

(No Model.)

J. W. WEST.
ANIMAL TRAP.

No. 587,894.

Patented Aug. 10, 1897.

Fig. 1.

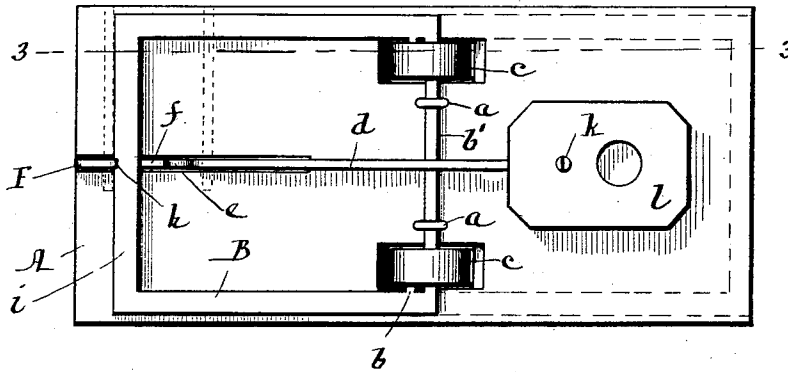


Fig. 2.

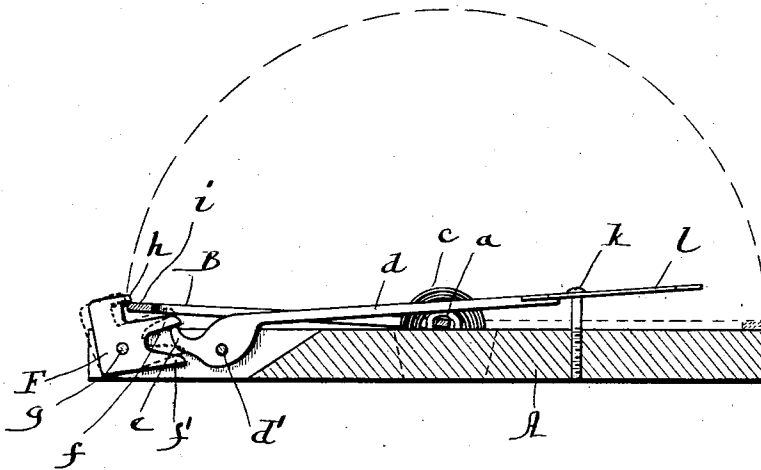
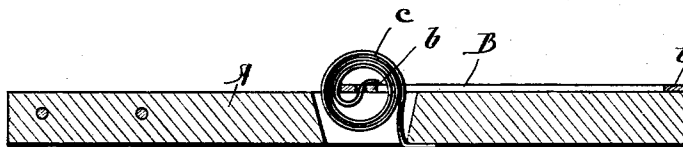


Fig. 3.



Witnesses:

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JAMES W. WEST, OF DE LONG, ILLINOIS.

ANIMAL-TRAP.

SPECIFICATION forming part of Letters Patent No. 587,894, dated August 10, 1897.

Application filed May 3, 1897. Serial No. 634,889. (No model.)

To all whom it may concern:

Be it known that I, JAMES W. WEST, a resident of De Long, county of Knox, State of Illinois, have invented certain new and useful Improvements in Animal-Traps, of which I do declare the following to be a full, clear, and exact description, sufficient to enable others skilled in the art to make and use the same.

The invention relates to traps such as can be employed for catching mice, &c., and is directed more especially to devices of the sort wherein a trigger and a separate detent for the striker-loop are both "cocked" automatically in coactive relation on contact of the loop with the pivoted dog upon which the detent is carried.

The nature of the improvement will appear in detail from the description following, and be more particularly pointed out by the claim at the conclusion thereof.

In the drawings like parts bear like designation throughout.

Figure 1 is a plan view of the improved trap, and Fig. 2 a median longitudinal section thereof, with the parts shown in "set" position. Fig. 3 is a like sectional view with the trap "unset."

