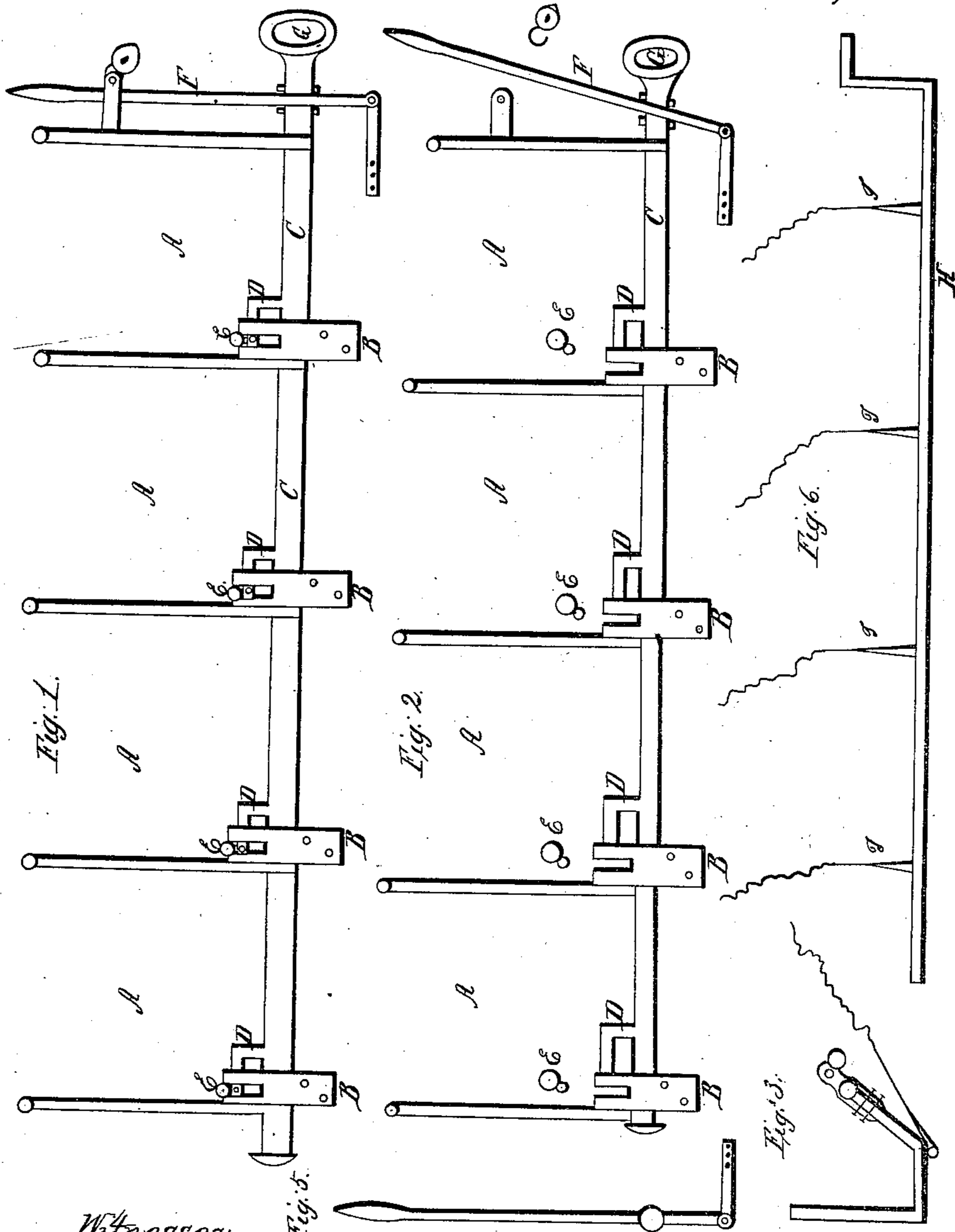


D. S. Neal.

Fire Escape for Horse Stall.

N^o 29,301.

Patented Jul. 24, 1860.



Witnesses;
J. C. Hickory.
Thomas Courtis

Inventor;
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UNITED STATES PATENT OFFICE.

DAVID S. NEAL, OF LYNN, MASSACHUSETTS.

FIRE-ESCAPE ATTACHMENT FOR HORSE-STALLS.

Specification of Letters Patent No. 29,301, dated July 24, 1860.

To all whom it may concern:

Be it known that I, DAVID S. NEAL, of Lynn, in the county of Essex and State of Massachusetts, have invented a new and useful improvement in horse-stalls, by means of which any number of horses can be loosened at once by a person outside of the building in case that fire or any accident or emergency should render it expedient to do so, of which the following is a clear, full, and exact description, reference being had to the accompanying drawings of the same, forming part of this specification, in which—

Figure 1—A, A, A, A, represent the stalls. C is a hollow iron pipe running from the outside of the building along the edge of the feeding-troughs.

D, D, D, D, are smaller hollow curved pipes connecting with the main pipe C and sliding in and out of two holes in the top of each of the clamps B, B, B, B, for the purpose of securing and loosening the tie-rings E, E, E, E.

E, E, E, E, are tie-rings to which the halters securing the horses are to be attached, and are secured in place by the small pipes D, D, D, D, and consequently loosened when these pipes are withdrawn.

F, is the lever outside of the stable or building by means of which the main pipe C is pulled outward, thereby withdrawing the smaller pipes D, D, D, D, from the holes in the clamps B, B, B, B, and so unloosing the tie-rings E, E, E, E, and enabling the horses thereby secured to leave their stalls.

Fig. 1 represents the lever secured on the

outside and the pipes D, D, D, D, in their places and the tie-rings consequently secured and fast. Fig. 2 represents the lever withdrawn and the pipes D, D, D, D, out of their places and the tie-rings consequently loose.

The main pipe C which is hollow can also be used as a means of forcing water into the building from the outside in case of fire, which can be distributed in the various stalls by means of the pipes D, D, D, D, when they are withdrawn as in Fig. 2. It can also be used as a speaking tube by means of which the word of command can be given to the horses in the different stalls.

In Fig. 6 H represents an iron rod running from the outside of the building or stable through the different stalls to which is attached whips I, I, I, I, playing in each of the stalls. The rod H is operated by the crank K on the outside of the building.

The utility of this combination to drive horses from their stalls which in case of fire they are generally reluctant to leave, is readily perceived.

What I claim as my invention and desire to secure by Letters Patent is—

1. The use of the main pipe C and the pipes D, D, D, D, constructed and described and operating in connection with the lever F in the manner and for the purpose set forth.

2. The whips I, I, I, I, in connection with and operated by the rod H and the crank K in the manner and for the purpose set forth.

DAVID S. NEAL.

Witnesses:

I. C. AUTHNEY,
THOMAS CURTIS.