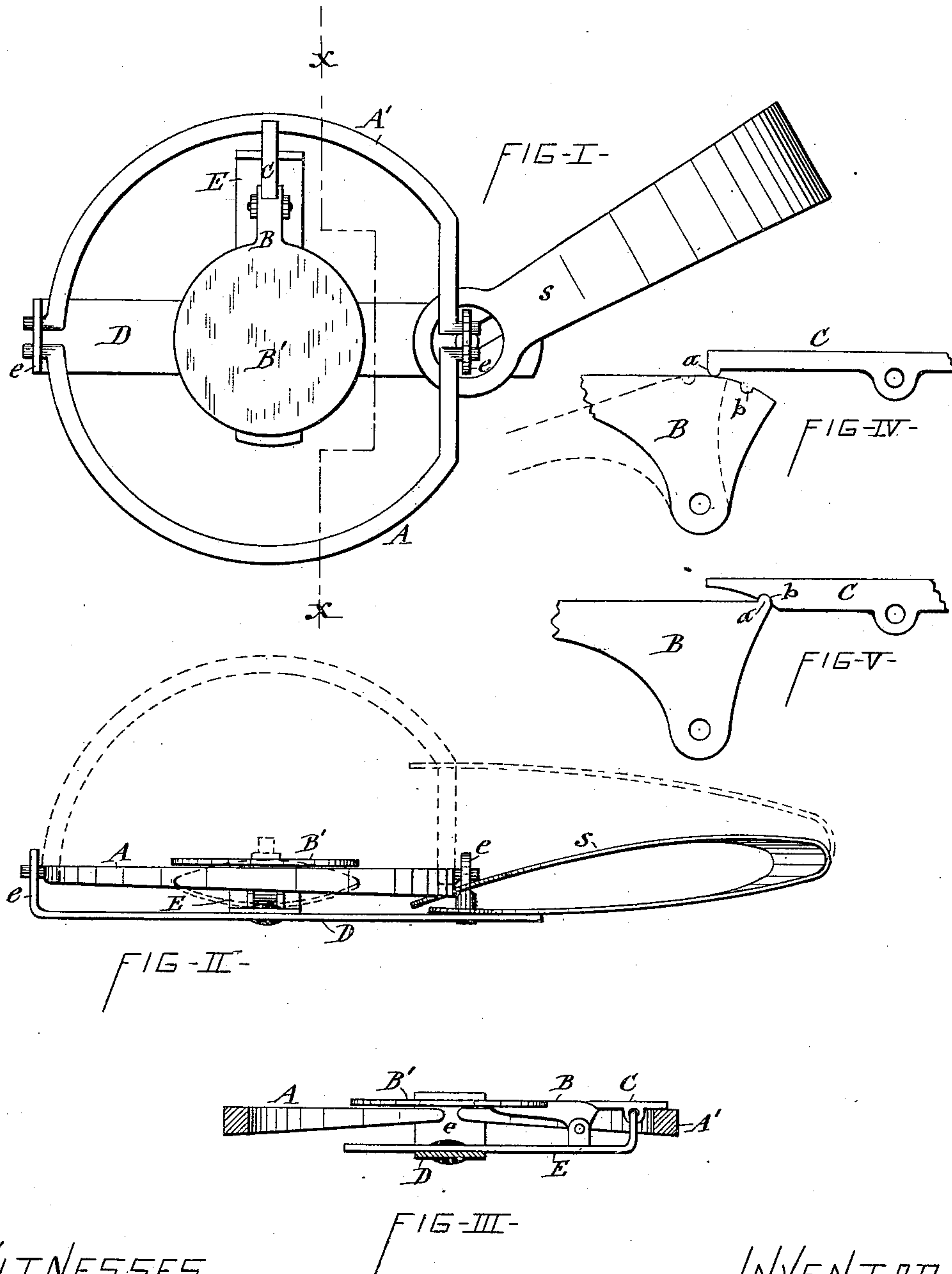


(No Model.)

L. F. DUNN.  
ANIMAL TRAP.

No. 335,512.

Patented Feb. 2, 1886.



