

(No Model.)

D. H. PAYNE.

MOLE TRAP.

No. 321,524.

Patented July 7, 1885.

Fig. 1.

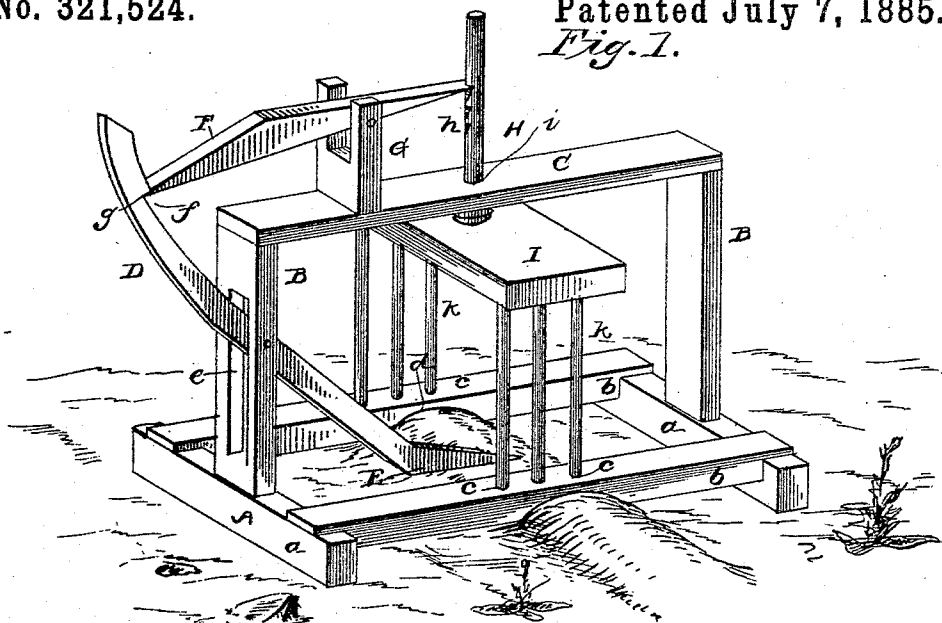
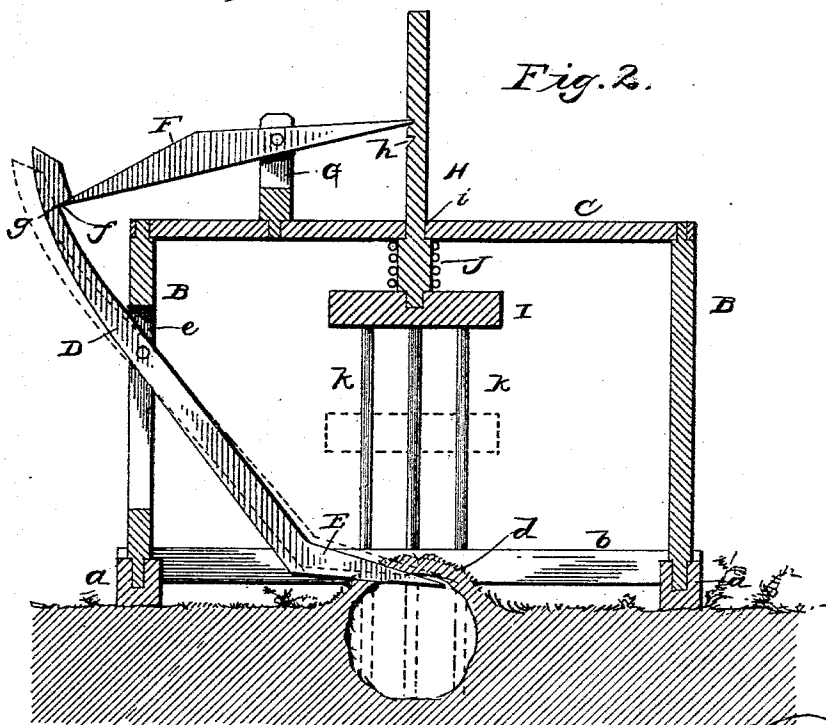


Fig. 2.



