

(No Model.)

2 Sheets—Sheet 1.

R. ERWIN.

HAND DISTRIBUTER FOR SEED AND FERTILIZERS.

No. 260,373.

Patented July 4, 1882.

Fig. 1.



(No Model.)

2 Sheets—Sheet 2.

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Fig. 2.

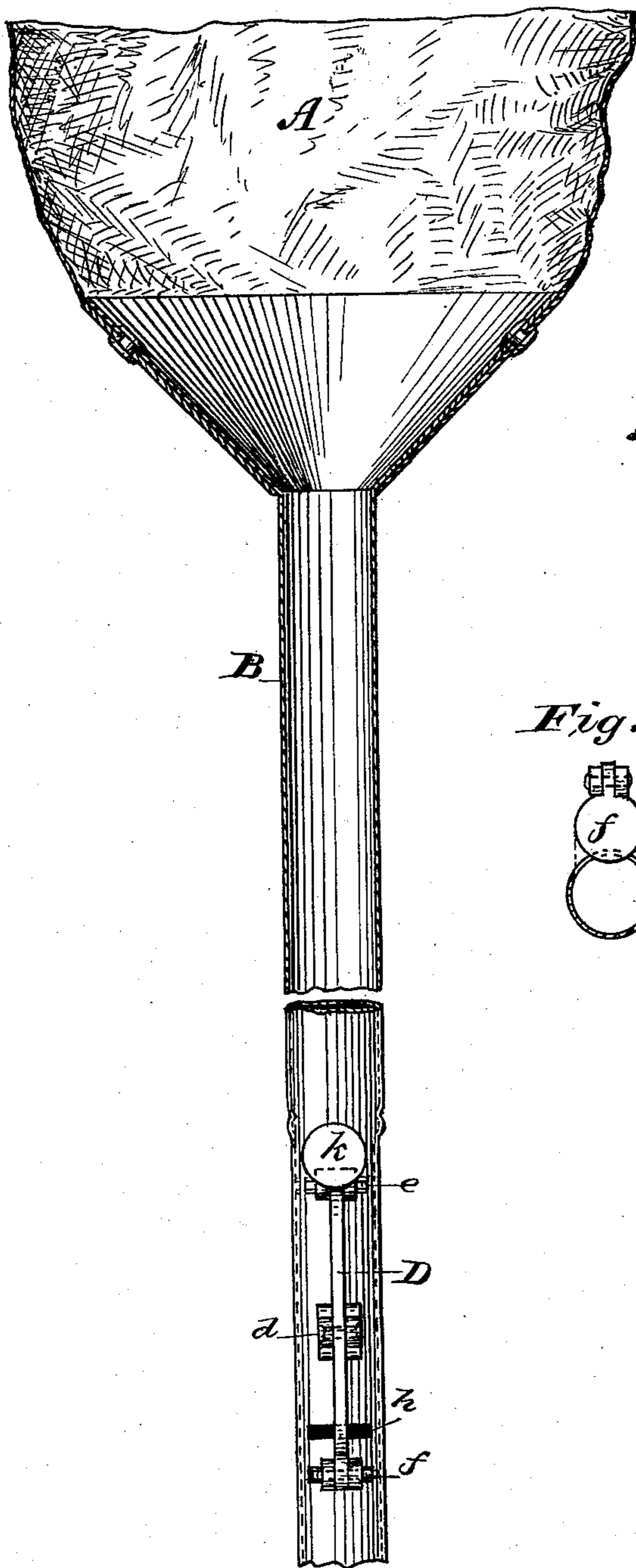


Fig. 3.

