

J. GRIERSON.

NEST BOX.

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997,189.

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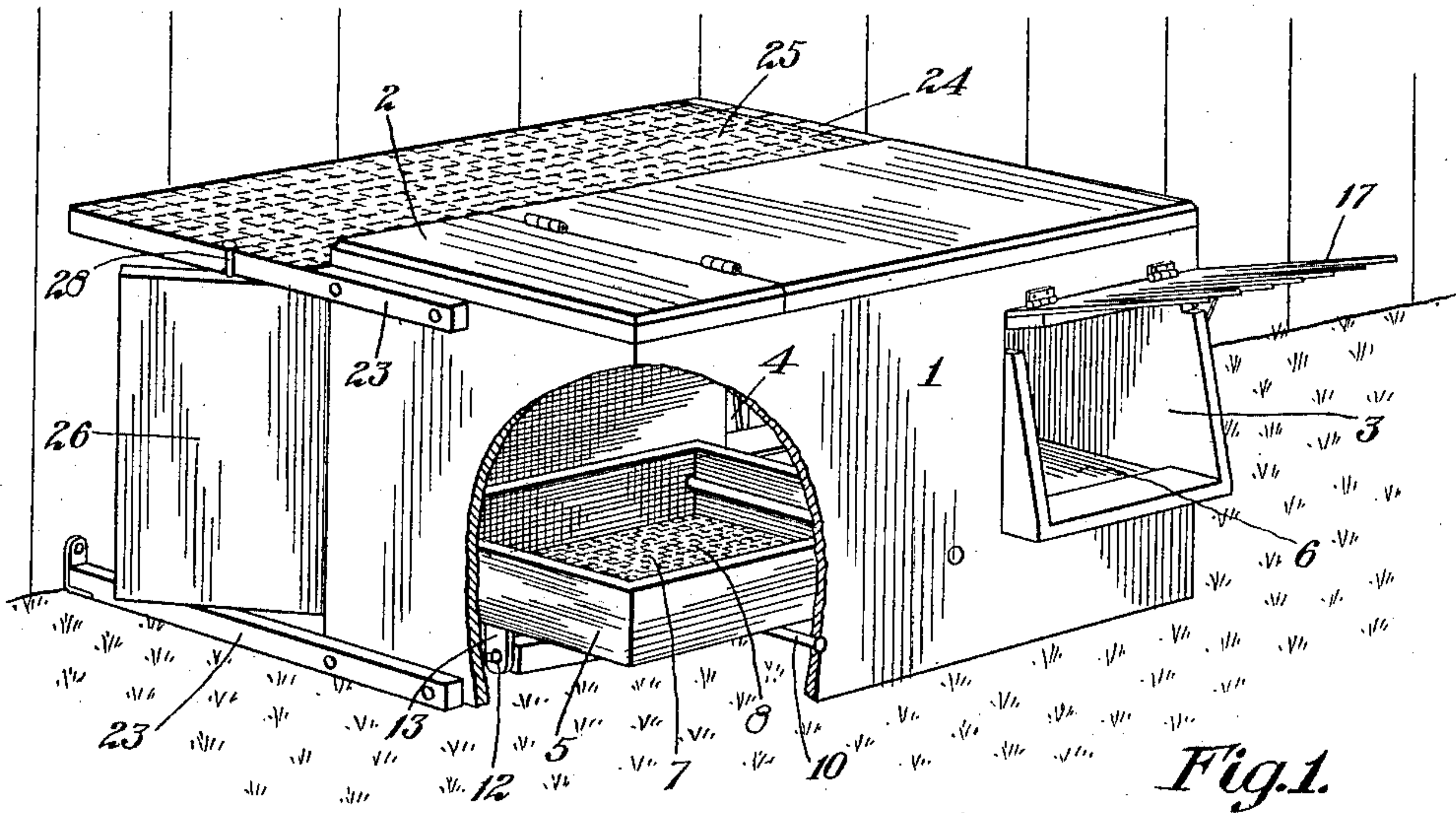


Fig. 1.

