

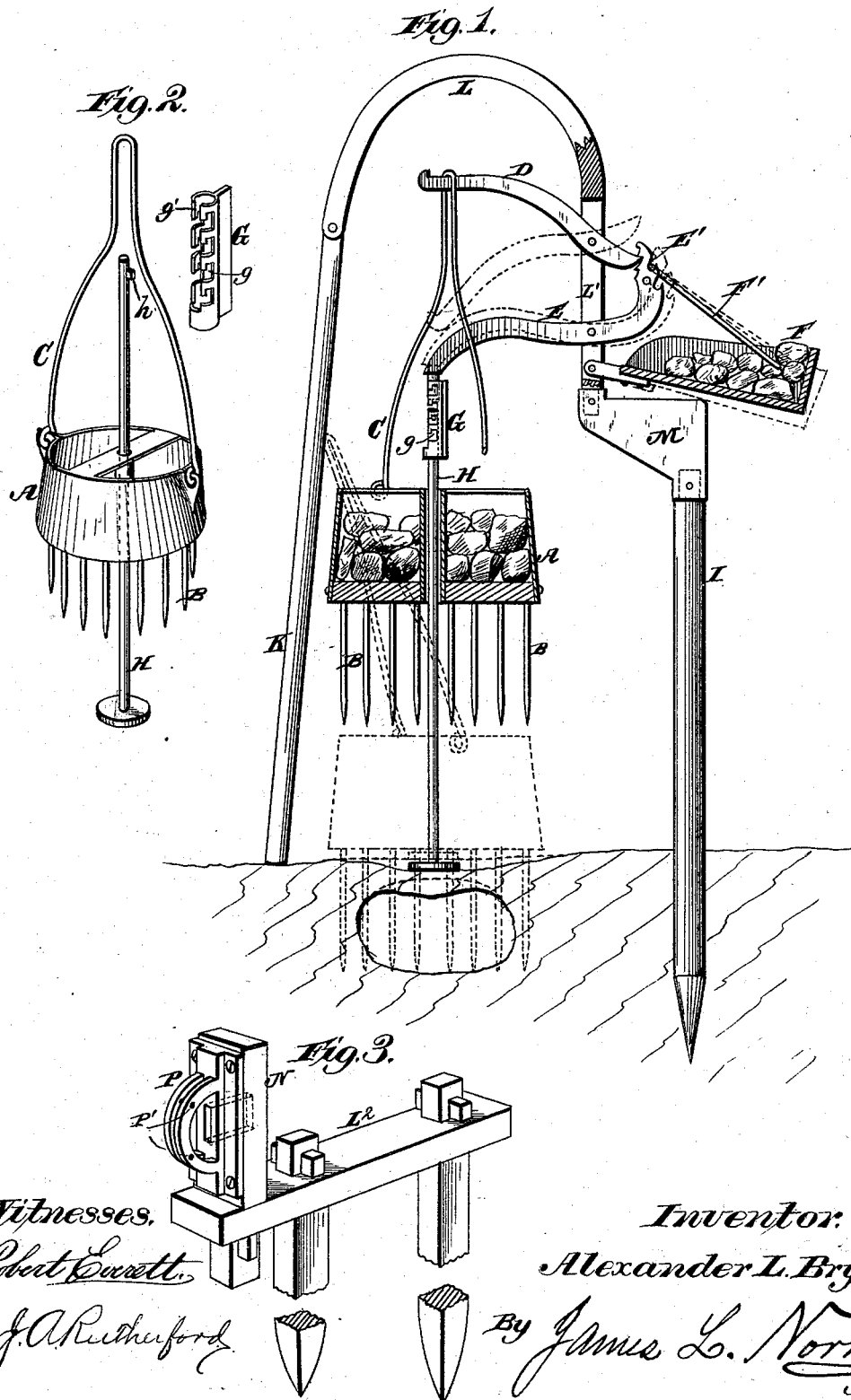
(No Model.)

A. L. BRYAN.

MOLE TRAP.

No. 263,109.

Patented Aug. 22, 1882.



UNITED STATES PATENT OFFICE.

ALEXANDER L. BRYAN, OF EDGEWOOD, GEORGIA.

MOLE-TRAP.

SPECIFICATION forming part of Letters Patent No. 263,109, dated August 22, 1882.

Application filed June 10, 1882. (No model.)

To all whom it may concern:

Be it known that I, ALEXANDER L. BRYAN, a citizen of the United States, residing at Edgewood, in the county of De Kalb and State of Georgia, have invented new and useful Improvements in Mole-Traps, of which the following is a specification.

This invention has for its object to provide a simple and efficient mole-trap adapted to be set over any desired portion of the ground where a mole is likely to pass.

The essential features of this invention are a drop provided with pins or spears for penetrating the ground and transfixing the mole, a push-rod for guiding the drop and for actuating a trigger when the ground upon which the push-rod rests is upheaved by the mole, a tripping-lever which engages the trigger and upon which the bail is hung, and a counter-balance for maintaining the trigger and lever in engagement and the drop in an elevated position until the push-rod is raised, all as hereinafter more fully set forth, and illustrated in the annexed drawings, in which—

Figure 1 is a side elevation of the trap, shown partly in vertical section. Fig. 2 represents the drop, the push-rod, and the slotted tube. Fig. 3 illustrates a somewhat different form of supporting-frame.

