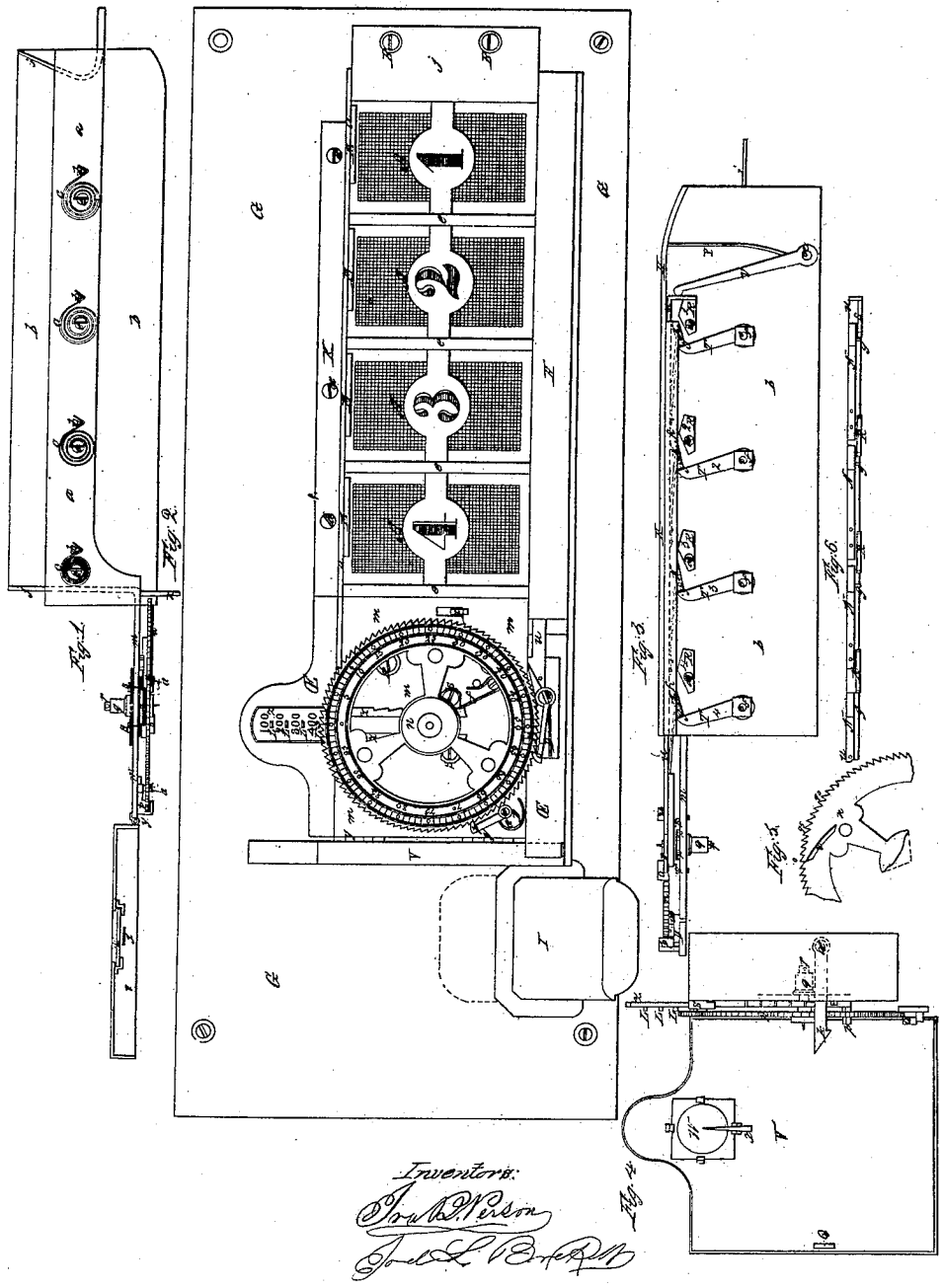
I. B. PERSON & J. L. BROCKETT.

NUMERATING REGISTER.

No. 8,304. Patented Aug. 19, 1851.