WITNESSES

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MOLE-TRAP.

SPECIFICATION forming part of Letters Patent No. 321,524, dated July 7, 1885.

Application filed September 25, 1884. (No model.)

To all whom it may concern:

Be it known that I, DAVID H. PAYNE, a citizen of the United States, residing at Coffeeville, in the county of Upshur and State of Texas, have invented a new and useful Improvement in Mole-Traps, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to mole-traps, and to that class of the same which are placed above the mole-hill and communicate with the hole therein, so that the passage of the mole through the latter will actuate the trap to impale the mole in the usual manner. The object of the present invention is to provide a device of this character which will be simple in construction and inexpensive to manufacture, which will be certain and sure in its operation, and which may be set with ease, and will not get out of order.

With these and other objects in view the said invention consists in certain details of construction and combination of parts, as hereinafter set forth, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a perspective view showing the trap set in position for operation. Fig. 2 is a longitudinal sectional view of the same.

Like letters of reference are used to indicate corresponding parts in the several figures.

Referring to the drawings, A designates the base-frame, consisting of end bars, *a a*, connected by longitudinal side bars, *b b*, which have a series of perforations or holes, *c*, extending along the length of the side bars, the under sides of the latter, at the center, having a concaved recess or depression, *d*, to conform to the general shape of the mole-hill and fit over the same.

Upon the end bars, *a*, are erected uprights or standards B B, having their upper ends mortised to fit into the ends of a longitudinal top beam, C. One of the uprights or standards B is slotted vertically at *e*, and within this slot is pivoted a tripping-lever, D, having its lower end bent downwardly on a slight incline to provide an operating-shoe, E, beveled to a point or sharpened at its lower end, which is adapted to be pushed through the

mole-hill and operated by the passage of the mole through the same.

The upper end of the tripping-lever is cut away at *f* and notched at *g*, which notch receives one end of the trigger F, the latter being pivoted in a slotted or bifurcated post, G, projecting from the top beam, C. The other end of the trigger engages with one of a series of notches, *h*, provided in one of the faces of a vertically-movable rod, H, which rod works in an opening, *i*, of the top beam, C, and is secured at its lower end to a drop or fall, I. Depending from the latter is a series of spears or pointed spiked rods, *k*, each series being on opposite sides of the fall or drop, and each of the spears working in a corresponding hole, *c*, in the base-frame.

A spring, J, is coiled around the rod H and bears at one end against the upper face of the drop or fall I, and at the other end against the under face of the top beam, C. It will be seen that when the drop or fall is raised to set the trap, the spring is compressed, so that when the trap is released the tension of the spring will serve to give increased force to the movement of the fall or drop and thus render the action more certain. It will also be seen that the trigger is pivoted beyond its center, the long arm engaging with the tripping-lever and the short arm engaging with the movable rod carrying the fall, so that the moment the tripping-lever releases the trigger, the fall I is released, causing the trigger to be carried down by the weight of the fall together with the force of the spring.

The operation of my invention will be readily understood from the foregoing description, taken in connection with the annexed drawings. The trap is applied to the mole-hill substantially as shown in the drawings, the base-frame extending transversely across the same, and the shoe E on the lower end of the tripping-lever penetrating the hill to any desired depth. It will be observed that by reason of the concaved recesses or depressions *d* in the side bars of the base-frame, the latter is made to conform to the shape of the hill. After the shoe of the tripping-lever is adjusted in the ground the trigger is caused to engage with the notch in the said lever, and the drop or fall is raised so that the other end

of the trigger will engage with a notch in the rod H. By this elevation of the drop or fall the spring J has been compressed and bears with all its force against the said drop or fall.

