

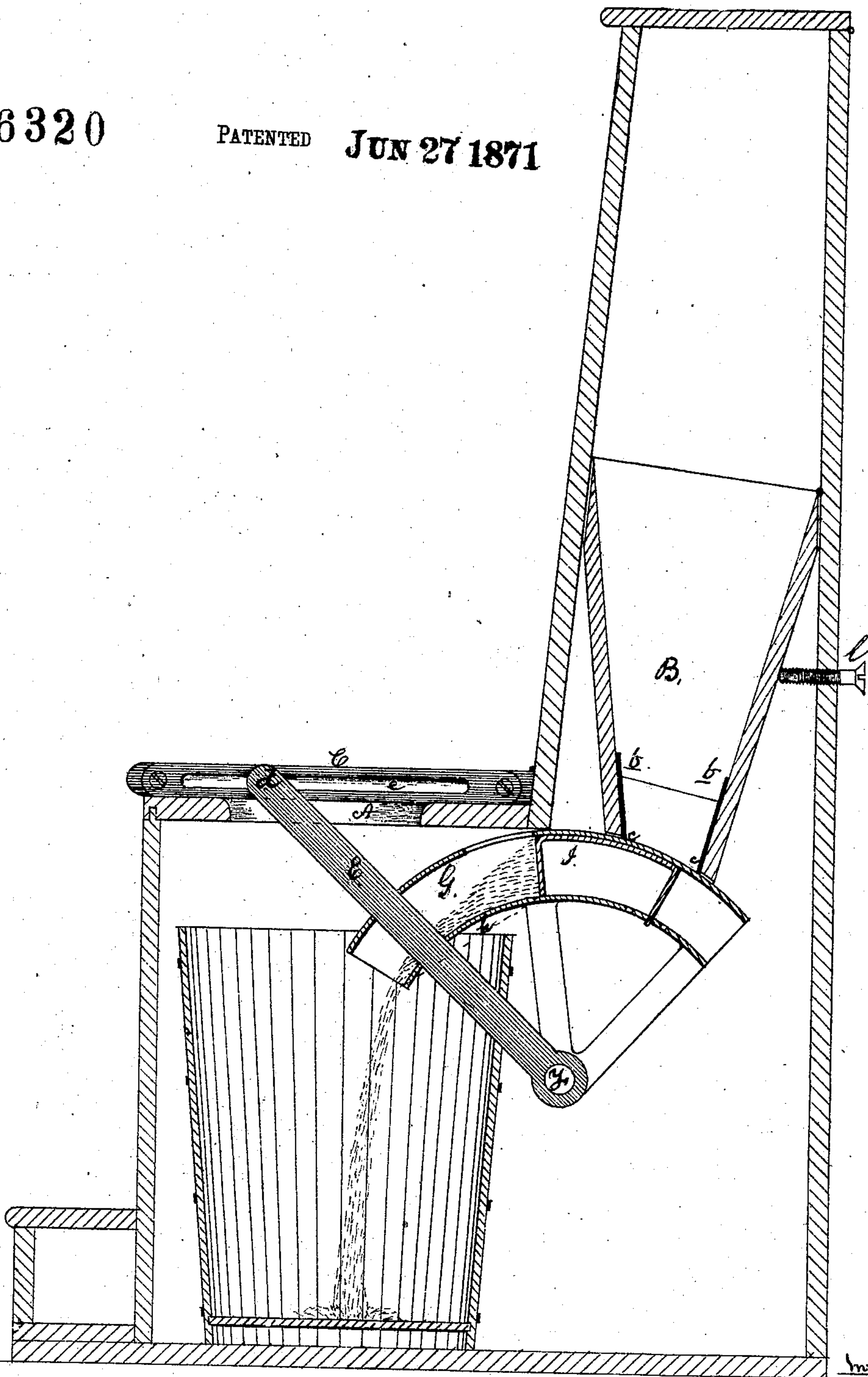
W. A. JORDAN'S

Improvement in Earth Closets

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PATENTED

JUN 27 1871



Witnesses-

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# UNITED STATES PATENT OFFICE.

