

(No Model.)

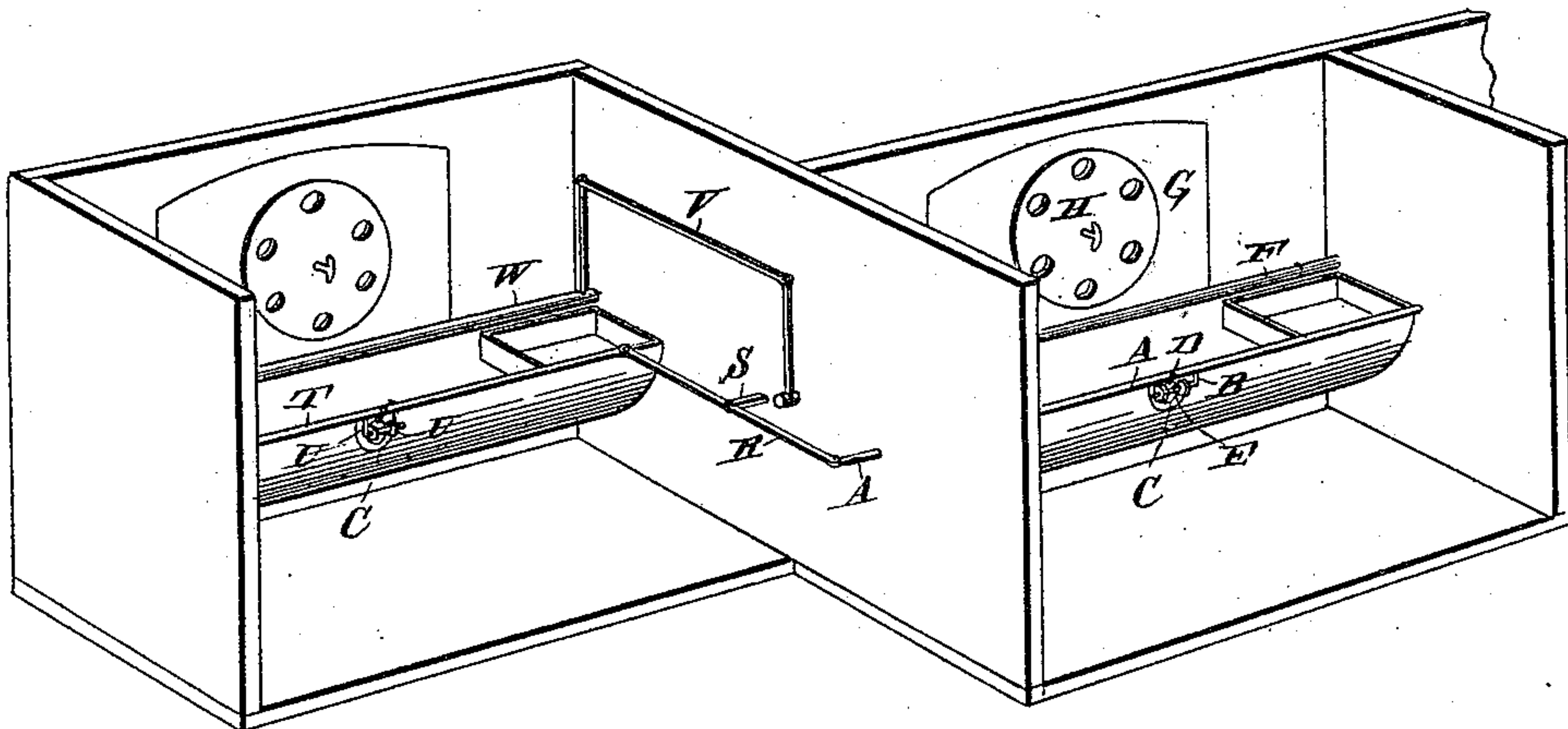
2 Sheets—Sheet 1.

