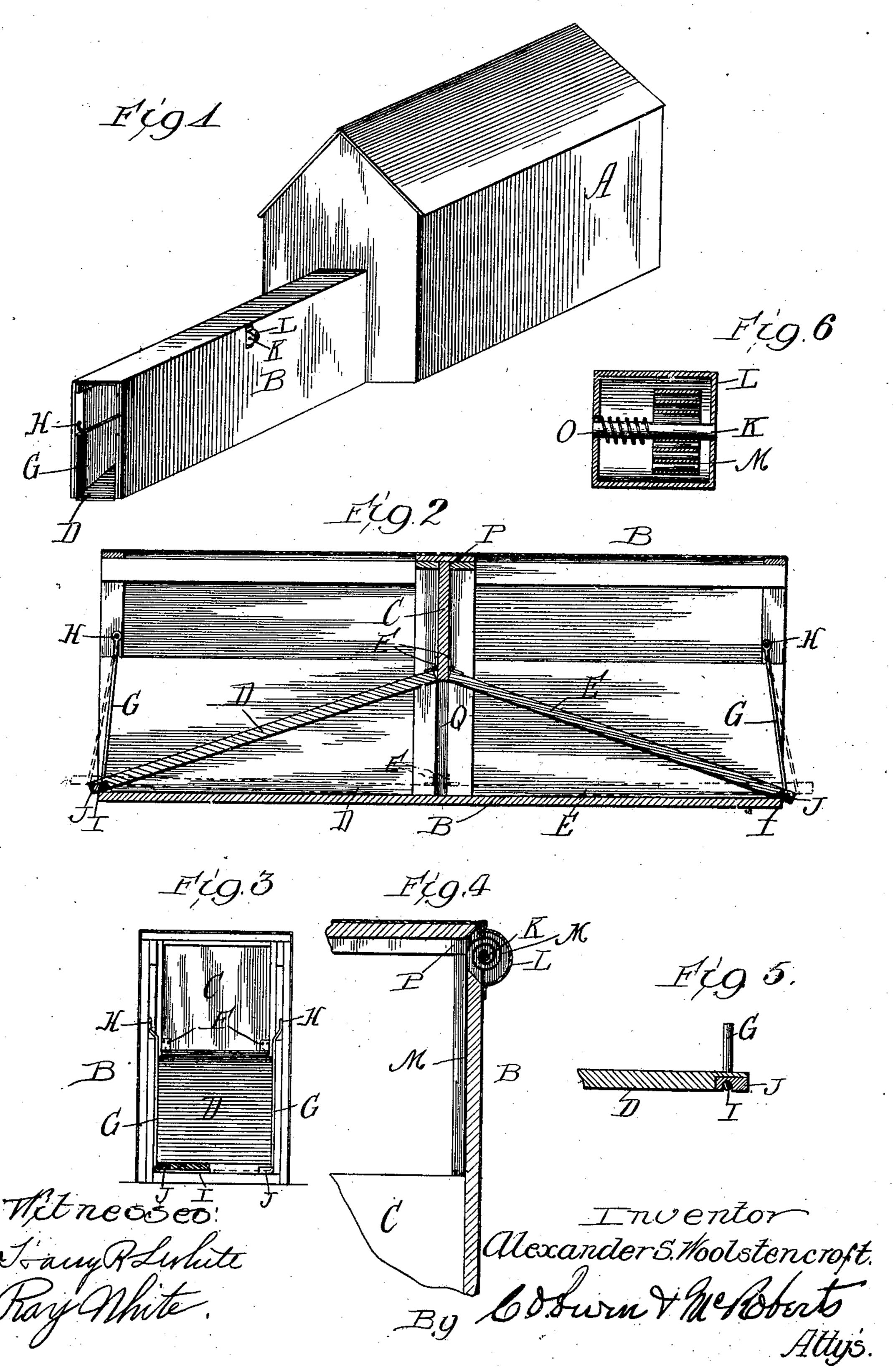
## A. S. WOOLSTENCROFT. DOG KENNEL DOOR. APPLICATION FILED MAY 24, 1908.



## UNITED STATES PATENT OFFICE.

ALEXANDER STUART WOOLSTENCROFT, OF FULDA, MINNESOTA.

## DOG-KENNEL DOOR.

No. 861,788.

Specification of Letters Patent.

Patented July 30, 1907.

Application filed May 24, 1906. Serial No. 318,467.

To all whom it may concern:

Be it known that I, Alexander Stuart Woolstencroft, a citizen of the United States, residing at Fulda, in the county of Murray and State of Minnesota, have invented certain new and useful Improvements in Dog-Kennel Doors, of which the following is a specification, reference being had therein to the accompanying drawing.

My invention relates to a door for dog kennels which 10 is so constructed that normally the door is always closed, but the weight of the dog serves to open it and keep it open while the dog is passing into and out from the kennel. I attain this end by the device illustrated in the accompanying drawing, in which—

Figure 1 shows a perspective view of a dog kennel with my door attachment; Fig. 2 is a longitudinal vertical sectional view of the door attachment to the kennel; Fig. 3 is an end view with a section of the end of one of the inclined portions of the door cut away;

20 Fig. 4 is a cross sectional view of a portion of the door attachment showing one of the spring attachments which support the door; Fig. 5 is a sectional view of a detached end of one of the inclined portions of the door; and Fig. 6 is a sectional view of the springs which operate to close the door.

