(No Model.)

A. BUTTON.

AUTOMATIC DRY CLOSET.

No. 364,988. Patented June 14, 1887.

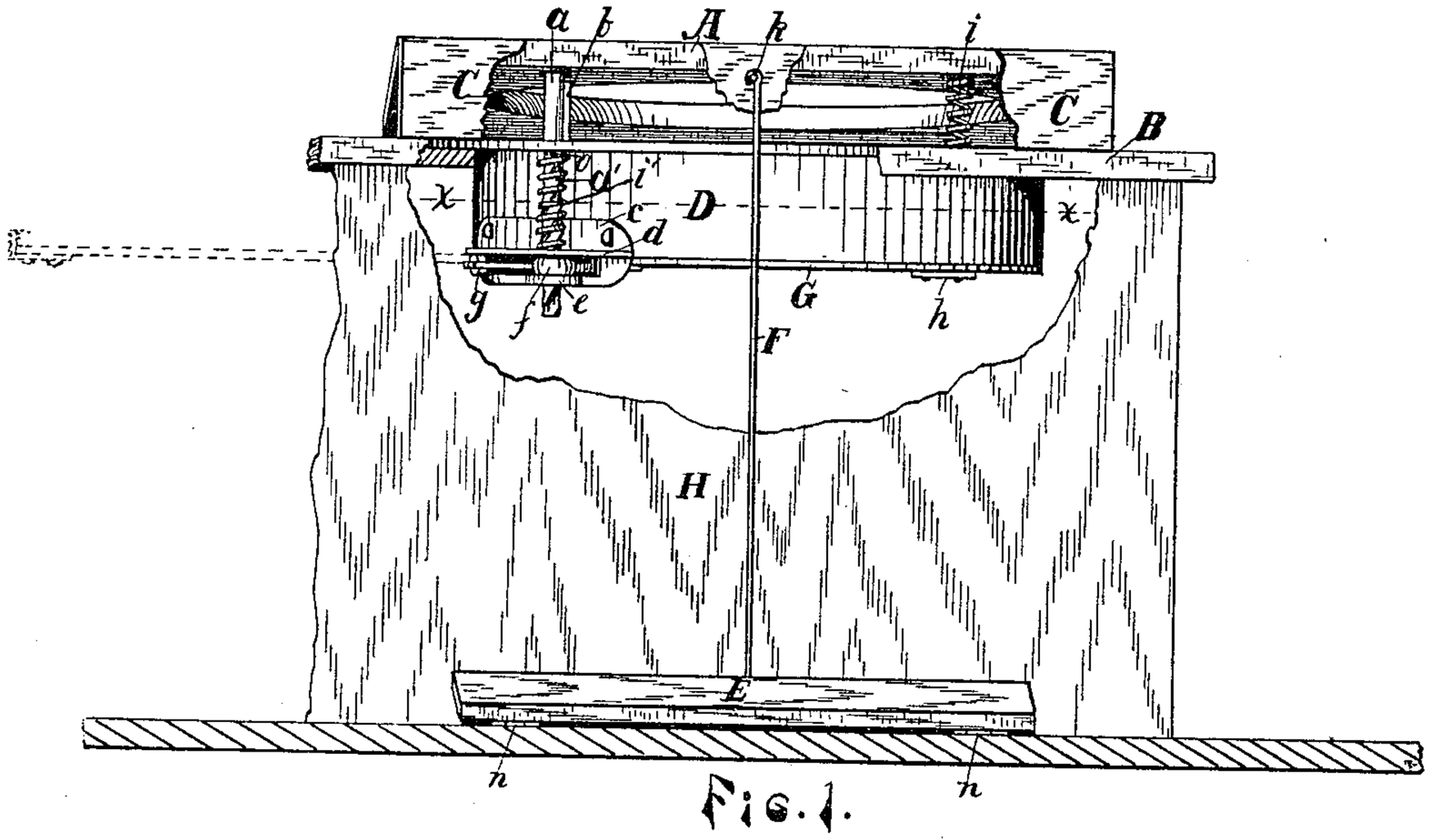

Fig. 1.