W. P. BROOKS.  
RELEASING DEVICE.

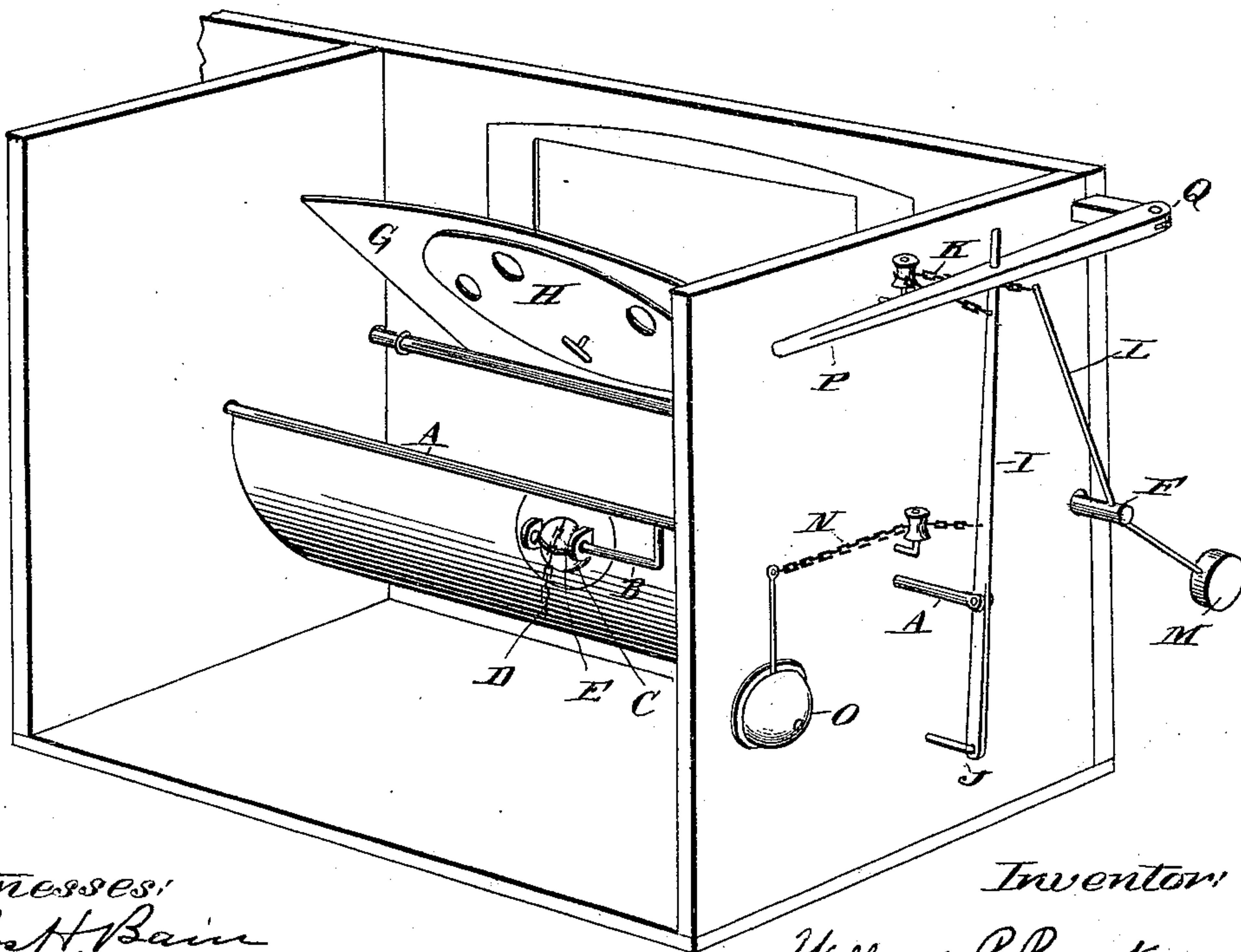
No. 496,380.

Patented Apr. 25, 1893.

*Fig. 1.*



*Fig. 2.*



Witnesses:  
Thos. H. Bain  
E. L. Burton

Inventor:  
Willard P. Brooks  
By Erwin Taylor atty

(No Model.)

2 Sheets—Sheet 2.

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Fig. 3.