In the accompanying drawings A represents the dog kennel which may be in any suitable form.

B represents a run-way in which I house a door leading to the kennel. This run-way is open at each end, 30 one end being placed against the wall of the kennel over an opening in the wall as large as the end of the run-way. In this run-way I place a vertically sliding piece C which extends across the run-way with its ends entering grooves in the sides of the run-way. To 35 the bottom of this vertical piece I hinge two inclined portions of the door D and E. These inclined portions of the door also extend the width of the run-way where they are hinged at one end to vertical portions of the door by the hinges F. The other end I preferably hang 40 in bent swinging bails G so that when the inclined portions of the door are thrown down their lower ends swing outward causing less friction than would be caused if they were left to slide on the bottom of the run-way. These bails, there being one at each end of 45 the run-way, are pivoted to the side of the run-way by bolts H, and extend below the end of the inclined portions of the door, as clearly shown at I in Fig. 5. I place on the end of each of the inclined lower portions of the door two pieces of metal J to take the wear of the 50 bails, the bails being carried in grooves, but allowed to swing as the door is thrown down into the position shown by dotted lines in Fig. 2.

K is a spring, there being one attached to each side of the run-way, and carries the ribbon or cord attached

to the upright portion C of the door. L represents the 55 housing of said spring, M a tape or cord, N the shaft on which the tape or cord is wound, and O the coil spring which revolves to wind the tape or cord thereon and raise the door to a closed position.

It is obvious that the run-way B may be partly within 60 the kennel and partly without, the purpose being simply to have it so arranged that the animal can pass in and out from the inclosure, the door always closing automatically to keep the cold from entering the inclosure. When the dog steps upon the inclined portion of the door, either E or D, his weight opens the door by sliding the vertical portion together with the inclined portions of the door downward into the position shown by the dotted lines in Fig. 2, the dog stepping over the vertical portion, and as he passes from 70 the run-way the springs restore the door into the position shown by the full lines in Fig. 2, thus closing the door.

I do not limit myself to any form of spring, or even to springs, because a weight might be used to restore 75 the door to a closed position, but I have found that springs such as I have described well serve the purpose.

It will be observed that I have made an offset in the upper ends of the bails in which the outer ends of the 80 inclined portions of the door are hung which form enables me to raise the outer ends of the inclined portions of the door above the bails for the purpose of reaching the bottom of the run-way to remove any obstacle that might get thereunder, because it is important to have the door go down to the bottom of the runway for the dog to pass back and forth.

I have described my door as being composed of a vertical portion and two inclined portions, but it will be observed that one inclined portion with the vertical 90 portion would entirely close the opening and keep the cold from entering the inclosure, but in order to enable the animal to pass both ways, for instance in and out, it is necessary to have two inclined portions, one at each side of the vertical portion.

To secure a complete inclosure I make a groove P across the top of the run-way for the top of the vertical portion of the door to enter. I also have grooves Q on the sides of the run-way for the vertical portion of the door to enter. The weight of the animal as he steps 100 upon the inclined portion of the door overcomes the tension of the spring and lowers the door, and when there are two inclined portions his weight upon the inclined portion after he steps over the vertical portion of the door still keeps the door down until he has passed 105 out of the run-way.

I find in the practical use of my invention that my dogs soon become accustomed to pass in and out of the

kennel through my run-way and the door is always kept closed in its normal position, thereby excluding the cold from the kennel.

Having fully described my invention what I claim 5 and desire to secure by Letters Patent is—

- 1. In a structure such as described, a door having a vertically sliding portion and inclined portions oppositely hinged directly thereto at one end, and means for holding the door normally closed.
- 2. In a structure such as described, a door having a vertically sliding portion and inclined portions oppositely hinged thereto, means for holding the door normally closed and bails suspended in the frame of the structure in which bails the outer ends of the inclined portions of the door are suspended.
  - 3. In a structure of the class described, a door composed of a vertically sliding portion and inclined portions oppositely hinged directly to the vertical portion at one

end, bails in which the outer ends of the said inclined portions of the door are suspended, the said bails being pivoted at their upper ends in the frame of the structure and offset substantially as shown to enable the raising of the outer ends of the inclined portion of the door above the bails.

4. In a device of the class described, a run-way open at 25 each end and provided with vertical grooves, a door in the run-way having a vertical portion of less height than the run-way and adapted to slide in the grooves and an inclined portion on each side of the vertical portion of the door and connected thereto at or near its lower end, and 30 means to raise the door to its normal or closed position at the top of the run-way.

In testimony whereof I affix my signature in presence of two witnesses.

ALEXANDER STUART WOOLSTENCROFT.

Witnesses:

ELIZABETH MOLITOR, J. MCROBERTS.