WITNESSES

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# UNITED STATES PATENT OFFICE,

LEONARD F. DUNN, OF COMMUNITY, NEW YORK.

## ANIMAL-TRAP.

SPECIFICATION forming part of Letters Patent No. 335,512, dated February 2, 1886.

Application filed October 6, 1885. Serial No. 179,097. (No model.)

*To all whom it may concern:*

Be it known that I, LEONARD F. DUNN, of Community, in the county of Madison and State of New York, have invented new and useful Improvements in Animal-Traps, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

This invention relates to the class of animal-traps in which two spring-actuated jaws are arranged to close over a tripping-lever, and are held in their open position by a latch engaging one of the jaws and the tripping-lever. Hitherto the latch has been hinged at one end to reach with its opposite end across one of the jaws and interlock with a notch in the tripping-lever, and in some instances the latch has been provided with two arms at opposite sides of the pivot, one of which arms engaged a notch in the heel of the tripping-lever and the other arm engaged a lug or projection on the inner side of the jaw. Both of said devices are defective and objectionable in various respects. The result in the first instance is that the latch, when released from the tripping-lever by depression thereof in the operation of springing the trap, was thrown upward and away from the tripping-lever by the spring-actuated jaw extending under the latch, and the aforesaid movement of the latch is liable to throw the animal's leg out of the trap, so as to prevent the jaws of the trap from gripping the leg. In the second cited case the forming of the lug or projection on the inner side of the jaw for the engagement of the latch is difficult, and adds to the cost of manufacture, and said lug fails to afford a secure hold for the latch, especially after the hinge of the jaw has become worn so as to allow the jaw more or less lateral play, or in case the central portion of the jaw has excessive outward curvature, and this curvature is varied more or less in the process of manufacture, and by the shrinkage of the metal in cooling the same from a red heat.

It is to obviate these defects which my invention has for its object; and to that end my invention consists in the improved construction and combination of parts hereinafter fully described, and specifically set forth in the claims.

In the accompanying drawings, Figure I is

a plan view of my improved animal-trap. Fig. II is a side view of the same. Fig. III is a transverse section on line *x x*, Fig. I; and Figs. IV and V are enlarged detail views of modifications of the construction of the bearings by which the latch engages the tripping-lever.

Similar letters of reference indicate corresponding parts.

A and A' represent the two jaws, which are pivoted on ears *e e*, projecting from the ends of a base-plate, D; and *s* denotes the spring which actuates said jaws in the usual and well-known manner.

B is the tripping-lever, which is pivoted on an arm, E, projecting at right angles from the base-plate D, said tripping-lever terminating in the shape of a pan or plate, B', over the center of the base-plate D, to be depressed by the animal stepping upon it.

On an extension of the arm E, and at a point between the pivot or heel of the tripping-lever and the set or open position of the jaw A', I pivot the latch C, the pivot being intermediate of the length of the latch, which is of a length to reach with one end across the top of the jaw A' and bear with its opposite end on top of the pivoted end of the lever B, and hold the same in its set position by the frictional contact of said parts.

The engagement of the latch with the tripping-lever consists in the downward pressure of one end of the latch on the heel or pivoted end of the said lever produced by the upward pressure of the spring-actuated jaw A' on the opposite end of the latch. The trap is sprung by depressing the free end of the tripping-lever B, which withdraws the heel of said lever from under the latch and allows the same to tilt over toward the center of the trap and in the same direction in which the tripping-lever moves. The tilting of the latch releases the jaw A', and allows the spring *s* to close the two jaws over the pan B', or free end of the tripping-lever, and catch the leg of the animal which has stepped on the pan B'. The aforesaid movement of the latch C in the direction of the tripping-lever obviates the liability of throwing the animal's leg off from the trap by the latch.

