

(No Model.)

R. H. & H. E. KLINE.

DEVICE FOR RELEASING CATTLE FROM STALLS.

No. 321,901.

Patented July 7, 1885.

FIG. 1.

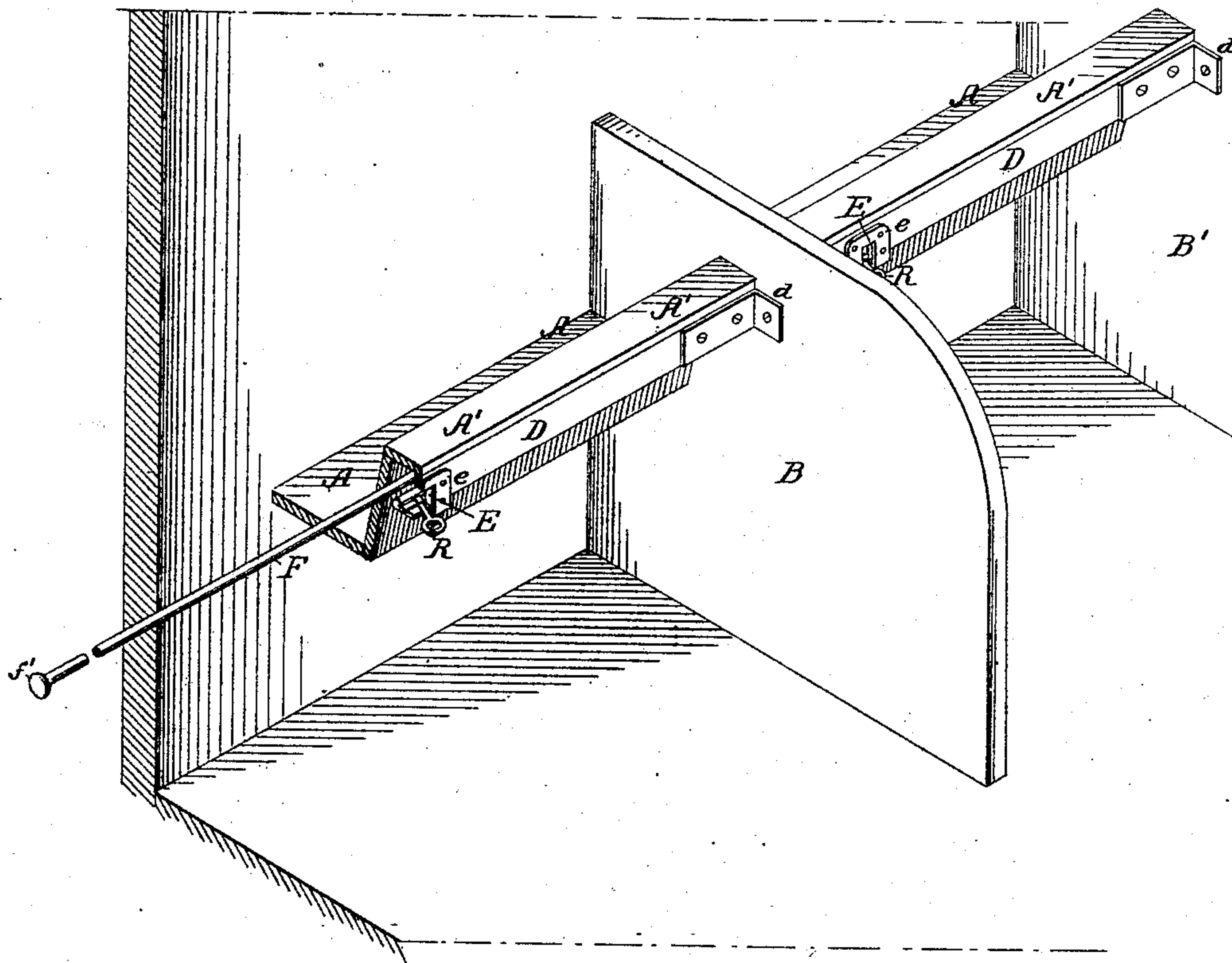