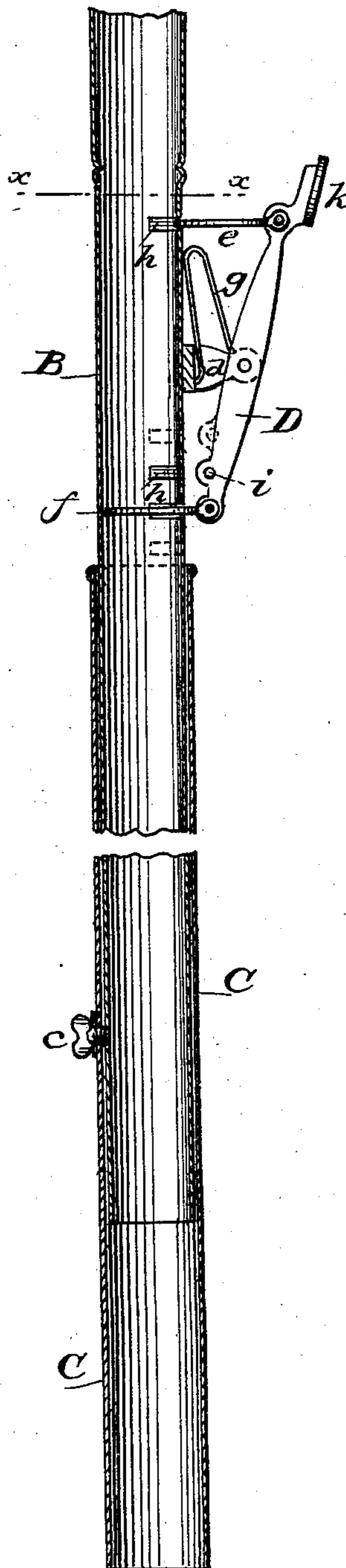
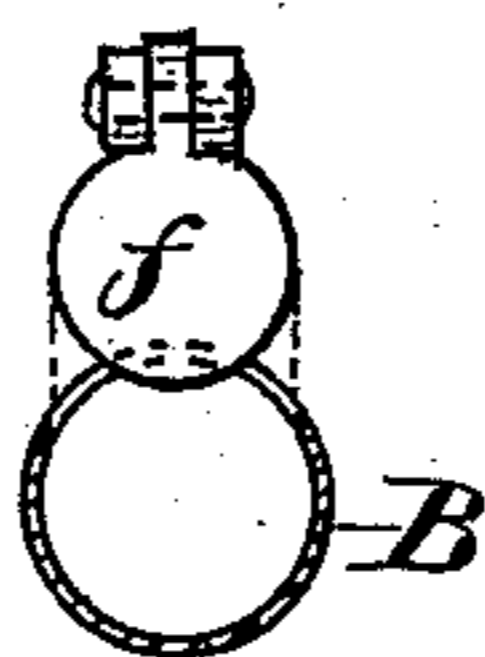


Fig. 4.



WITNESSES

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UNITED STATES PATENT OFFICE.

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HAND-DISTRIBUTER FOR SEED AND FERTILIZERS.

SPECIFICATION forming part of Letters Patent No. 260,373, dated July 4, 1882.

Application filed May 5, 1882. (No model.)

To all whom it may concern:

Be it known that I, ROBERT ERWIN, a citizen of the United States, residing at Savannah, in the county of Chatham and State of Georgia, have invented certain new and useful Improvements in Hand-Distributers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in devices for the distribution of guano or artificial fertilizers or planting of seed; and the object is to construct a device for that purpose that is very simple in construction, efficient for the object, not liable to get out of order, and one that can be readily adjusted to suit the different heights of persons using the same, and that can also be varied to suit the quantity of material it is desired to use at one time.

The invention consists in the construction and arrangement of parts, as will be more fully described hereinafter, reference being had to the accompanying drawings and the letters of reference marked thereon.

Like letters refer to like parts in the different figures of the drawings, in which—

Figure 1 represents a man with the device attached on his back and in the act of distributing fertilizers. Fig. 2 is an enlarged section of the upper part of the device, partly in side elevation. Fig. 3 is a sectional view of the lower part of the device, showing the telescopic adjustment. Fig. 4 is a cross-section on line *x x*.

