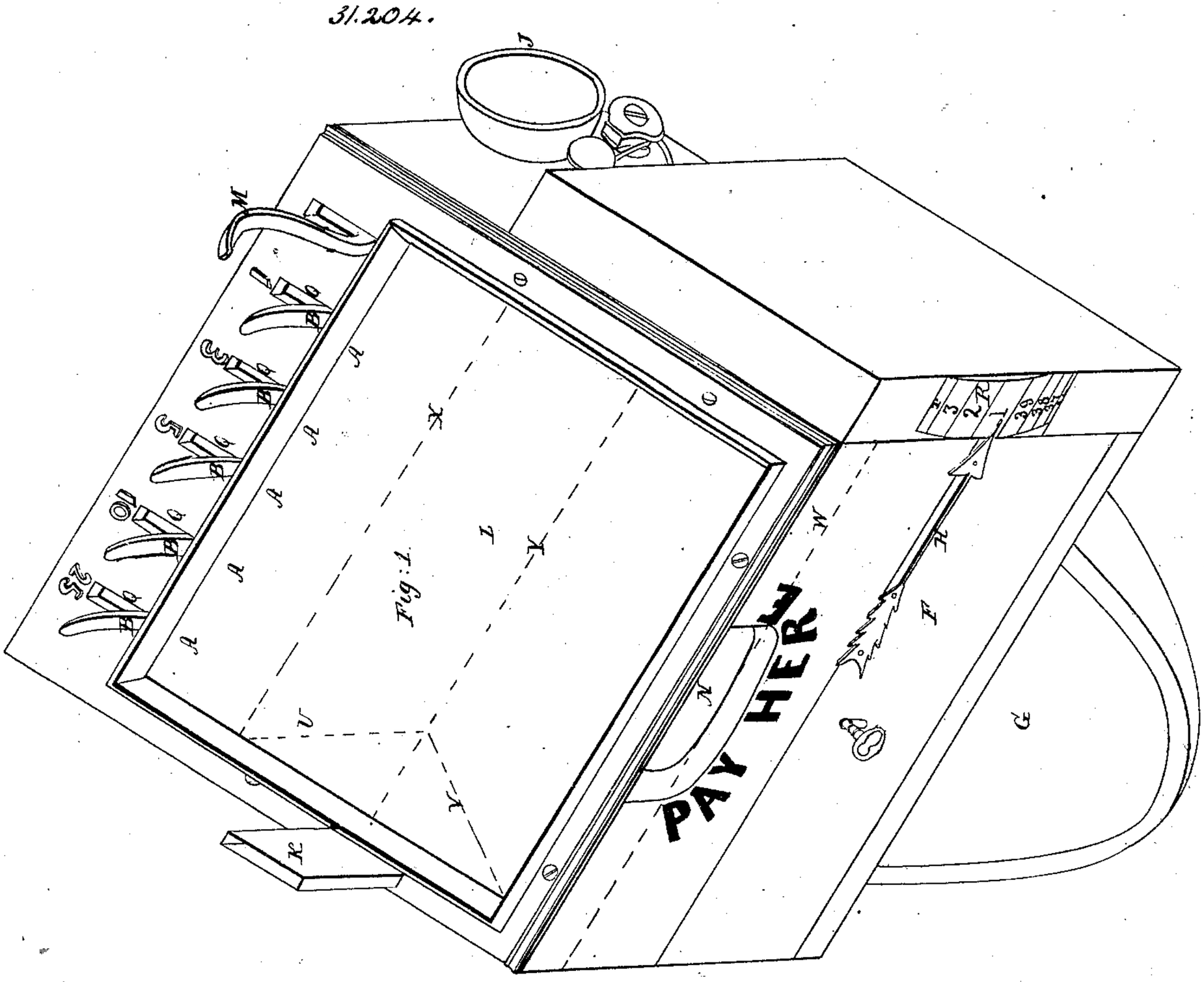
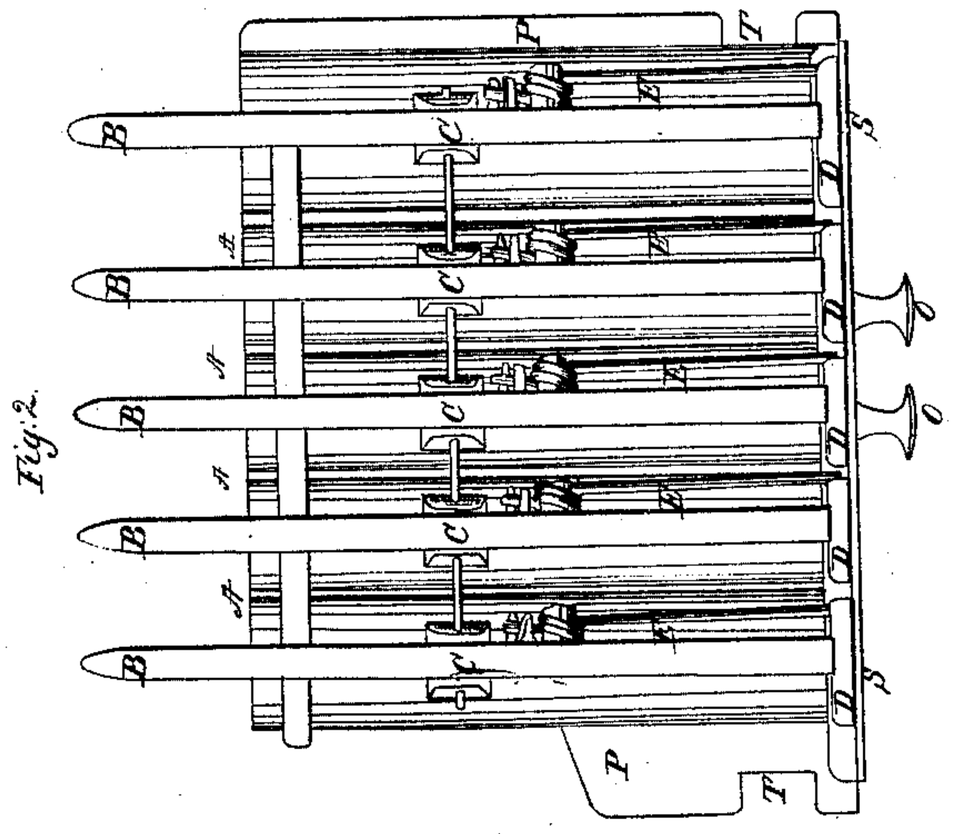
W. B. Bartram.