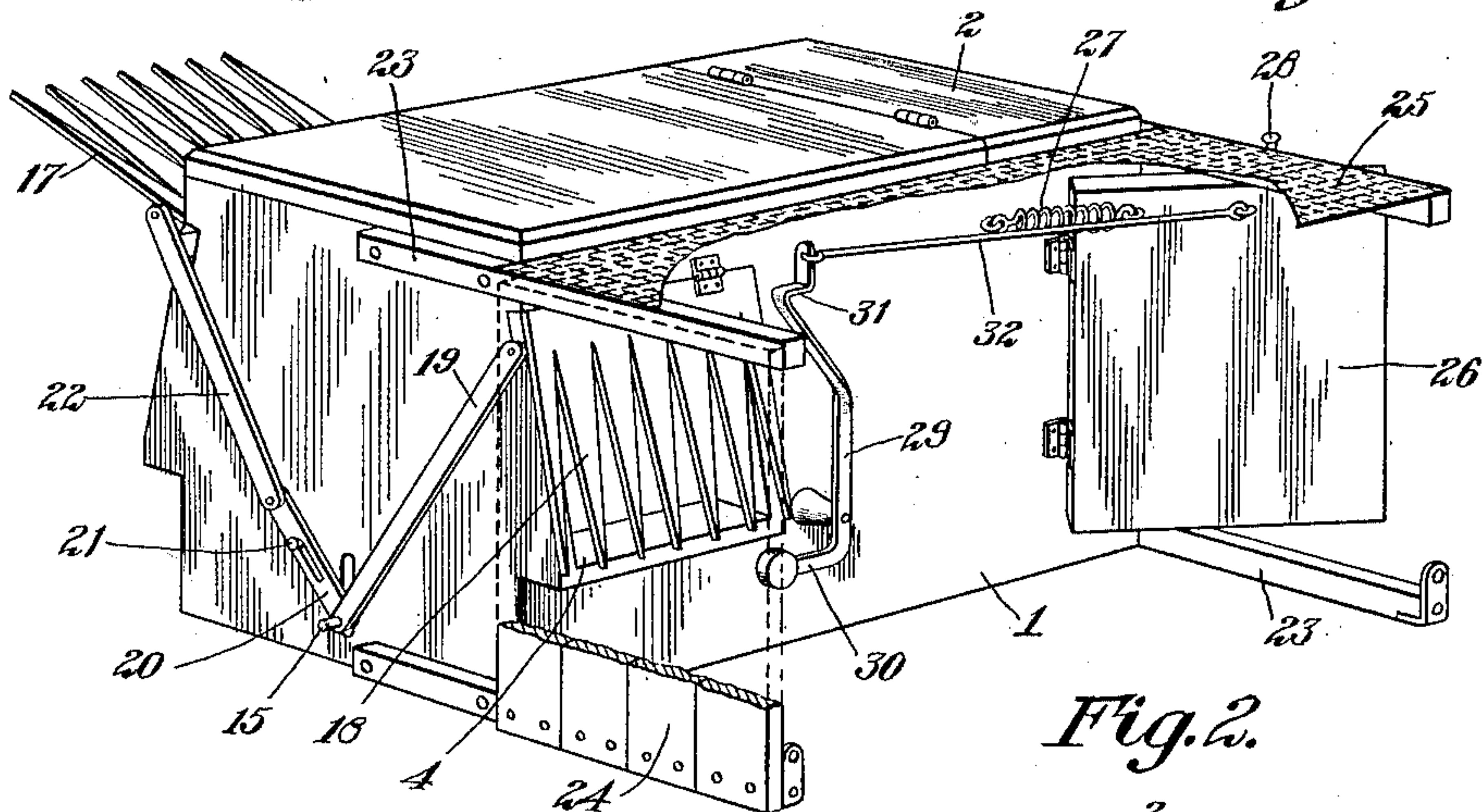


Fig. 2.

