F. Ewer.

Sliding Gate.

No. 61,526. Patented Jan. 29, 1867.

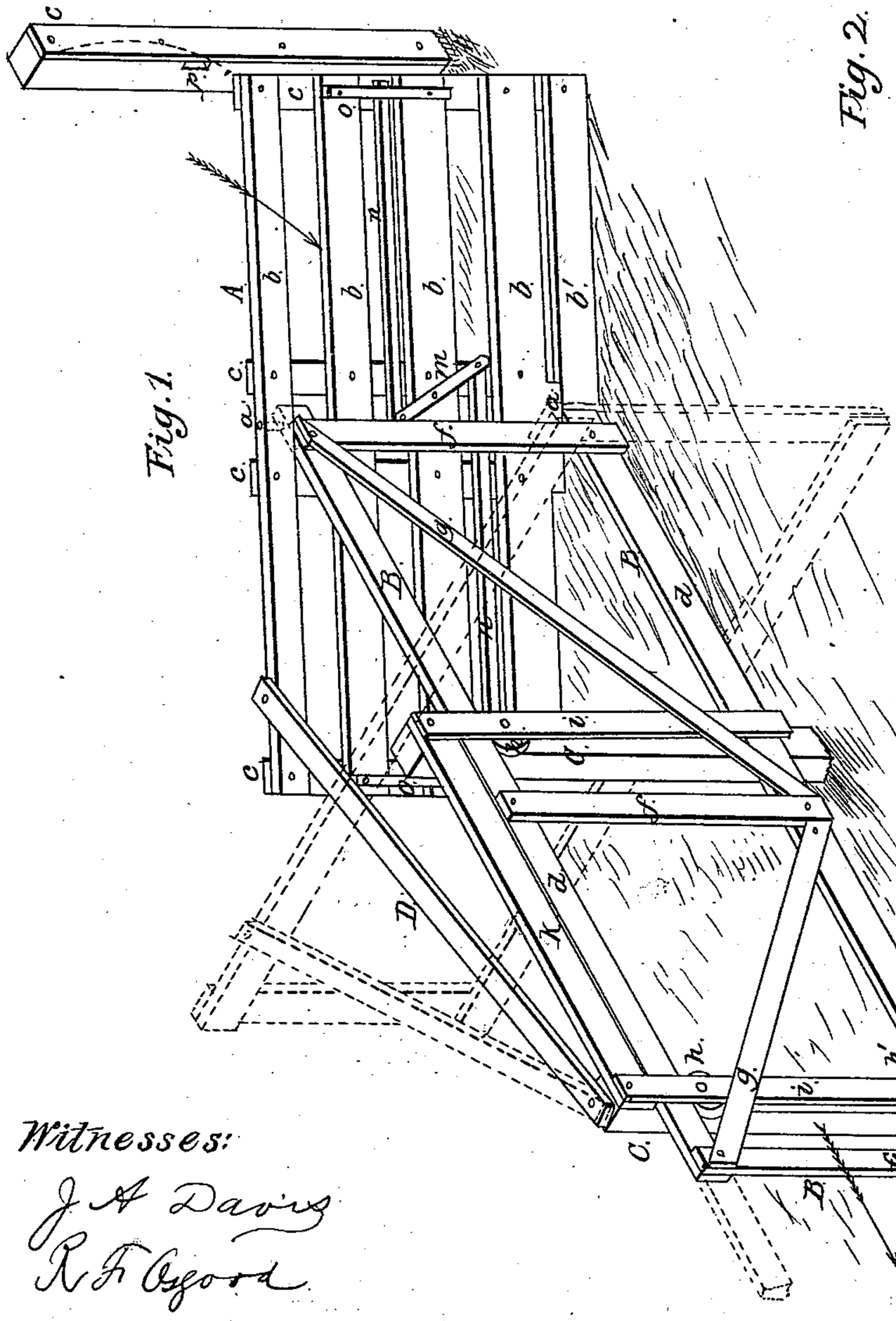

Fig. 1.

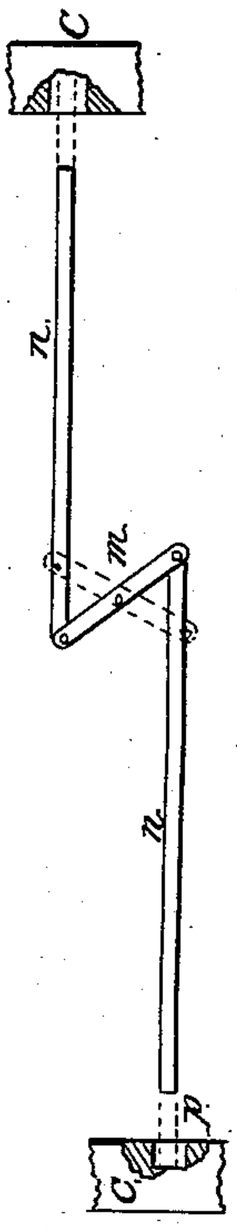

Fig. 2.