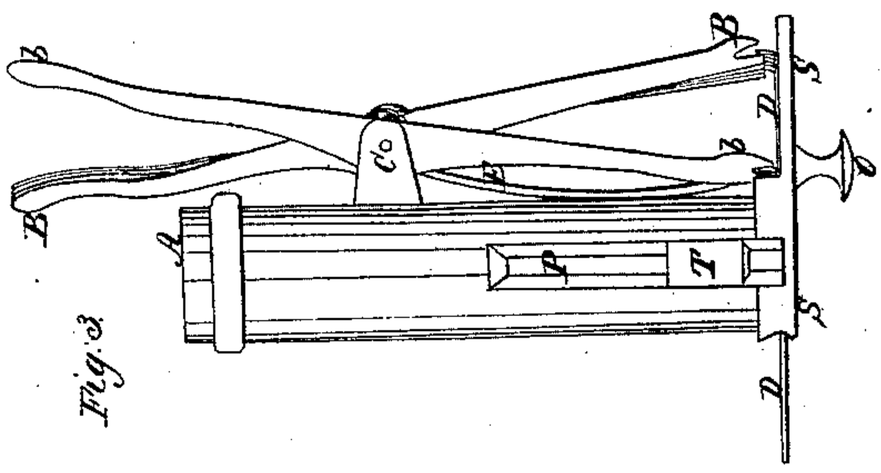
Fare Box.

No. 200.
31.204.

Patented Jan. 22, 1861.







Witnesses
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UNITED STATES PATENT OFFICE.

WALKER B. BARTRAM, OF NORWALK, CONNECTICUT, ASSIGNOR TO C. T. DUDLEY AND A. S. DODD; SAID DUDLEY ASSIGNOR TO SAID DODD.

FARE-BOX.

Specification of Letters Patent No. 31,204, dated January 22, 1861.

To all whom it may concern:

Be it known that I, WALKER B. BARTRAM, of the town of Norwalk, county of Fairfield, and State of Connecticut, have invented a new and useful machine for receiving money and giving correct change as required and registering number of fares received without the operator touching the money, called "Bartram's omnibus paying and receiving box;" and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is an isometrical perspective view of the whole machine. Fig. 2 is a view of the change tubes, finger levers, fulcrums, springs and open valves removed from the machine. Fig. 3 is a view of one of the change tubes and appurtenances in the operation of giving change.

The construction of the said machine is as follows:

Fig. 2 consists of five hollow tubes of iron or other metal lettered in drawing severally "A" the inside diameter of the tubes being sufficiently greater than the diameter of the coins, quarter of a dollar, one dime, one half dime, three cents and one cent respectively to admit of the free movement up and down of the several coins in the tubes. The tubes "A" have an opening at the bottom wide enough to allow the free movement of the open valves "D" backward and forward.

"D" are the aforesaid valves made of iron or other metal of the thickness of the several coins respectively working at the bottom of the tubes and having a hole in them of the diameter of the several coins respectively so that when the machine is at rest the holes in the valves coincide with the openings in the tubes each with its tube. "B" are finger levers made also of iron or other metal in a state of rest, these levers working freely upon their several fulcrums "C." These levers have a small slit at the bottom as seen in Fig. 3 the said slits receiving freely the back of the valves turned up for that purpose and inserted into them.