The letter A indicates the weighted drop, which is provided upon its under side with any desired number of barbed or plane-pointed spears or pins B for penetrating the ground and transfixing the mole. This drop can be made in a variety of ways. As herein shown it consists of a sheet-metal bucket having a wooden bottom for receiving the pins or spears and a centrally-located guide-tube passing through and secured in the said bottom. The entire receptacle can, however, be made of wood or metal; or, in lieu of such construction, the drop may consist of a solid body having a vertical central bore.

In order to properly weight the drop when it consists of a bucket or analogous receptacle, earth, stones, or other weights can be placed in it.

The drop is provided with a bail, C, which, when the trap is set, is hung upon the notched or hook-shaped inner end of a tripping-lever, D, pivoted in the upper part of the supporting-frame. The outer end of the tripping-le-

ver is adapted to engage in a series of notches which are formed in the outer end of a trigger, E, pivoted in the supporting-frame at a point below the tripping-lever.

A counter-balance, F, pivoted to the supporting-frame below the trigger, is provided with a bail, F', adapted to be engaged in a series of notches, E', that are formed in the edges of the trigger opposite to the edge in which the notches for receiving the end of the tripping-lever are located. This counter-balance can consist of a tray or receptacle suitable for holding earth, stones, or other weights sufficient to nearly balance the drop.

The inner end of the trigger rests upon a short tube, G, and is provided with a pin which enters the same. This said tube is fitted upon the upper end of a vertical push-rod, H, which passes through the tube in the drop and guides it in its descent. The lower end of this rod is provided with a foot, nut, or other enlarged base, which, when the trap is set, rests upon the surface of the ground.

In order to vary the distance between the trigger and the vertical guide and push rod H, the tube G is slotted longitudinally for a portion of its length, and also formed with a series of transverse angular slots, *g*, along each side of the longitudinal slot *g'*.

The upper end of the push-rod, which is inserted in this slotted tube, is provided with a laterally-projecting stud or pin, *h*, adapted to pass along the longitudinal slot in the tube and to be engaged in any one of the angular slots or notches by turning either the push-rod or the tube. In this way the tube can be adjusted upon the rod, so that when the trap is set the lower end of the rod will rest upon the ground and the inner end of the trigger rest upon the upper end of the tube.

The supporting-frame of this trap can be constructed in a variety of ways. As shown in Fig. 1, it consists of two supporting-rods, I and K, the former being adapted to be driven into the ground and the latter to rest on the surface thereof. The rod K can have a nut or foot on its lower end, if preferred, or it could be sharpened and also driven into the ground. The upper portion, L, of the frame consists of an arch connected at one end with the rod or standard K, and at its other end connected to a block or piece, M, which is supported upon

the rod or standard I. The arch L is also formed with a mortise, L', in which the tripping-lever, the trigger, and the arm of the counter-balance are pivoted.

5 As shown in Fig. 3, the two standards are pivoted at their lower ends and both secured to an upper cross-bar, L², upon which is fixed a block, N, and a casting, P, formed with suitable bearings, P', for the pivots of the tripping-lever, the trigger, and the arm of the counter-balance, is fastened to this said block.

10 In setting the trap it is placed over the line of seeds or the burrow of a mole and the trigger set by engaging the tripping-lever in one of its series of notches, and also engaging the 15 bail or cord of the counter-balance in the opposite set of notches. The drop is raised and its bail hung upon the hook end of the tripping-lever, while the foot of the push-rod rests 20 upon the ground and the inner end of the trigger rests upon the top end of the tube, which is connected with the push-rod. As the mole passes through its burrow or plows through the ground so as to form a new one the ground 25 will be upheaved sufficiently to lift the push-rod and thereby raise the inner end of the trigger. The cord or bail of the counter-balance will then tilt back and the tripping-lever be freed from engagement with the trigger, so 30 that the inner end of the tripping-lever will de-

scend and the bail of the drop slip over the end of the lever, thereby allowing the drop to rapidly descend. The pins or spears of the drop will then immediately penetrate the ground and transfix the mole.

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What I claim is—

1. The combination, in a mole-trap, of the drop carrying downwardly-projecting transfixing pins or spears with the push-rod passing through the drop, the tripping-lever upon 40 which a bail connected to the drop is hung, the trigger adapted to be engaged by the tripping-lever and to be actuated by the upward movement of the push-rod, and the counter-balance for maintaining the tripping-lever and 45 trigger in engagement with each other when the trap is set, substantially as described.

2. The combination, in a mole-trap, of the drop with the trigger, the push-rod passing through the drop, the slotted tube adjustably 50 secured upon the upper end of the push rod, and devices for setting the trigger, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses. 55

A. L. BRYAN.

Witnesses:

JAMES L. NORRIS,

J. A. RUTHERFORD.