WILLIAM A. JORDAN, OF NEW ORLEANS, LOUISIANA.

## IMPROVEMENT IN EARTH-CLOSETS.

Specification forming part of Letters Patent No. 116,320, dated June 27, 1871.

*To all whom it may concern:*

Be it known that I, WILLIAM A. JORDAN, of the city of New Orleans and State of Louisiana, have invented certain Improvements in Earth-Closets, of which the following is a full, clear, and correct description of my said invention, reference being had to the annexing drawing, which, with the description and specification, illustrates more clearly the mechanical arrangement and operation of my device.

My invention, unlike nearly all the improvements which have been made in earth-closets, is designed to precipitate not only dry earth, pulverized charcoal, or other equivalent deodorizing substances, but it is likewise intended to precipitate any of these materials, whether they be perfectly dry, as is most desirable, or whether they be moist or wet, as experience in their use has conclusively proven their most probable condition, especially when used for a longer or shorter period of time in a humid climate, or in wet, damp weather. It is designed that the precipitation of the deodorizing substance shall also be in regular and proper quantities, and at the proper period of time, in order to effectually deodorize the excretions deposited in the receptacle within or beneath the closet by the thorough neutralization and absorption of the gases emitted therefrom, and thereby to render unobjectionable those necessary conveniences which, under the old system of privy-vaults, are so injurious and detrimental to human health and comfort. My improvement consists of an exceedingly simple and cheaply-constructed mechanical arrangement, by which, through the agency of the cover of the seat of the closet, the hopper containing the deodorizing substance is made to deliver from its lower extremity, at the proper time, the desired quantity of said substance which may be necessary to accomplish the end in view. The material thus delivered by the hopper above mentioned is received and precipitated upon the newly-deposited fecal matter with positive and unfailing certainty by means of a novel, simple, and ingeniously-conceived and easily-operated mechanical device, as will be hereinafter described. Another important and very desirable feature in the arrangement of my device is that I am enabled, in a very simple manner, to regulate the quantity, more or less, of the disinfectant substance which it may be necessary to discharge upon the excrement to be de-

odorized, whereby the use of valuable disinfectants is economized and unnecessary waste prevented; and all of the above-enumerated desirable results are accomplished with an apparatus which, for simplicity of arrangement, effectiveness in the execution of the work to be done, economy in the cost of the construction, and its preservation in perfect repair, has no equal among the innumerable devices hitherto invented and brought into practical and general use. These views are thoroughly substantiated by many intelligent persons who have examined my device, who are experienced in the construction, use, and introduction to the public attention of the dry-earth-closet system, and who are likewise largely and pecuniarily interested in their own, or in the invention of other parties, and whose judgments, therefore, might be expected to be prejudiced entirely in favor of these said inventions.

The precise character of my improvement, with respect alike to its several and separate parts, will at once be more clearly understood by referring to the drawing, which presents a sectional view of the earth-closet proper, the earth-dumper or discharger, and at the same time a side view of the lever or bar, and the slotted plate secured to the lid of the seat, by which the earth-dumper is operated.

Behind the seat A of the closet, and rising above it, as in ordinary cases, is the hopper B, for retaining the deodorizing material, and which at the bottom, is contracted or drawn together, as shown, in order to concentrate the substance at the point of delivery by its own gravity. The outlet or opening for the discharge of the substance into the dumper is made at the bottom of the hopper, and this opening is flanked or faced on each of its four sides by pieces of rubber, *b b*, leather, or other equivalent. Suitable flexible material or a brush of stiff hair might answer the important purpose for which it is intended, namely, the prevention of the particles of the deodorizing substance used from interposing too much friction, jamming or clogging between the earth-dumper and the bottom surface of the hopper, as it is desirable that, under all circumstances, the earth-dumper should work easily, smoothly, and freely. The bottom of the hopper is curved to fit the upper side of the earth-dumper as closely as it is practicable to a free operation of the same, and the rubber, leather, or other material used



