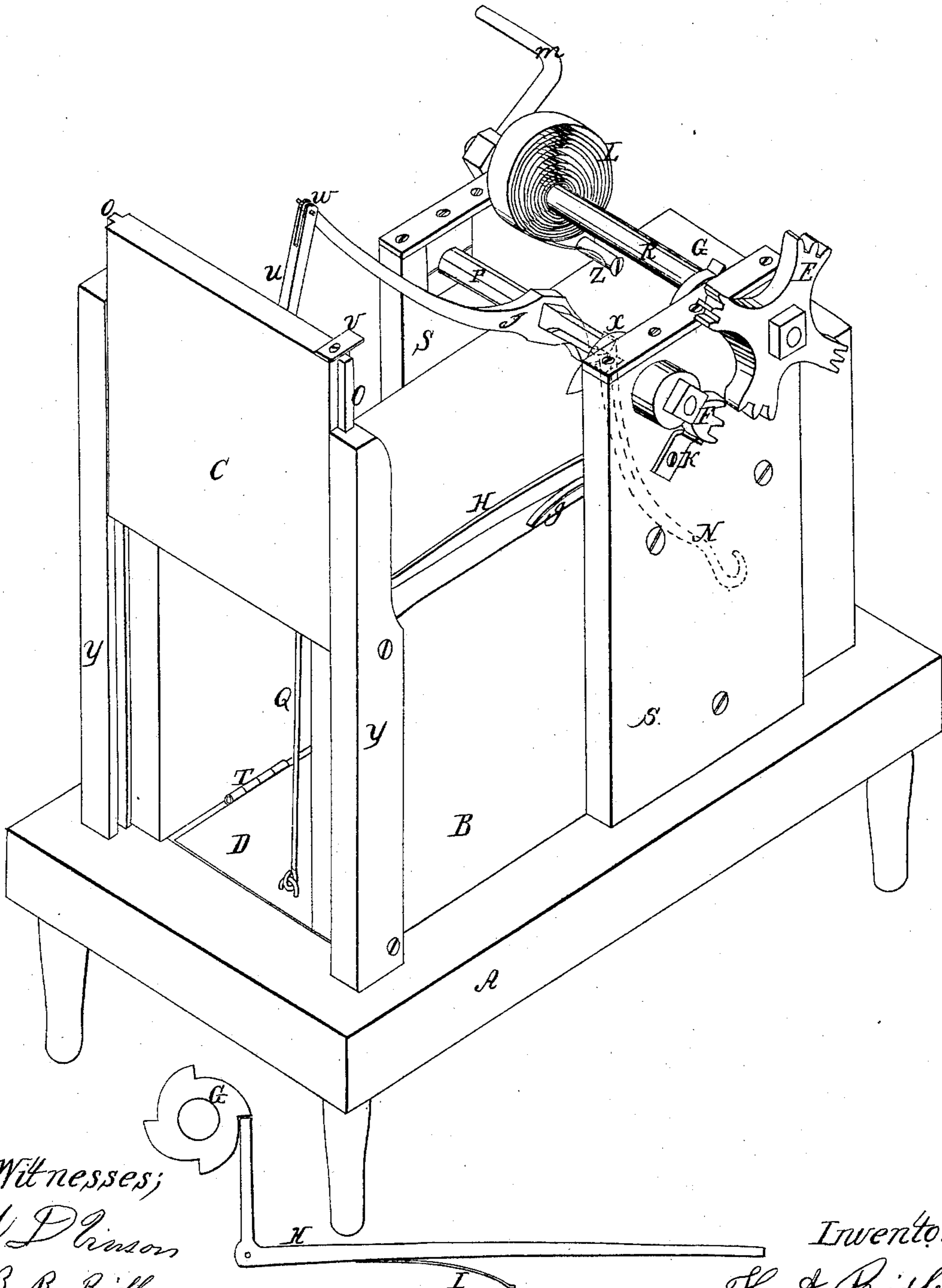


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*Patented Feb. 7, 1860.*



*Witnesses;*  
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# UNITED STATES PATENT OFFICE.