In the accompanying drawings, A represents a bag or sack, of acid and water proof material, which is to be secured to the back of the person by straps *a b*. The material of which the bag is made consists of any fabrics saturated in a solution of rubber, paraffine, asbestos, or of nitrate of tungsten, with three per cent. phosphate of soda, or a solution of silicate of lead with sugar of lead saturated and dipped in a solution of water-glass, or any similar water and acid proof material.

To the lower part of the sack a funnel-mouthed pipe or tube, B, is secured in any suitable manner. The lower part of this pipe is slightly reduced in diameter, and over the reduced end is fitted a pipe, C, that slides tele-

scopically up and down over the pipe B, and can be adjusted to the desired height and as required by the person using it by a set-screw, *c*, or ratchet and pawl, or any other suitable equivalents for holding the pipes in position.

About midway of the pipe B, or within easy reach of the person distributing the material, whatever it may be, is arranged a double valve, or what I call "spring feed and cut-off." This consists of a pivoted lever, D, supported on a stand, *d*. The lever D has at each end a valve, *e* and *f*, pivoted to it. The valve *e* acts as the cut-off, while the valve *f* acts as the feed or outlet of the material. The space between the valves forms a measure for the proper amount to be distributed or sown at a time, and when the cut-off is depressed it closes communication with the material above until again released of the pressure of the hand. A spring, *g*, is placed between the side of the pipe B and the lever D, and always keeps the end with the cut-off valve raised and the feed-valve closed in its normal position. It is sometimes desired to vary the amount of material to be distributed; and to accomplish this object, I arrange two or more slots, *h*, in the pipe B, through which the valve *f* slides, and corresponding lugs, *i*, on the lever D, to which the valve *f* is then secured or pivoted. The lever and valves are operated by the operator pressing upon a finger-button, *k*, on the lever D.

The bag or sack A is preferably made of material that is perfectly water-proof, so that anything within the bag will be kept perfectly dry, while at the same time I prefer to use also such material as will not be affected by acids often contained or generated in fertilizers, and which acids, as is well known, soon destroy the material now employed. The pipes can also be made of any suitable metal or other material suitable for the purpose, and they may be made smaller or larger in diameter, as occasion requires.

The advantage of adjusting the pipes to suit the different heights of persons using the device will be readily appreciated, and also that the quantity or amount of the material to be distributed can be readily measured or gaged so as to suit different kinds of material.

The device is not liable to get out of order, as it is very simple in its construction, it can

be furnished at a very small cost, so as to be within reach of all, and it obviates the necessity of bending over to plant or distribute the material.

5 I am aware that shot-pouches have been provided with a valve and cut-off to gage the amount of shot required; and I am also aware of the Patent No. 52,413, granted to Thos. M. Hill, for a corn-planter provided with wheels, 10 upon the axle of which are arranged hinged arms that operate three slides, by which the amount of corn from a hopper, to be planted, is regulated. In this instance three slides are necessary for the operation instead of two, 15 and it is not a hand-planter, and would require great changes.

I am also aware that a hand seed-planter consisting of a telescopic tube with a single spring-stop and a bag is old, and I therefore 20 disclaim all such devices; but,

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

1. The combination, in a hand-distributor, of a water and acid proof bag, A, and adjustable 25 telescopic tubes B C, with the adjustable cut-off and feed valves pivoted to a hand-lever, D, and the spring *g*, all arranged substantially as and for the purpose set forth.

2. As a new article of manufacture, a hand- 30 distributor consisting of the water and acid proof bag A and adjustable telescopic tubes B C, with the cut-off valve *e* and feed-valve *f*, pivoted to a spring-lever, D, having holes for adjusting the valves to suit different measures 35 of material, all arranged substantially as specified.

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

ROBERT ERWIN.

Witnesses:

G. W. BAGBY,

W. M. FRENCH.