In order to maintain the latch dormant



while the tripping-lever is sliding from under it, and thus obviate frightening the animal before the latch is released from the tripping-lever, I curve the engaging-bearings of said parts in the shape of an arc described from the pivot of the tripping-lever, and this shape may be applied either to both of said parts, as shown in Fig. III of the drawings, or to only one of said parts, as represented in Figs. IV and V of the drawings, one of which shows it on the tripping-lever and the other shows it on the latch. The hold of the latch on the tripping-lever, however, depends on the downward pressure and frictional bearing of the former upon the top of the latter at the heel or pivoted end thereof, and consequently by forming the latch with an arm of sufficient length to reach some distance beyond the heel end of the tripping-lever toward the bait-pan the engagement of said parts is prolonged. This allows the tripping-lever to be set in different angles of inclination, so as to bring the bearing of the latch on said lever a greater or less distance from the heel end of the latter, as illustrated in Fig. IV of the drawings. By inclining the tripping-lever B so as to bring the bearing of the latch close to the heel end of said lever, as represented by dotted lines in Fig. IV of the drawings, it requires but a slight depression of the tripping-lever to release it from the latch. Hence the trap can be set to be sprung by a shy animal cautiously touching the bait-pan B, or by raising the bait-pan or tripping-lever the engagement thereof by the latch can be brought some distance from the heel end of the aforesaid lever, as shown by full lines in Fig. IV of the drawings, thereby requiring greater depression of the bait-pan to release it from the latch, and thus allowing the animal to attack more ferociously the bait on the bait-pan, and giving said animal time to get its body fairly over the trap before springing the trap.

On large traps I provide the engaging-bearings of the tripping-lever and latch with a tooth or lug, *a*, on one of said parts engaging a notch or shoulder, *b*, on the other of said parts, as shown in Figs. IV and V of the drawings. This serves as a guard-catch to partially restrain the action of the tripping-lever sufficiently to prevent small animals from springing the trap, while large animals will be able to exert sufficient pressure on the tripping-lever to disengage the lug *a* from the notch *b*. I am aware that prior to my present invention the latch (which is sometimes designated the trigger) has been pivoted to the frame of the trap nearly or quite directly underneath the set position of the jaw, and had one arm engaging the heel of the tripping-lever or bait-pan, and another arm made hook-shaped to engage a lug on the inner side of the jaw;

but it is obvious that such an arrangement of the latch or trigger in relation to the jaw causes that end of the latch which engages the jaw to swing away from the jaw and toward the bait-pan when springing the trap; consequently the release of the jaw from the latch is very quick, and all three parts—the bait-pan, latch, and jaw—must be accurately fitted on their respective pivots, otherwise the latch is unable to obtain its hold on the jaw and at the same time hold the bait-pan in its set position.

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

1. In combination with the spring-actuated jaw A' and pivoted tripping-lever B, the latch C, pivoted between the set position of the jaw and pivot of the tripping-lever, and having one end extending across the top of said jaw and the opposite end bearing on the pivoted end of the lever B, and holding the same in its set position, substantially as set forth and shown.

2. In combination with the spring-actuated jaw A', the tripping-lever B, and latch C, having their engaging-bearings curved in the shape of an arc described from the pivot of the tripping-lever, substantially as and for the purpose set forth.

3. In combination with the spring-actuated jaw A' and the pivoted tripping-lever B, the latch C, pivoted between the set position of the jaw and pivot of the lever B, and having one end extended across the top of the set-jaw and the opposite end extended over the pivoted end of the lever B, and provided with an elongated bearing on the same, all constructed and combined to permit of adjusting the action of the tripping-lever to different degrees of sensitiveness, substantially as set forth.

4. In combination with the spring-actuated jaw A' and the tripping-lever B, the latch C, pivoted between the set position of the jaw and pivot of the lever B, and having one end bearing on the jaw and the opposite end extended over the pivoted end of the tripping-lever B, and provided with an elongated bearing on the same and with a guard-catch on said bearing to partially restrain the tripping of the lever B, substantially as set forth.

In testimony whereof I have hereunto signed my name and affixed my seal, in the presence of two attesting witnesses, at Syracuse, in the county of Onondaga, in the State of New York, this 3d day of October, 1885.

LEONARD F. DUNN. [L. S.]

Witnesses:

FREDERICK H. GIBBS,  
C. BENDIXON.