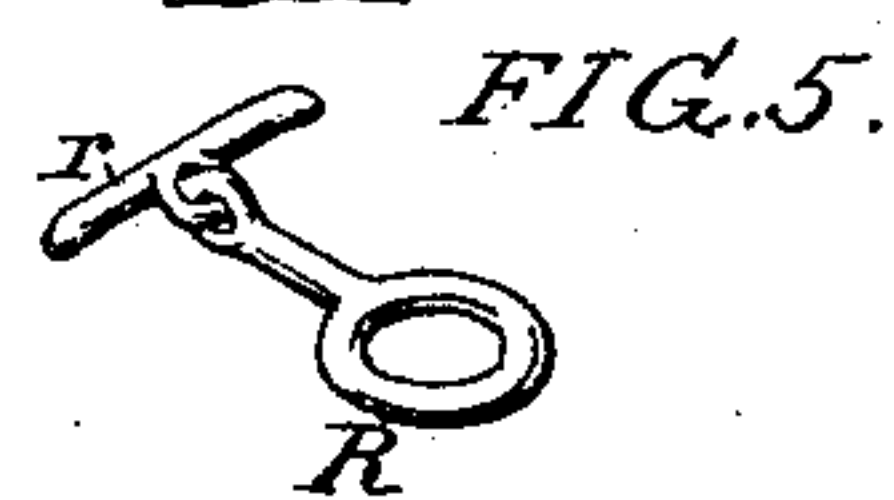
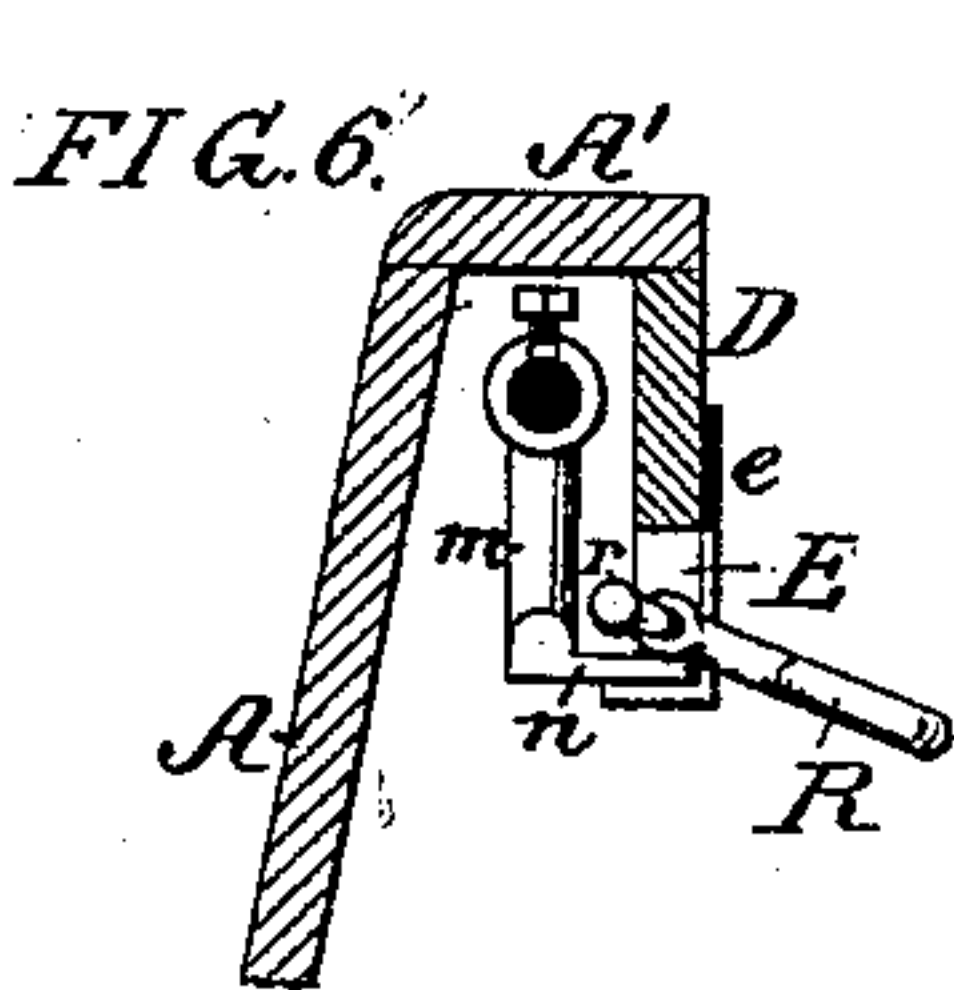
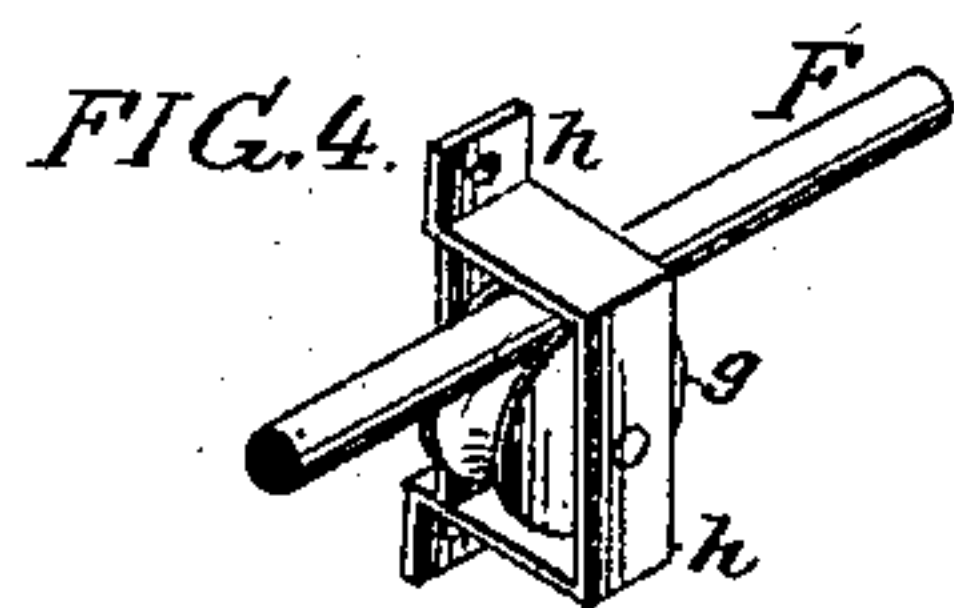