UNITED STATES PATENT OFFICE.

IRA B. PERSON AND JOEL L. BROCKETT, OF BALTIMORE, MARYLAND.

REGISTER FOR OMNIBUS-DRIVERS.

Specification of Letters Patent No. 8,304, dated August 19, 1851.

To all whom it may concern:

Be it known that we, IRA B. PERSON and JOEL L. BROCKETT, of Baltimore, in the county of Baltimore and State of Maryland, have invented a new and useful machine, called a "Numerating-Register," for ascertaining and registering the number of specific sums paid to, and received by, a particular agent or other person—the number of fares paid to the driver of an omnibus-stage, for instance; and we do hereby declare that the following is a full and exact description.

The nature of our invention consists in arranging one or more doors, legibly numbered, in a frame, in such a manner that persons paying such specific sums, are required to open, and pay the same through said doors; and attaching such machinery to such door or doors, that it and they, respectively, will upon being so opened, register, in the manner hereinafter described, the number of such specific sums so paid, during any given time.

To enable others skilled in the art to make and use our invention, we describe its construction and operation as follows.

It consists of four doors, (which number may be increased or diminished at pleasure,) as seen in Figure 2, (A,) in the accompanying drawings, (which are referred to and made part of this specification,) which doors have their axes upon the left, marked *e e e e*, and are closed by snail springs attached to their axes, above the top plate, seen in Fig. 1, and marked *c c c c*. These doors, like the rest of the machine, (except the wood frame, G G G, and Œ Œ,) are made of brass or some other suitable metal or metals, consisting of a frame, within which is inserted woven wire, or some other suitable and durable substance or fabric, to admit the transmission of light and sound, as seen in the cross lines of Fig. 2, and have each a number legibly and durably affixed to them. They are set in a frame of metallic plates, shutting close within the same and close to each other. The horizontal plates, at the top and bottom, are perforated to receive the axes of the several doors, which project far enough above the top plate to admit of the attachment of the snail springs *c*, and far enough below the bottom plate to admit the attachment of the levers and nuts, seen in Fig. 3, letters T and *f*. The bottom plate projects forward far enough to cover the said levers and the flat sliding rod and springs, as seen in Fig. 3, and is turned down in front, thus forming two sides of a groove for the sliding rod *u*, (Fig. 2, H,) while the lower side of the groove is formed by a metallic strip, soldered or otherwise attached to the same, as seen in Fig. 3, *ff*, *ff*. The right hand end plate is turned outward at right angles with the end of the bottom plate as seen in Figs. 2 and 3, letter *j*, to receive the screws B, B, that attach the register to the wood frame. The left hand end plate is also turned out at a right angle, so far in front of the door, that when the dial is placed upon its front it will correspond with the projection of the sliding rod, *u*, and through this plate, also, screws are inserted to secure the register to the wood frame. These several plates are soldered or otherwise firmly secured together. The dial is constructed with one hundred teeth or ratchets, and is divided, on its face into a corresponding number of points, numbered as in Fig. 2, *n*. It is placed in such position on the left hand plate as that its bottom will correspond with the sliding rod *u*, and so that there shall be room on its left to attach a door to the plate and on the right for the catch or bolt, *k*. The axis or axle of the dial consists of a pin inserted in a tube (Figs. 1, and 3,—*q* and *r*,) of sufficient length to steady it, which is secured in the plate, *m m m m*. Between the dial and the plate, is a narrow strip or plate, which we call a vertical register, (Fig. 2, *z*,) in which are inserted pins projecting on its surface, say $\frac{1}{16}$ of an inch in length, and about $\frac{1}{4}$ of an inch apart, marked L L L L. Upon the back of the dial and opposite to Figs. 95 and *o* a small wedge, as seen in Fig. 5, & is attached, of a thickness corresponding to the length of the pins, in such a manner that at each revolution of the dial, the wedge, &, passes under the pins, successively, of the vertical register and forces it upward, so as to bring the figures upon its surface in sight, above the dial. Two metallic straps, one at the top of the plate (which is severed to admit the passage of the pins—Fig. 1, *s s*,) and one just below the axis of the dial, secure it in place; while a slot, extending from the bottom a little more than half its length upward, allows it to descend past the axis of the dial. There are indentations upon the side into which the spring, *ff*, falls, to sus-

tain it at the several points to which it is raised by the dial, and which upon being pressed back, permits it to fall, so that all its figures are hid below the dial..