5 The trap is now set and in condition to be operated by the first victim. As is well known, the mole always travels through a hole made in the hill and pursues his course blindly, as one might say, no matter what slight obstruction there may be in his hole. By reason of this peculiarity in this animal he does not notice the slight disarrangement made by the shoe E, but continues through the hole beneath the shoe, and when he reaches that point he finds that a part of the hole is clogged or taken up by the insertion of the shoe. In endeavoring to overcome or pass this obstruction he presses against or actuates the shoe to force it upward, this movement throwing the tripping-lever out, disengaging the trigger, the long arm thereof traveling upward and releasing the fall or drop I, the weight of which combined with the force of the released spring causing said fall to descend, carrying the short arm of the trigger with it and the spears or pointed rods working down through the mole-hill and impaling the animal in the manner well known. In this manner moles can be killed in their holes with ease and certainty.

30 The operation is automatic and the arrangement is such that there will be no hitch in the operation. Most of the mole-traps in use are so complicated in construction that they require considerable time to set, and oftentimes work out of order, or some hitch occurs so that the mole gets free. In my device the action is positive and certain, the construction is simple, and the parts are so combined that they depend on each other to make the trap efficient in every particular.

In order to define the nature, scope, and advantages of the present invention, I would have it understood that heretofore it has been proposed to construct a mole-trap comprising a dead-fall carrying a series of spears, a vertically-movable rod connected to the fall, a spring encircling the rod and bearing against the latter, a tripping-lever carrying a treadle, and a lever jointed to the movable rod and engaging with the tripping-lever. I am aware that span-pieces have been employed to fit over the mole-hill; and I am aware, also, that the rod which connects with the fall has been notched to be engaged by the pivoted trigger. These constructions I do not broadly claim, but limit myself to the peculiar construction and combination as expressed. The particular feature of the present improvement resides in the pointed tapering shoe for penetrating the hill at the top and extending across the

same, so as to be in a position to be actuated by the mole as it passes through the hole. The other element upon which special mention should be made is the trigger-lever, pivoted intermediately of its length, and having one end engaging with the tripping-lever and the other end engaging with any one of a series of notches provided in the rod which carries the fall, whereby the pressure of the spring can be adjusted.

Having described my invention, I claim—

1. The base-frame, in combination with the tripping-lever D, pivoted at an intermediate point of its length, a pointed shoe, E, provided on the end of the lever and inclining downward therefrom at an angle, so as to be inserted transversely through the top of the mole-hill without otherwise disturbing the latter, a vertically-movable rod, H, carrying the drop or fall I, a series of spears or spiked rods connected to the latter, a spring mounted on the rod and pressing against the fall, a series of notches, *h*, formed in the rod H, a slotted post, and a trigger, F, pivoted in the post and having one end engaging with any one of the notches of the rod to adjust the pressure of the spring, and the other end engaging with the upper end of the tripping-lever, as set forth.

2. The combination, with the loose frame, consisting of the end bars, *a*, connected by longitudinal side bars, *b*, the latter being recessed at *d* to enable the frame to fit over the mole-hill, the end bars, *a*, resting firmly on the ground, of the pivoted tripping-lever D, having an inclined pointed shoe, E, to be inserted into the hill, a movable rod, H, carrying the drop or fall I, a series of spears or spiked rods connected to the latter and working through the side bars, *b*, a series of notches at the upper end of the rod H, a slotted post, G, mounted on the frame, and a trigger, F, pivoted in the post and having one end engaging with any one of the notches of the rod H, and at the other end with the upper end of the tripping-lever D, as set forth.

3. In a mole-trap, the combination, with the frame of the drop or fall, a trigger, a tripping-lever, and a shoe provided on the end of the lever and inclining downward therefrom at an angle, said shoe tapering to a point and being inserted transversely through one side of the mole-hill and extending into the same across the top, for the purpose set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

DAVID HINSLEY PAYNE.

Witnesses:

W. S. PHILLIPS,
H. W. COLLINS.