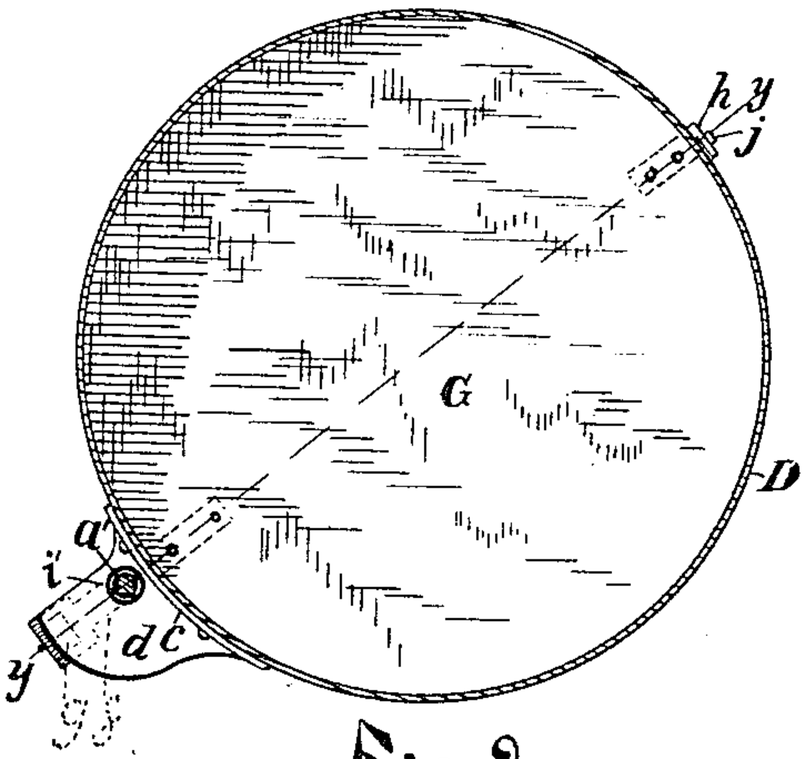

Fig. 2.

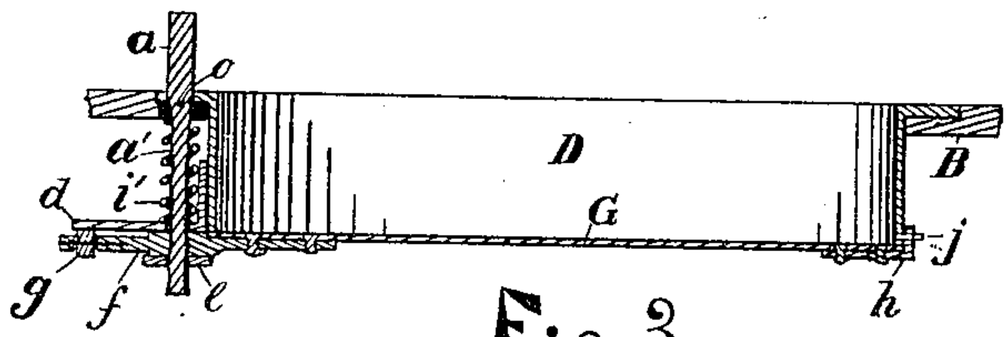

Fig. 3.

Witnesses

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AUTOMATIC DRY CLOSET.

SPECIFICATION forming part of Letters Patent No. 364,988, dated June 14, 1887.

Application filed October 23, 1886. Serial No 216,999. (No model.)

To all whom it may concern:

Be it known that I, ALPHONZO BUTTON, a citizen of the United States, residing at the city of Grand Rapids, in the county of Kent and State of Michigan, have invented a new and useful Automatic Dry Closet, of which the following is a specification.

My invention relates to improvements in that class of dry closets or privies more especially adapted to be erected over vaults on ground surface, being attached to the under side of the seat and operated in such a manner that all poisonous gases or unwholesome odors are effectually excluded from the room; and it consists in vertically inserting into and suspending from the hole in the top of the seat an open cylinder or pipe by a rim formed thereon, at the lower end of which a close-fitting valve or cut-off is operated in conjunction with a vertically-operating pin or screw, together with an open coil-spring, is made to rotate from and into position over the lower end of said cylinder or pipe by the partial weight of a person seated upon a skeleton seat resting upon the head of said operating pin or screw, and the same returning is secured in position by the slack of said spring immediately on vacating said seat; and the objects of my improvements are, first, to provide a simple, substantial, and economical attachment to the seats of privies or closets, whereby not only the room is made odorless by excluding therefrom all poisonous gases, but also the sight of the contents of the vault will effectually be shut off and hidden from view; and, secondly, that by an automatic arrangement of the same the aforesaid objects cannot be neglected or forgotten. I attain these objects by mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a vertical section of the entire dry closet in position, the bench and seat being tipped back in a horizontal position, with part of the front cut away at *x x*. Fig. 2 is a section showing the upper side of the valve or cut-off in position on lower end of the cylinder in connection with the hinge or bearings of the same on a line of *z z;* Fig. 3, a vertical section of the closet cut down through the center of the operating pin and latch on a line of *z z*.