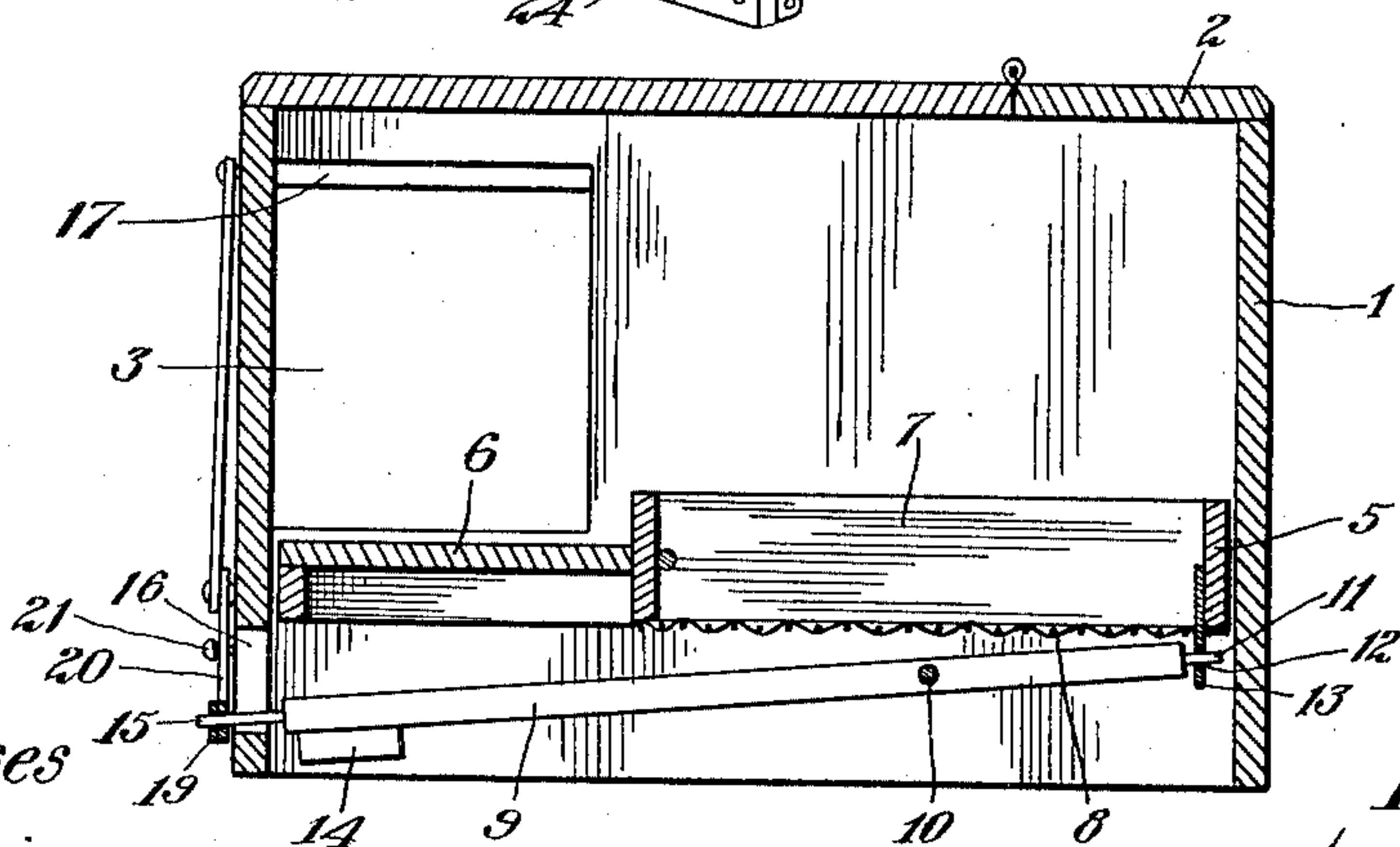


Fig. 3.

Witnesses
Admission
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UNITED STATES PATENT OFFICE.

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NEST-BOX.

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To all whom it may concern:

Be it known that I, JAMES GRIERSON, a subject of the King of Great Britain, and resident of the city of Toronto, county of York, Province of Ontario, in the Dominion of Canada, have invented certain new and useful Improvements in Nest-Boxes; and I do hereby declare that the following is a full, clear, and exact description of the same.