"E" are wire springs on the inside of the levers attached to a projection from the sides of said levers near their fulcrums by a coil the upper extremity being interlaced between two other projections nearer the fulcrums and said springs pressing against the tubes at their lower extremities.

"S" is a plain flat piece of iron or other metal attached to and extending over the lower ends of the tubes and upon which the valves "D" rest.

"O O" are two ordinary knobs attached to the bottom "S."

"P P" are tongues on the apparatus above described sliding easily in corresponding grooves in the main box at the bottom thereof. The main box may be constructed of any size large enough to receive the tubes and their appendages, and consists of a plain box of wood or other material.

Fig. 1 represents the box with the tubes inserted, the tops of the levers "B" projecting through the openings "Q" at the top of the box, said openings being sufficiently large to allow the free movement of the levers backward and forward.

"L" the top of the box is made of clear glass with an iron rim.

"G" is a glass spout large enough to admit the hand, and attached to the bottom of the box and into which open at the back part of the spout the valves "D" at bottom of tubes "A."

"F" is the money drawer or receptacle of money paid and is constructed of wood with a glass bottom and with a jog in each side of the box so that when the money drawer and tubes are inserted into the box, the jogs project through the openings "T" in the tongues "P" of the paying apparatus shown in Fig. 2.

"N" is an opening in the front of the box to admit money into the box. The drawer has also in front a pointer "H."

"M" is a lever connected by means of ordinary levers and clockwork arrangements with a revolving wheel "R" containing on its circumference figures from 0 to 39 inclusive or more if desired and also with a bell "J," and also with a glass plate "U, X," turning on its longitudinal axis situated above the money drawer and extending the width of the box and from the top thereof to a corresponding immovable glass plate "V, Y," extending likewise the width of the box and from a line "W," drawn parallel with and at the bottom of the opening "N" and at an angle of about sixty degrees with the front of box, these movable and immovable plates coming together in the line "Y"

directly over the money drawer "F" and forming a temporary money chamber, all being so connected as aforesaid so that by the simple movement backward of the lever "M" the said movable plate "U, X," turns leaving an opening at "Y," where the two plates meet, the money drops into the drawer "F" the bell "J" strikes once and the wheel "R" turns up the next number on the circumference thereof to the pointer "H."

"K" is a small open tube large enough to receive change from top of box and deposit same in temporary money chamber above money drawer.

The operation of the machine is as follows: The machine being together as in Fig. 1 first remove the money drawer "F" then by means of the two knobs "O O" remove tubes. Fill tubes with the coins for which they are adapted respectively. First replace the tubes in the box and then replace the money drawer and lock it. Suppose for instance that a half dollar is put into the opening "N" and forty-four cents change is desired. The operator looking through the glass top "L" sees the coin and pulls back the lever "M." The movable glass plate "U, X," within the box turns and the coin drops through the opening "Y" between the movable and immovable glass plates into the money drawer "F." The bell "J" strikes once and calls attention to reception of change and the wheel "R" turns up 1 to the pointer "H." The operator then pushes back the lever "B, 25," the lever and open valve "D" assuming the positions shown in Fig. 3 by the letters "*b*" and "D" respectively and in like manner lever "B 10," lever "B 5" lever "B 3" and lever "B 1." One of the coins thereupon in the several tubes, resting previously in the hole in the open valve "D" is thrown out and drops into the spout "G" ready for the hand. On removing the fingers from the levers "B" they are forced back to their original positions by the actions of the springs "E" and the machine is again ready for immediate use.

The tubes and their appurtenances may be increased in number and diameter at pleasure so as to operate with all or any coins. The width of the openings at the bottom of the several tubes and the thickness of the valves may also be increased at pleasure so as to throw out two or more coins at a time.

This machine is particularly adapted for the reception of fares in cars, omnibuses and other vehicles, being so placed and arranged that the operator has no access to any of the moneys and is yet enabled to give exact change as required and at the same time registering each fare paid. The amount of money in the tubes being known by comparing the same with amount in money drawer and fares registered, any deficiency can be easily determined.

The machine made without the lever "M" and its appendages may be used for giving change only the levers "B" being bent to suit convenience of operators.

What I claim as my invention and desire to secure by Letters Patent is—

1. The giving of exact change as desired by means of tubes "A" adapted to different coins in combination with the open valves "D," levers "B" and springs "E" constructed and operated substantially in the manner and for the purpose set forth.

2. In combination with the above, the money box, lever "M" movable plate, "U X," bell "J" and register "R," the whole being constructed and operated substantially in the manner and for the purpose set forth.

W. B. BARTRAM.

Witnesses:

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