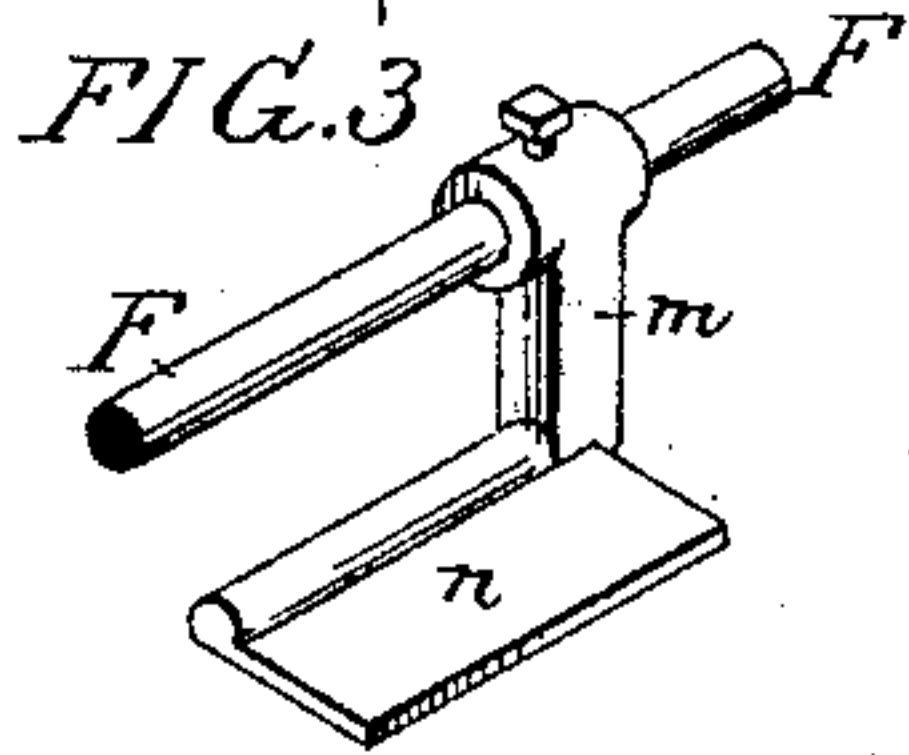
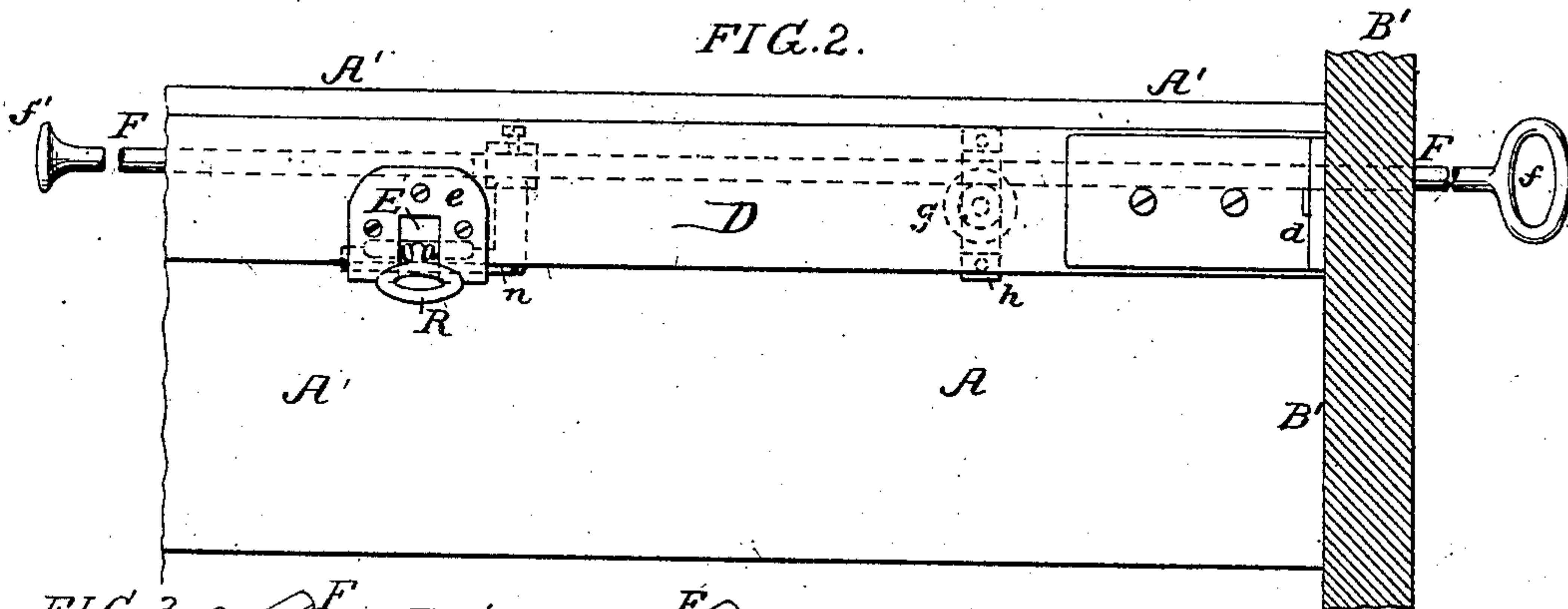