Motion is communicated to the dial from the doors, as follows: The flat, sliding rod, (marked *u*, in the several figures,) is placed in the groove under the front of the bottom plate (formed as before described) and to one end is attached a catch or hook, (*o*) by a screw (*œ*) which is forced into the lower ratchets of the dial by a small spring, D. It is made long enough so that its other end will extend ½ or ¾ of an inch beyond the axis of the door farthest from the dial, which other end is bent at a right angle to present a surface for the action of the lever, V, as seen in Fig. 3, and to arrest the motion of the slide by its contact with the block or wedge, R, when the rod is returning, at the proper point. Flat springs, with catches at one end, are secured to the sliding rod by the other, on the side next the axles of the doors, and in such manner that the catches shall be opposite those axles respectively. (Fig. 3, N N N N.) The springs are about two thirds the width of the rod, and have each a pin projecting, on the upper side, near the catch, in length about one third the width of the rod (whose width is about ½ inch) as seen in Fig. 6, *g g g g*. The levers, T T T T, in Fig. 3, are secured to the axes of the doors (*e e e e*,) by nuts (*f f f f*,) so as to move with them. They are placed at such a distance from the plate, as not to interfere with the blocks, R R R R, whose thickness corresponds to the length of the pins, (*g*), and which are secured to the plate, by screws, *œ œ œ œ*, in such a manner as to present the surface of one edge to the pins, (*g*,) at such an angle as to throw off the springs from the points of the several levers, (T) at the point where they shall have registered upon the dial the number indicated by their respective doors: when the lever, V, actuated by the spring, Y, returns the rod, *u*, to its place. A dog or hook, *p*, supported by spring, D, prevents a reverse motion of the dial. The dial, vertical register &c. are covered by a door, *v*, which has a flange or rim around its inner edge, which shuts close around them, and is secured by the hook or bolt, K. Near the top is a small, glazed aperture (*w*,) through which are seen the index or pointer (*x*,) and the necessary fingers on the top of the dial and upon the vertical register. The index or pointer is soldered or otherwise fixed permanently on the inside of the door in such manner as to point to the top of the dial and indicate the number it has registred.

The register is secured in a wood frame or plank, (G, G G, Fig. 2, and Œ Œ Œ, which is a part of the frame elevated to correspond with the projection of the dial plate, *m m m*,) by screws, as before mentioned, an opening being made in the frame to receive the metallic frame containing the doors, which wood frame is made of any suitable size and attached by screws in the desired place. A tube is inserted in it, as seen in Fig. 2, letter I, at such an angle that coin will readily slide through it, for the purpose of paying back change to avoid re-opening or keeping open the doors of the register.

What we claim as our invention and desire to secure by Letters Patent, is—

The arrangement of a series of doors, with the attachment to the axes or hinges thereof of levers, or other mechanism, in such a manner, and in such connection—by means of a rod or rods, and springs, or other suitable contrivance or device—with a dial, or some like mechanism, that each door, upon being opened, will act upon such dial, or other mechanism in such manner, as to indicate thereon and thereby, the number indicated by such door,—the several doors indicating different numbers, respectively: also the arrangement of a strip of metal, or other suitable substance, vertically or in some other position in connection with such dial, so that by means of a wedge upon the dial and pins upon the said strip, or vice versa, under which, or over which, the wedge successively passes, the said strip will rise, or be forced outward from the circumference of the dial, a given distance, at each revolution of the dial, and indicate by the figures on the surface of such strip, near the outward or upward end of the same, successively coming in sight, above or beyond the circumference of the dial, the number of such revolutions of the dial; using for the construction of the same any metal or metals or other substance of a suitable and durable description.

IRA B. PERSON.
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Witnesses for I. B. Person:
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Witnesses for J. L. Brockett:
LEWIS HANDY,
LEWIS GALE.