Witnesses:

J. A. Davis

R. F. Osgood

Inventor:

F. Ewer

By J. Fraser & Co.,

Attys

United States Patent Office.

FRANKLIN EWER, OF HONEOYE FALLS, NEW YORK.

Letters Patent No. 61,526, *dated January* 29, 1867.

IMPROVEMENT IN GATES.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, FRANKLIN EWER, of Honeoye Falls, in the county of Monroe, and State of New York, have invented certain new and useful Improvements in Gates; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of this specification.

Figure 1 is a perspective view of my improved gate partly swung open.

Figure 2, a side view of the double-acting catch.

Like letters of reference indicate corresponding parts in both figures.

My invention consists in the combination of a swinging gate, with a sliding section or panel, to which it is pivoted in such a manner that when the section is slid back the gate will swing around, and *vice versa;* also in the employment of a pivoted connecting-arm between said parts for producing the automatic action; and furthermore, in the combination of a double-acting catch with such a gate engaging with the opposite posts.

As represented in the drawings, A is the gate, and B the sliding section or panel. The gate is hung midway, or nearly so, upon the front end of the section by means of vertical pivots *a a* at top and bottom, by which it swings free. The gate is composed of the usual rails and battens *b c;* the bottom rail *b*, however, extends back but half way, as shown, the corresponding space in the rear shutting over the lower rail of the section or panel. The section or panel is preferably composed of two rails *d d*, and three battens *f f f*, with two braces *g g* extending diagonally from the top of the two end battens to the bottom of the middle one. This arrangement serves to brace the section or panel to hold the weight of the gate without sagging or bending. The upper rail of the sliding section rests on two friction-rollers *h h* at the top, secured to posts C C; and the under rail fits under a single friction-roller *h'*, at the bottom, in such a manner as to properly balance. I prefer to provide these rollers with proper flanges to hold the gate in place as it runs upon them; but, if desired, guides *i i* may be used for the purpose shown in the drawings. I also prefer to have the upper rail of the section slide under a fixed board, *k*, or equivalent, to hold the section in place. With the top of the rear post, and with the gate, at a suitable point rear of the pivot *a*, is connected an arm, D, pivoted to the said parts, as shown, which, as the gate is turned, holds it in position to swing around to one side, out of the way. Thus arranged, the gate can be opened either by the person standing in front, and swinging it around, or by standing in the rear, and sliding back the section or panel. The effect will be the same in either case, the gate swinging around to one side in the position indicated by red lines, fig. 1. This advantage of opening the gate, either from the front or rear, is of much importance, and can be accomplished in no other gate with which I am acquainted. The sliding panel at all times supports the gate firmly in place without sagging, either thrown forward or back, and at the same time it allows the gate to play easily thereon. It will be seen that, if desired, the connecting-arm D may at any time be detached from the gate, in which case, if only a small passage is required, the panel may be set back a suitable distance, and the gate simply swung around, as occasion requires. This arrangement is such as to work easily over snow. The lower rail of the gate occupies but half the length, and the corresponding space in the rear, which shuts over the lower rail of the sliding section, allows a free passage of the rear of the gate. In its action of swinging around, the turning movement is comparatively slow, being combined with the longitudinal one, so that it does not reach its right-angled position, as indicated by the red lines, till fully retracted. This produces less resistance in the snow than if fully swung around before being drawn back. When the arm D is detached it will also be seen that, by setting the gate free from the rear post, it may be slid back endwise with the section, which is of much advantage in case of deep snow. To the middle rail of the gate, at a suitable position, is attached a double-acting rock-arm, *m*, or equivalent; and to the opposite end of this are pivoted arms *n n*, which extend, respectively, forward and backward through guides *o o* at the ends of the gate, and project into mortises *p p* in the two opposite posts, thus securing a double fastening or a fastening to both ends of the gate. To release the catch from the posts, the arm *m* is turned to the opposite position. By thus fastening both ends of the gate, the same is not only made more secure, but any strain, when applied to the gate, is prevented from coming on the projecting section B.

I am aware that a sliding gate has been combined with a swinging crane, but that I do not claim.

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

1. The combination of a swinging gate, A, with a sliding section or panel, B, substantially as described, and for the purpose specified.

2. The combination, with a swinging gate, A, and sliding section or panel B, of the connecting-arm D, operating substantially as and for the purpose set forth.

3. The combination of the double-acting catch *n n* with the swinging gate A and sliding section or panel B, operating in the manner and for the purpose substantially as described.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

FRANKLIN EWER.

Witnesses:
R. F. OSGOOD,
J. A. DAVIS.