FIG. 2.



Witnesses:
Henry Bossert.
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R. H. Kline &
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UNITED STATES PATENT OFFICE.

REUBEN H. KLINE, OF SPRING CITY, AND HARVEY E. KLINE, OF ROYER'S FORD, PENNSYLVANIA.

DEVICE FOR RELEASING CATTLE FROM STALLS.

SPECIFICATION forming part of Letters Patent No. 321,901, dated July 7, 1885.

Application filed March 9, 1885. (No model.)

To all whom it may concern:

Be it known that we, REUBEN H. KLINE, of Spring City, Chester county, Pennsylvania, and HARVEY E. KLINE, of Royer's Ford, Montgomery county, Pennsylvania, and citizens of the United States, have invented certain Improved Devices for Releasing Cattle from Stalls, of which the following is a specification.

Our invention consists of certain improvements in the detailed construction of devices for releasing a number of horses or cattle from their stalls simultaneously, the apparatus being adapted to be operated from the outside of the building, more particularly in an emergency of fire, as fully described hereinafter.

In the accompanying drawings, Figure 1 is a perspective view, partly in section, of portions of two adjoining stalls with our improvements applied thereto. Fig. 2 is a front view of a portion of a stall with an end wall in section. Figs. 3, 4, and 5 are perspective views, and Fig. 6 a sectional view, of portions of our improvements.

A A are the mangers or feeding-troughs. B is one of the partitions separating adjoining stalls, and B' represents an end wall of the barn or building, there being as many adjoining stalls as the building can conveniently accommodate. Along the upper front edge of each manger is secured a top board, A', and in a vertical position, immediately under the top board, A', is a transverse bar, D, which is provided at each end with an angle-iron, d, by which it is firmly secured to the partitions or wall at opposite sides of the stall. In the under edge of each bar D is a recess or notch, E, preferably strengthened by a U-shaped metal band, e, whose lower ends are bent or flanged under the edge of the bar D, for a purpose explained hereinafter.

Throughout the length of all the stalls, behind the bars D, runs a longitudinal releasing-rod, F, having its opposite ends extending to the outside of the building or of the end stalls, and there provided with knobs or handles f f', to push or pull the rod to the extent of the sliding movement allowed it. This rod is supported at intervals by anti-friction rollers g,

carried by brackets h, Fig. 4, which are secured to the face of the manger or the inner walls of the bars D. The rod F carries at intervals arms m, provided with supporting plates or gates n, and these arms are adjustable on the rod to any desired position, and can be secured by suitable set-screws after adjustment, as shown in Figs. 2, 3, and 6. They are adjusted to such positions on the rods that the plates n will be guided in and supported by the flanged ends of the bands e, and by the limited movement of the rod F the plates n can be moved to open or close the lower edges of the notches E.

The ring R, to which the halter or other securing rope or chain of the horse or cattle is to be fastened, is provided with a T-head, r, whose shank will readily go into the notch E in the edge of the retaining-bar D, but whose T-head is held therein, when the notch is closed, by the sliding plate n, as shown in the drawings. Under ordinary circumstances the rings R are kept in place in the notches E by the plates n, and the horses or cattle are tied and released by securing their ropes to and detaching them from the rings; but whenever desired, as in the emergency of a fire, all the horses and cattle may be released at once by drawing or pushing the rod F from the outside of the barn, so that the sliding plates or gates n will be withdrawn, and all the rings to which the halter-ropes are secured will fall free.

The mangers or troughs may be of any suitable construction, or, if desired, may be dispensed with, the top board, A', and retaining-bars D alone being used with the releasing-rod and attachments.

It will be seen that in the construction described there is practically no strain on the rod F, the strain due to the pulling on the rings R being taken up by the transverse bars D, which are firmly secured at their ends to fixed parts of the building. Furthermore, the rod, being inclosed by the top boards, A', and bars D, is not liable to get bent and put out of order.

We claim as our invention—

1. The combination of a series of stalls, having transverse bars D secured at the ends to the said stalls, and top boards, A', with secur-

ing-rings, and a retaining and releasing rod below said top boards and behind the bars, substantially as described.

2. The combination of a stall, having a trans-
5 verse bar notched at its edge, with a T-headed securing-ring, and a sliding plate adapted to close the edge of the notch of the bar to retain the ring, the said transverse bar receiving all the pulling strain, substantially as set forth.
- 10 3. The combination of a stall, having a transverse bar, D, notched at its edge, with a T-headed securing-ring, the sliding rod F, and an arm carrying the retaining-plate N, to close the edge of the notch, and adjustable on said
15 rod, substantially as described.

4. A stall having a notched transverse bar and a band with flanged ends, in combination with a T-headed securing-ring and a sliding retaining-plate adapted to said flange to close the notch, substantially as specified. 20

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

REUBEN H. KLINE.
HARVEY E. KLINE.

Witnesses:

HARRY SMITH,
HUBERT HOWSON.