as the cleaner or scraper is made to project a little below the bottom of the hopper, as shown at *c*, that it may impinge against the said earth-dumper sufficiently tightly and closely, as it is necessary to keep the same free and clear of the particles of the deodorizing substance used. The seat *A* is provided with a cover, *C*, which is hinged at its rear top edge to the closet in such manner as to admit of its easy operation and of its fitting closely down upon the said seat. At and upon the side of the lid *C* there is a grooved or slotted bar, *e*, secured by screws to the lid, and in the groove or slot of which there slides freely a double-headed pivot, *d*, which passes through the end of the bar or lever *E*. This bar or lever is secured at its lower end to the axle *F*, upon which or to which the earth-dumper *G* is also attached rigidly, so as to be oscillated or moved backward and forward by means of the rising and the lowering of the lid or cover *C*. The earth-dumper *G* is an elongated trunk or tube, curved in the form of the arc of a part of a circle, with brackets or arms projecting from its lower or inner periphery, for the purpose of securing it to the oscillating axle *F*. These brackets are just long enough to admit the earth-dumper to move freely under the hopper, and the capacity of the earth-dumper is ample to receive and hold a sufficient quantity of the deodorizing agent completely to cover each deposit of fecal matter. The mouth of this tube or earth-dumper should slightly expand or enlarge from the point at which it receives the disinfectant substance to the point of discharge, and I believe it will likewise be found in practice essential to remove or omit the top covering from this part of the said earth-dumper.

The bottom part of the earth-dumper, from the point at which it receives the deodorizing substance to the point of delivery, should also be made straight, as indicated by the dotted lines *h*, and not curved, as shown on the drawing, as this form or outline will probably be found the best adapted to a free delivery of the deodorizing substance from the earth-dumper.

I do not, however, wish to be confined to any particular form of the cross-sectional area of the dumping-tube. It may be an oval, a circle, an ellipse, or a parallelogram, or of any other shape or form, without in any manner deviating from the general principles of my invention, or without, in any degree, impairing its usefulness or efficiency for the purposes for which it is intended and herein set forth.

The interior of the tube or earth-dumper is pro-

vided with a slide-gate, *I*, which can be moved backward or forward under the opening at the bottom of the hopper, so as to enlarge or contract this opening, and thus regulate at pleasure the quantity of the deodorizing substance to be received within the earth-dumper. For a like purpose the hopper *B* is suspended from a hinge or hook from within the closet, and is easily moved forward or backward by means of the set-screw *l*, and thus the opening at its bottom may be placed in any relative position with reference to the opening in the top of the earth-dumper, and thus the desired quantity of earth to be delivered from the hopper may again be regulated. It is not absolutely necessary, however, to pivot the hopper in the manner above described, and for the purposes set forth, as the whole object attained by this means is already effectually accomplished by means of the slide-gate in the earth-dumper above mentioned.

The operation of my invention is as follows: When the cover *C* is down on the seat *A* the earth-dumper will be thrown forward through the agency of the slotted bar *e* and the lever-bar *E* sufficiently to allow the deodorizing substance already in the earth-dumper to be discharged therefrom, and at the same time the discharge-opening in the hopper *B* will be closed; but when, on the contrary, the cover is raised, the earth-dumper will be thrown back so as to uncover the opening therein to receive another charge preparatory to its requirement for use, when the person occupying the closet rises and closes the cover down on the seat and precipitates thereby said substance on the excretions just deposited.

It will, I believe, be perceived from this description that my invention is of very simple and economical construction and of easy operation, and that all its movements being positive and compulsory, it must necessarily be effective in accomplishing the object in view. I have, in fact, demonstrated the thorough efficiency of its operation in practice by repeated experiments.

What I claim, and desire to secure by Letters Patent, is—

The combination of the earth-dumper *G*, adjustable slide-gate *I*, pivoted lever *E*, seat *C* having slotted bar *e* attached, and hopper *B*, substantially as described.

WM. A. JORDAN.

Witnesses:

S. F. OLMSTEAD,  
WM. McC. JONES.