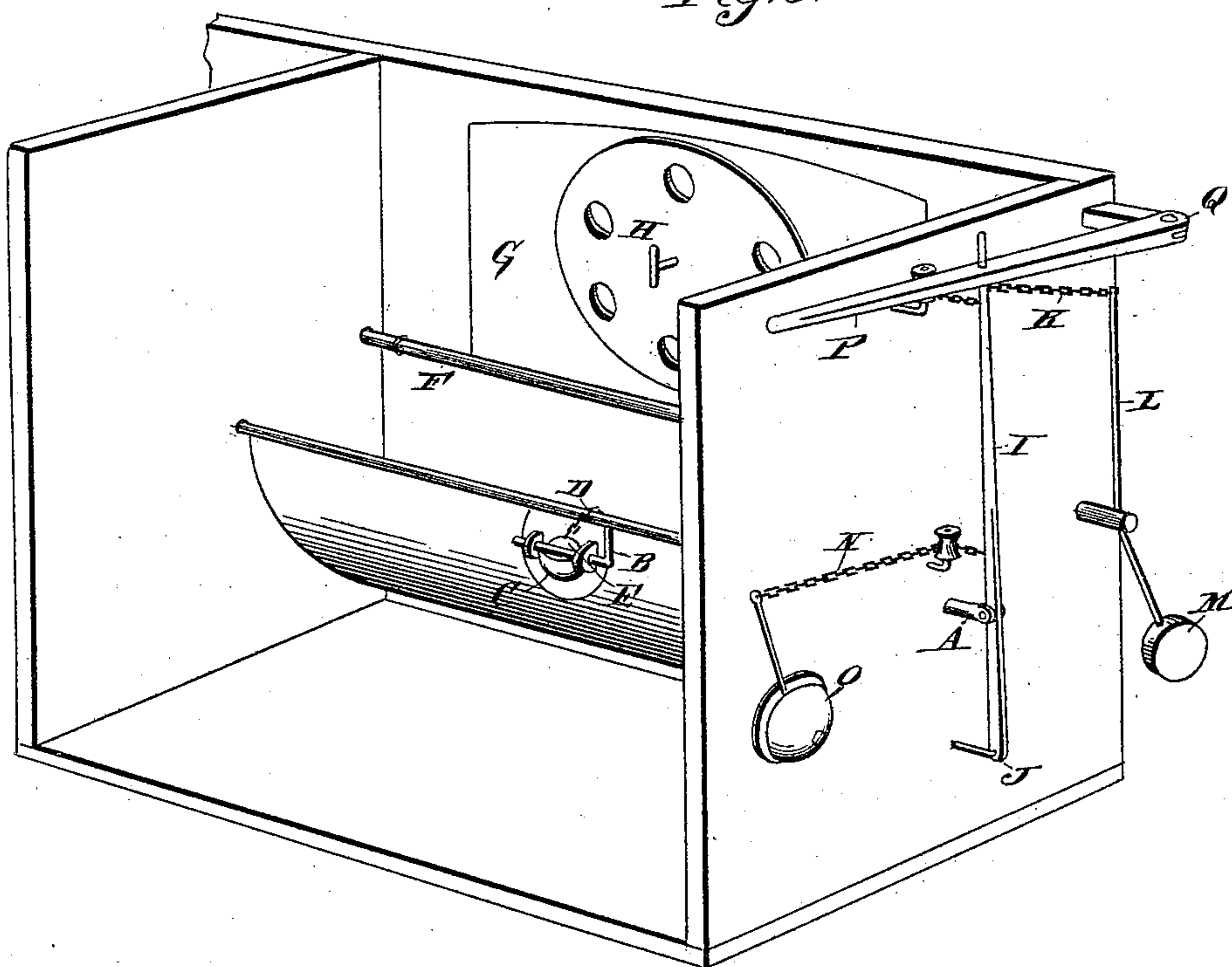