Pivotaly secured, as at *a a*, to the upper face of base A is the striker-loop B, here shown of substantially rectangular outline and stamped in skeleton form from sheet metal. Volute springs *c*, located within slots of the base, engage at one end beneath with the under face of base A and at the other terminal engage the nibs *b*, projected from loop B. The loop B is turned to set position against the tension of said springs *c c*.

Extended lengthwise of the base within the sweep or compass of loop B and across the pivot-bar *b'* thereof is the trigger *d*, having an expanded free terminal, and near its opposite extremity pivoted, as at *d'*, in a slit of base A. Beyond pivot *d'* the trigger *d* has an upturned tip *e*, designed to encounter the heel *f* of a lock-dog F.

The dog pivots, as shown at *g*, in the slit of base A, and is alined with trigger *d*. The head of dog F carries a detent *h*, which may be brought to bear against the striker-bar *i* of loop B, and thus operate to detain said loop at set position in readiness to be sprung.

With the parts in relation shown by Fig. 3 the free end of trigger *d* is depressed, its shank being at rest upon pivot-bar *b'* of loop B. At such juncture trigger-tip *e* beyond pivot *d'* thrusts against dog-heel *f* to turn said dog about its pivot *g* and throw the detent *h* thereon slightly beyond or away from the path of loop B. This condition persists until loop B is brought over to be set, whereupon the under face of striker-bar *i* (constituting a part of the loop) ultimately encounters the confronting edge of heel *f* and tends to depress such heel about pivot *g*. Necessarily on depressing heel *f* the detent *h* at the head of dog F is shifted across the path of striker-bar *i* to detain such bar at its upper edge in set relation, Fig. 2, when the operator's thumb is released from the loop. The play of the parts named in effecting the result stated need be only minor in extent. As dog-heel *f* is depressed it pushes beneath upon trigger-tip *e*, thereby upraising the free end of said trigger about its pivot *d'* to "cock" the trigger for action. A stop *k*, here shown as a headed pin threaded to base A and projecting through the trigger bait-plate, serves to determine the limit of rise for the free end of the trigger, and hence likewise determines the extent of depression for the dog-heel *f* at its encounter with striker-bar *i* in setting the trap-loop. The loop is sprung if the free end of trigger *d* be forced from cocked position down toward base A. When this occurs, trigger-tip *d* pushes up against dog-heel *f*, thereby turning the dog F far enough for its detent *h* to release striker-bar *i*.

To prevent any premature turning of dog F under stress of loop B at set relation, it is noted that the arcs of striker-bar *i* and detent *h* described from their respective pivots *a g* intersect substantially at a right angle, while the pivot *g* is located along the tangent drawn from the intersection. By such provision the loop B exerts a straight-away pull upon detent *h* at the point of encounter in avoidance of the tendency otherwise to revolve the detent about its pivot *g*. The dog thus acts unaided to hold the loop set.

A supplemental heel *f'* on dog F encounters trigger-tip *d* as the trap is sprung to keep the dog from being cast over and disarranged. Should the dog stand depressed as the striker-

loop is thrown over to be set, the rounded edge of detent *h* first encounters loop-bar *i* and is forced away thereby far enough for bar *i* to clear the detent and to bear beneath against the contiguous edge of heel *f*. Thereupon the detent *h* is restored to place in the return-path of loop B to hold the trap set. A cup *l* for bait may be used.

Obviously the details of structure can be varied according to the skill of the mechanic without departure from the essentials of the invention.

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

In animal-traps, the combination with the base, of the recoil-springstriker-loop mounted thereon, the trigger-lever extended length-

wise within the loop, fulcrumed near the outer or set position of the striker and having a projecting tip beyond the trigger-fulcrum, and the pivoted dog furnished at its upper part with a detent and at its lower with a heel extended over the trigger-tip; the relation of the several parts being such that on shift of the striker-loop to set position said loop contacts with the dog to bring the detent thereon into the return-path of the loop and coactively depresses the trigger-tip so as to cock the free end of said trigger, substantially as described.

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Witnesses:

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