The invention relates to improvements in nest boxes, as described in the following specification and illustrated in the accompanying drawings that form part of the same.

The invention consists essentially in the novel construction and arrangement of parts, whereby the entrance to a feeding chamber is closed by a gate member operatively connected with the nest, and whereby the entrance to the nest box is closed by the movement of the nest caused by the hen sitting therein.

The objects of the invention are, to give an extra feed to the hens that are laying, to devise a simple form of nest box which will guard the special feed so that only the hens nesting will have ingress to the same, and to prevent the interference with hens while nesting or feeding.

In the drawings, Figure 1 is a perspective view of my improved nest box shown partly broken away. Fig. 2 is a perspective view of the nest box from the opposite side to that shown in Fig. 1 and also partly broken away. Fig. 3 is a longitudinal vertical sectional view.

Like numerals of reference indicate corresponding parts in each figure.

Referring to the drawings, 1 is a rectangular casing having an open bottom and a hinged cover 2 closing the top thereof.

3 and 4 are openings in the sides of the casing 1 arranged at one end thereof and opposite to each other.

5 is a frame pivotally supported intermediate of its length within the casing 1 and having a platform 6 at one end and extending between the openings 3 and 4 and a nest box 7 formed at the other end, said nest box having a screen bottom 8 thereto.

9 is a lever pivotally supported intermediate of its length upon a rod 10 extending across the casing 1 below the nest box 5.

11 is a pin secured in the inner end of the lever 9 and extending through a hole 12 in

the metal strap 13 secured to the outer end of the nest box.

14 is a suitable weight secured to the other end of the lever 9.

15 is a pin secured to the weighted end of the lever 9 and extending through a vertical slot 16 in the end of the casing 1 beneath the platform 6.

17 is a gate or closure of any suitable form hinged at the top edge of the opening 3 in the casing 1, said gate having suitable openings therethrough to allow a free circulation of air and also to allow the ingress of light.

18 is a gate or other suitable closure similar to the gate 17 hinged to the top of the opening 4 and adapted to close the same.

19 is a link pivotally secured at one end to the outer end of the pin 15 secured to the lever 9 and at the other end to the edge of the gate 18 adjacent to the top.

20 is a link pivotally secured at one end to the pin 15 and slidably supported upon a pin 21 secured to the end of the casing 1 and extending through a longitudinal slot in said link.

22 is a link pivotally connected to the outer end of the link 20 and at its upper end pivotally connected to the side edge of the gate 17 adjacent to the top.

The weighted lever 9 pulls downwardly upon the links 19 and 20, thereby holding the gate 18 normally closed and the gate 17 normally open. The gate 17 opens into the chicken run and a hen may step inside. If on going inside she sits upon the nest the said nest swings downwardly a short distance on its pivot, thereby tilting the lever 9 and throwing the outer weighted end upwardly. The upward movement of the weighted end of the lever 9 swings the slotted link 20 on its pivot, thus drawing downwardly on the link 22 and closing the gate 17. Coincidentally with this movement the link 19 is pushed upwardly and swings the gate 18 open. The entrance to the nest is thus closed and the exit gate opened.

23 are bars secured to the ends of the casing 1 and extending laterally therefrom.

24 are wood strips secured to one set of the bars 23.

25 is a netting secured to the upper bars 23 and extending from end to end of the casing.

The device is placed against a fence or

other suitable barrier and the ends of the bars secured thereto. A feeding inclosure is thus provided outside of the nest box.

26 is a hinged gate partly closing the opening between the fence and the side of the box 1 at the end opposite to that closed by the strips 24.

27 is a spiral spring secured to the inner side of the gate 26 and to the side of the box 1 and holding said gate to its closed position.

28 is a pin secured in the top of the gate 26 adapted to engage the upper bar 23 and to hold the gate 26 partly open. This pin is so arranged that the opening between the edge of the gate and fence is not sufficiently wide to allow a hen to pass through, consequently the hens cannot get into the inclosure at the side of the box without passing through the nest box.

29 is an arm pivotally supported from the side of the casing 1 within the side inclosure having a weighted bell crank lower end 30 and an angularly shaped latch portion 31 adapted to engage the gate 18 to hold it in its raised position, thereby securely locking the gate 17.