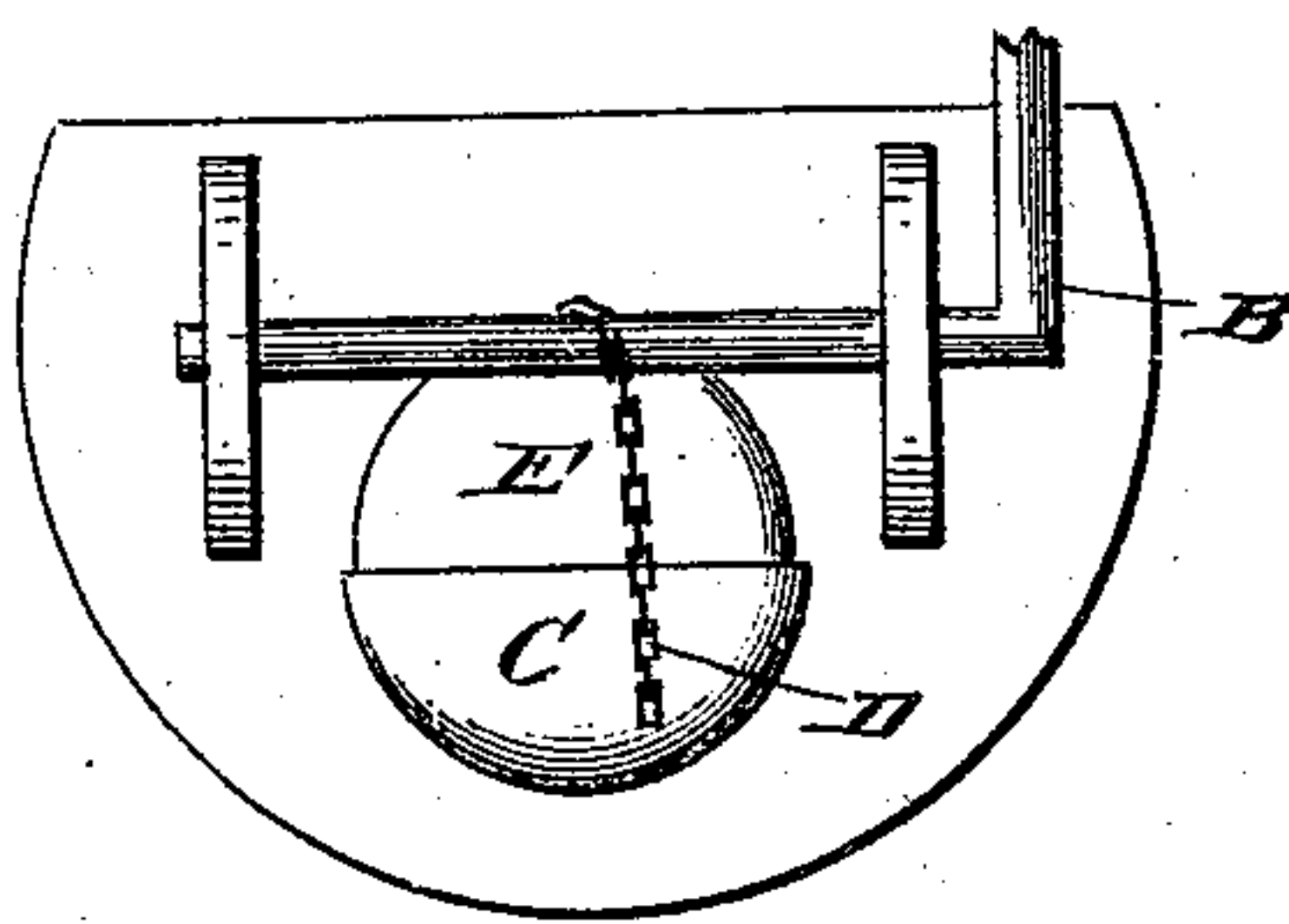