HENRY A. RIDLEY, OF SOMMERVILLE, TENNESSEE.

## RAT-TRAP.

Specification of Letters Patent No. 27,071, dated February 7, 1860.

*To all whom it may concern:*

Be it known that I, HENRY A. RIDLEY, of Sommersville, in the county of Fayette, State of Tennessee, have invented certain new and  
5 useful Improvements in Traps for Catching Rats and other Animals; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and  
10 to the letters of reference marked thereon.

The nature of my invention consists in providing a box with a trap door and a sash door so connected and operated by means of levers, cog wheels, and springs that when the  
15 sash door falls it also forces down the trap door, after which by means of a simple mechanism hereafter described it immediately resets itself.

To enable others skilled in the art to make  
20 and use my invention, I will proceed to describe its construction and operation.

I construct my trap by providing a frame (A), in which the trap door (D) fits.

(B) is the box which is fastened to the  
25 top of frame (A) one end of which is opened for the sash door (C).

(D) is the trap door hinged to the frame (A) and is worked up and down when the sash door (C) rises or falls by means of a  
30 rod (Q).

(E) is the interrupted cog wheel on shaft (R) operated by spring (L).

(F) is the cog sector that fits in the cogs of the interrupted cog wheel (E) when trap  
35 door is down.

(G) is the click wheel on shaft (R) with upper end of lever (H) fitting in it.

(H) is a lever working on a pivot, with spring (I) to keep it up to its place.

40 (I') is a lever one end of which is fastened to the sash door (C) by rod (U) working on pivot (W) and firmly secured on the shaft (P).

(K) is a stop to hold the cog sector (T) from going too far when the spring (L) throws it back.

(L) is the coiled spring on the shaft (R) for moving all the machinery.

(M) is the key for winding.

50 (N) is the bait lever fastened to the top of box (B) by a pivot with a spring behind

it to make it catch on the lower end of (I') forming the catch at (X).

(O) are the tongues on the door (C) which fit in the grooves on the guides (Y) of the  
55 box (B).

(P) is the shaft on which the lever (I') is fastened.

(Q) is the connecting rod from sash door (C) to trap door (D). 60

(R) is the shaft on which the spring (L), click wheel (G), and interrupted cog wheel (E) are fastened.

(S) are side pieces coming above the top of box (B) in which the shafts (P) and (R) 65 work.

(T) is the hinges for the trap door (D).

(U) is the connecting rod from lever (I') to sash door (C).

(V) is a plate fastened to the top of sash 70 door (C), so that when the sash door falls the plate will knock the lever (H) down and out of the click wheel (G).

(W) is the pivot on which the arm (U) and lever (I') work. 75

(X) is the catch formed by the upper end of bait lever (N) and the lower end of lever (I').

(Y) is the guides for sash door (C) which are fastened to each side of box (B). 80

(Z) is the screw which fastens the spring (L) to the side pieces (S).

When wound up by key (M) and set, the rat going in the box for the bait on lever (N) and pulling it, that uncatches (X), the  
85 sash door (C) and trap door (D) fall by their own weight, which tilts the rat into a box or tub of water below. As the sash door (C) falls, the plate (V) on top of it knocks down the lever (H), which lets the  
90 upper end of lever out of the notch in click wheel (G) and that sets the spring in motion. Now when the sash door (C) is down the cog sector (F) is turned up in a position for the interrupted cog wheel (E) to  
95 catch in it. The spring then throws the sector (F) down against the stop (K) which bings the trap door (D) and sash door (C) up to their proper places, which causes the levers at (X) to catch and hold up (D) and  
100 (C) and the upper end of lever (H) catches in another notch in click wheel (G) and

stops the spring from turning, and the trap is set for another rat as it was at first.

What I claim as my invention and desire to secure by Letters Patent of the United States is—

Operating the doors (C) and (D) by the rods and levers (Q) (U) (I') in combination with the cog sector (F) and interrupted

cog wheel (E) and click wheel (G) when operated by the spring (S) or its equivalent in the manner herein described and for the purpose specified.

H. A. RIDLEY.

Witnesses:

J. D. VINSON,  
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