32 is a rod connected to the upper end of the arm 29 and to the inner side of the gate 26. When the hen is through feeding in the special inclosure, she may pass outwardly past the gate 26 as a slight pressure from the inside will cause the said gate to swing on its hinges against a pull on the spring 27. As said gate swings outwardly, it pulls on the rod 32 and withdraws the latch portion of the arm 29 from engagement with the gate 18, thereby releasing said gate.

Immediately on the release of the gate 18, the weighted lever 9 swings the same downwardly closing the opening 5 and simultaneously swings the gate 17 upwardly, thus automatically re-setting the device. The eggs may be removed from the case by lifting the cover 2.

A device such as described regulates the feeding of the hens in such a manner that those kept in the run and not laying will be kept quite healthy and not overfed, while a sufficient supply of egg producing food is provided for the hens that are laying.

What I claim as my invention is:—

1. In a nest box, a feeding inclosure having an exit opening, a casing forming a nest house having an entrance opening from a chicken run and an exit opening to said feeding inclosure, gates closing said nest house openings, a gate closing said feed inclosure exit, a nest in said house, means operatively connecting said nest with said house openings for closing said entrance opening and opening said exit opening, and means connected with said feed inclosure gate for reversing the positions of said house gates.

2. In a nest box, the combination with a casing having a pair of openings in the side walls, a nest pivotally supported within said casing, a pair of gate members hinged at the top and adapted to close the openings in said box, a link pivotally supported intermediate of its length on said casing, links pivotally connected to each end of the aforesaid link and to the gate members, and means operatively connected with said pivotal nest for swinging said pivotal link on its pivot to open one of said gates and to close the other.

3. In a nest box, the combination with a casing having a pair of openings in the side walls gates closing said openings, a nest pivotally supported within said casing, a lever pivotally supported intermediate of its length beneath said nest and having one end thereof operatively connected to said nest and the other weighted end extending through a suitable vertical slot in the end of the casing, a link slidably and pivotally supported from the end of the box adjacent to said vertical slot and having one end thereof pivotally connected to said lever, a link pivotally connected to the extending end of said lever and at its other end connected to one of said gates, and a link pivotally connected at one end to the opposite end of said pivotal link and at its other end to the other of said gates.

4. In a nest box, the combination with a casing having a pair of openings in the side walls oppositely arranged, an extension wall projecting from one side of said casing and forming an inclosure communicating with one of the openings in said casing, a nest pivotally supported within said casing, a gate pivotally supported and adapted to close the outer opening of said casing and normally held in an open position, a gate closing the opposite opening in said casing and normally held closed, means for operatively connecting said gates to said nest, a pivotal latch member adapted to lock the inner gate in a raised position, a gate leading from said inclosure and spring held partly closed, and a rod connected to said spring held gate and to said latch member and adapted to withdraw said latch member from engagement with the inner gate of said casing on the outward swinging of said spring held gate.

5. In a nest box, the combination with a casing having an entrance opening in one side thereof and an exit opening in the other side, a nest movably supported within said casing, a gate adapted to close said entrance opening, a gate adapted to close said exit opening, means connected with said nest for normally holding said entrance gate open and exit gate closed and to close said entrance gate and open said exit gate simultaneously, a barrier secured to one end of

said casing and extending outwardly beyond one of the sides, an arm secured to the opposite side of the casing at the top thereof and extending outwardly therefrom, a
5 screen of suitable material extending from the top of said barrier to said arm and forming a top covering for a feeding chamber, a gate hinged below said projecting arm, a pin secured in the top of said gate and
10 engaging said arm and retaining said gate in a partly open position, a spring secured to said gate and to the side of said casing and holding said gate in its partly closed

position, means for holding the exit gate from said casing open and said entrance 15 gate closed, and means connected with said spring held gate for releasing the aforesaid gate.

Signed at the city of Toronto, county of York, Province of Ontario, in the Dominion of Canada, this 26 day of September, 1910. 20

JAMES GRIERSON.

In the presence of—

H. DENNISON,

E. HERON.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