Similar letters refer to similar parts throughout the several views.

The skeletoned and hinged operating-seat A, the under seat, B, to which the same is attached, and the side H, (indefinitely extended,) to which the operating foot-treadle E is hinged, constitute the frame-work to which the trap is attached. The operating pin or screw *a*, Fig. 1, to which power is transmitted by the person seated upon the skeletoned seat A, Fig. 1, resting upon the head of said pin, is formed of half inch round steel or other metal, with feather or guides *b* at the top and squared at the lower end to about two inches upward, and twisted so as to form a screw or thread of three-fourths of the circumference of the pin or a one-third twist in one inch of the screw, that being the length required to rotate the cut-off G sufficient to clear the hole. The pin or screw *a* is passed downward through a half-inch hole in an extension of the rim cast or formed on the upper end of the cylinder or pipe D, and thereby suspended from the hole in seat B, Fig. 1, the upper end of said pin *a* being feathered to said rim through slots in a hole corresponding with guides *b*, Fig. 1, and through an open coil-spring, *i*, on which the same rests by a pin through hole *o*, Fig. 3, and continuing vertically through the one-half-inch hole in the upper bearing or extended hinge, *d*, Fig. 3, and through a three-eighths-inch square hole in corresponding nut formed in extension of spider *f*, Fig. 3, to which sheet-metal cut-off G, Fig. 2, is attached, and continuing through lower bearing or hinge, *e*, Fig. 3, operating vertically by force of person and slack of spring *i*, causing the valve or cut-off G to rotate from and into position and secure, the said screw being feathered to the cylinder D, as aforesaid, and operated vertically in entering its corresponding nut in extension of cut-off or spider *f*, hinged between said bearings. The screw or thread turning to the right causes the nut to recede and rotate to the left and return secure in position. The skeletoned seat A, Fig. 1, hinged to a cleat on opposite side of the hole in top of seat B, is provided with a cleat, C, extending to below the seat B when pressed down, to which a rod, F, is attached by hook and staple *k*, Fig. 1, at the top and stapled to a foot-treadle, E, hinged to a cleat on floor, by which

the closet is operated by the foot, as convenience may require. The open coil-spring *i* at the right of Fig. 1 is set through a hole in the seat B into a corresponding hole in a block on the under side of seat B, to keep the skeletoned seat A level. The casting *d*, Fig. 2, includes the two bearings, between which the cut-off G is hinged, and is entire in one casting, attached to cylinder D by an extension of the same, (shown at *c*, Fig. 1,) which, in conjunction with the operating-pin, forms a hinge or axis upon which the cut-off or valve rotates. The spider *f* is a casting in the form of a dagger, with an inverted or crescent-shaped hilt corresponding to the circle of the sheet-metal cut-off G, to which the same is attached, as shown by dotted lines, Fig. 2, at the extremity of which a friction-roller, *g*, is arranged in a slot cast therein, turning upon a pin inserted at *z* on left of Fig. 2, having its bearing on the under side of extension of bearing or hinge *d*, to lessen the friction of the cut-off and to keep the same from sagging out of a level position.

I am aware that other automatic stench-traps have been made to operate from pressure on the seat and with the foot, but only in connection with letting on water and opening and closing a valve falling from the aperture, but not attached to the top of the bench or under side of the seat, nor otherwise shutting off the stench than by letting in water in conjunction with opening and closing said valve. I therefore do not claim such a combination, broadly; but

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

In an automatic dry closet, the combination of a reciprocating valve or cut-off composed of parts *f* and G, the former provided with a friction-roller at the extreme outer end, and also provided with a nut at its axis of reciprocation, with a vertically-reciprocating pin, *a*, provided with guides at the top end and feathered to hollow cylinder D and made auger-shaped at its lower end, corresponding with and reciprocating in the nut at the axis of the valve, and attached by a hinge to cylinder D, whereby the valve can be moved from and to position over the mouth of said cylinder by weight of person on seat A, in conjunction with the spring *i*, operating-seat A, and treadle C, substantially as shown and described.

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Witnesses:

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