Fig A.



*Witnesses:*

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# UNITED STATES PATENT OFFICE.

WILLARD P. BROOKS, OF TOPEKA, KANSAS.

## RELEASING DEVICE.

SPECIFICATION forming part of Letters Patent No. 496,380, dated April 25, 1893.

Application filed June 6, 1892, Serial No. 435,613. (No model.)

*To all whom it may concern:*

Be it known that I, WILLARD P. BROOKS, a citizen of the United States, residing at the city of Topeka, in the county of Shawnee and State of Kansas, have invented a new and useful Improvement in Stock-Detaching Apparatus, of which the following is a specification.

The purpose of my invention is to provide an apparatus by which all the stock in a barn can be loosened at once, and at the same time a shutter can be made to project into the stall, whereby the stock are frightened out of the stall, and at the same time an alarm is sounded.

The invention consists of a lever placed at one end of a row of stalls, operating a continuous iron bar running along the top of the mangers, on which iron bar there are short bolts parallel therewith, which slide into loops and cover a cup containing the ball fastened to a ring. The lever also, at the same time that it causes a longitudinal motion to the bar in front of the trough, causes a rotary motion to another bar placed along the end of the barn above the trough, which bar contains a shutter or fan to be thrown against the stock and to frighten them out of the stall; and the same lever operates a gong by means of chain and pulley attachment, giving alarm. The shutters also act as ventilators.

In the accompanying drawings, in which similar letters of reference refer to like parts, Figure 1 is a perspective view showing the inside of the stalls and my machine in operation, in a stable, having an offset in the same. Fig. 2 is a perspective view of the other end of the stalls showing operation and working of the lever, with shutter rotated and projecting into the stall. Fig. 3 is a view showing the action of the bolts sliding into their grooves, covering the ball in the cup and holding the chain secure. Fig. 4 is a view of the chain and ball with cup and bolt showing the way in which the ball is locked in the cup by operation of bolt.

A is a bar running in front of the troughs.

B is a parallel bolt one end of which is rigidly secured to bar A, there being one of these bolts in each stall.

C is a cup under each bolt B, and in this cup C the ball E is inserted.

D is the chain, one end secured to ball E

and one end to be secured to halter, which chain is held secure behind bolt B when the ball E is in the cup.

E is the ball on end of chain, to be dropped in the cups on the stall and prevent the chain being pulled out.

F is a long bar running along and above the trough and stalls against the side of the barn, hinged at suitable places, and having in front of each stall, rigidly secured thereto, a shutter G.

G is a shutter made of metal or some other suitable material, rigidly secured to bar F and standing against the side of the barn when not rotating, and when bar F is partly rotated, it will be thrown out into the stalls. This shutter G is also suitable for ventilation, and has large orifices in it for ventilation, and on the center of shutter G is pivoted a disk having similar orifices which register with the orifices of G.

H is the disk just described, pivoted on the shutter G, with registering orifices therein for ventilation.

I is a lever secured to rod A and pivoted at its end at J. This lever has also a chain attachment K to give rod F rotary motion.

K is chain attachment from lever I to crank L.

L is a crank at the end of rod F, rigidly attached thereto, vertical in position, and to which crank the attachment K is secured.

M is a heavy weight rigidly attached to rod F, to hold rod F firmly in position and keep the shutters closed.

N is a chain attachment from lever I, on pulley, to gong O.

O is a gong operated by chain N from lever I.

P is a lever pivoted at Q and pivoted to the top of I, and by means of lever P lever I is operated.

Q is pivot attachment for lever P.

R is a lever at the end of rod A, pivoted to rod T, and which is in an offset in the barn, and operates a similar releasing device in barns having ells or angle stalls.

S is a pivot to secure lever R and upon which it works.

T is a rod on the mangers, in an offset in the barn, having a short parallel bolt rigidly secured to said rod, in each of the stalls.



U is a small bolt like the letter L, rigidly attached to bar T, moving parallel therewith, and are similar bolts to bolts B; and when pushed into eye loops holding behind the bolts a ball on the end of a chain, in a cup C; there being one of these bolts in each stall, in an offset in the barn; and the bolt is operated by rod T and lever R pivoted to rod A.

V is a rod attachment to be used in an angle or offset of the barn to operate shutters in said offset.

W is a rod to operate shutters in stalls in the offset of barn, rotated by rod attachment V. To this rod are rigidly attached shutters similar to those in the main barn. The shutters in offset are rigidly secured to rod W and rotated by crank on rod W.

To operate my machine hand power is applied to the lever P, which moves lever I, giving longitudinal motion to rod A that is pivoted on the lever, and giving also longitudinal motion to rod T in the offset. As rod A and rod T are moved the parallel bolts B on rod A and the parallel bolts U on rod T are simultaneously drawn out of their sockets. The ball E is inserted in a socket with the chain behind the bolts, and the lever P is closed by securing the balls E in the cups. The stock is fastened to the chain attached to this ball as in ordinary stables. On an alarm of fire or for other cause, when it is desirable to remove the stock speedily from the barn, the doors are opened and the lever P is pulled from the stalls, on its pivot, operating lever I, as lever I is moved the rod A is moved with the lever, opening at once all the bolts B from their sockets and all the bolts U from their sockets, thus detaching instantaneously all the bolts on the chain dropping the balls out of the cups and loosening the stock. At the same time the gong O is vigorously sounded by the same lever working on chain N attached to lever I. At the same time the rod F is rotated about ninety degrees, throwing in each stall a shutter G, and striking the stock in the face, which causes them to jump backward out of the stall.

I know that stock releasing devices are not new, and that many kinds of stock releasing devices have been patented; but I do not know of any releasing device which, at the same time is used for frightening the stock, driving them out of the stable and also used for the purpose of giving an alarm. The gong alarm may be dispensed with, or used when desired.

The ventilators in the shutters will be found very useful for the purpose of allowing drafts of air to enter the barn. The iron bars A and T which run along on top of the mangers, are also very useful in protecting the mangers from injury by the stock, forming a protection to keep the stock from eating the manger.

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

1. In a stock releasing device an iron bar on the manger through the stalls having a longitudinal motion on said manger and having in each stall L shaped bolts parallel with and rigidly attached to said bar in combination with a cup suitable to hold a ball on the end of a chain and the opening of which cup is partly covered by the L shaped bolts sliding into sockets, a ball attached to chain, an iron bar in front of the stalls hinged thereto and having rigidly secured thereon in each stall a shutter adapted to rotate with said bar and project when rotating into the stalls, a gong near one end of the stalls, a lever pivoted at one end of the stable attached to the bar on top of the manger and attached to the bar in front of the stalls and attached to the gong giving to the bar on the manger longitudinal motion and to the bar in front of the stalls rotary motion and ringing a gong, all substantially as described.

2. In a stock releasing device a lever pivoted to the side of the stall near one end of the same in combination with an iron bar hinged to the side of the barn in front of each stall having shutters rigidly attached to said bar and adapted to swing into each stall as the lever is moved, an iron bar on the mangers having longitudinal motion operated by the lever and having on said bar L shaped bolts in each stall, sockets for said bolts to slide in, a chain secured to said bolt, all substantially as described.

3. In a stock releasing device an iron bar on the manger through the stalls having a longitudinal motion on said manger and having in each stall L shaped bolts parallel with and rigidly secured to said bar in combination with a cup suitable to hold a ball on the end of a chain and the opening of which cup is partly covered by the L shaped bolts sliding into the sockets, a ball attached to chain, an iron bar in front of the stalls hinged thereto and having rigidly secured thereon in each stall a shutter adapted to rotate with said bar and project when rotating into the stalls, a lever pivoted at one end of the stable attached to the bar on top of the manger giving to the bar on the manger longitudinal motion and to the bar in front of the stalls rotary motion, all substantially as described.

4. In a stock releasing device a lever pivoted to the side of the stall near one end of the same in combination with an iron bar hinged to the side of the barn in front of each stall having shutters rigidly attached to said bar and adapted to swing into each stall as the lever is moved, an iron bar on the mangers having longitudinal motion operated by the lever and having on said bar L shaped bolts in each stall, sockets for said bolts to slide in, a chain secured to said bolt, a gong near the end of the stalls operated by the motion of the lever all substantially as described.

5. In a stock releasing device an iron bar on the mangers through the stalls having a longitudinal motion on said mangers and



having rigidly attached to said bar L shaped bolts parallel to said bar in each stall in combination with double sockets in which the bolts slide, a chain secured to said bolt, an iron bar hinged to the side of the barn in front of the stalls, a shutter in each stall rigidly secured to said bar and adapted to swing into the stalls as the bar is rotated, a lever connected to each of the iron bars and adapted to operate the same, all substantially as is described.

WILLARD P. BROOKS.

Witnesses:

C. J. EVANS,  
IRION M. DAVIS.