

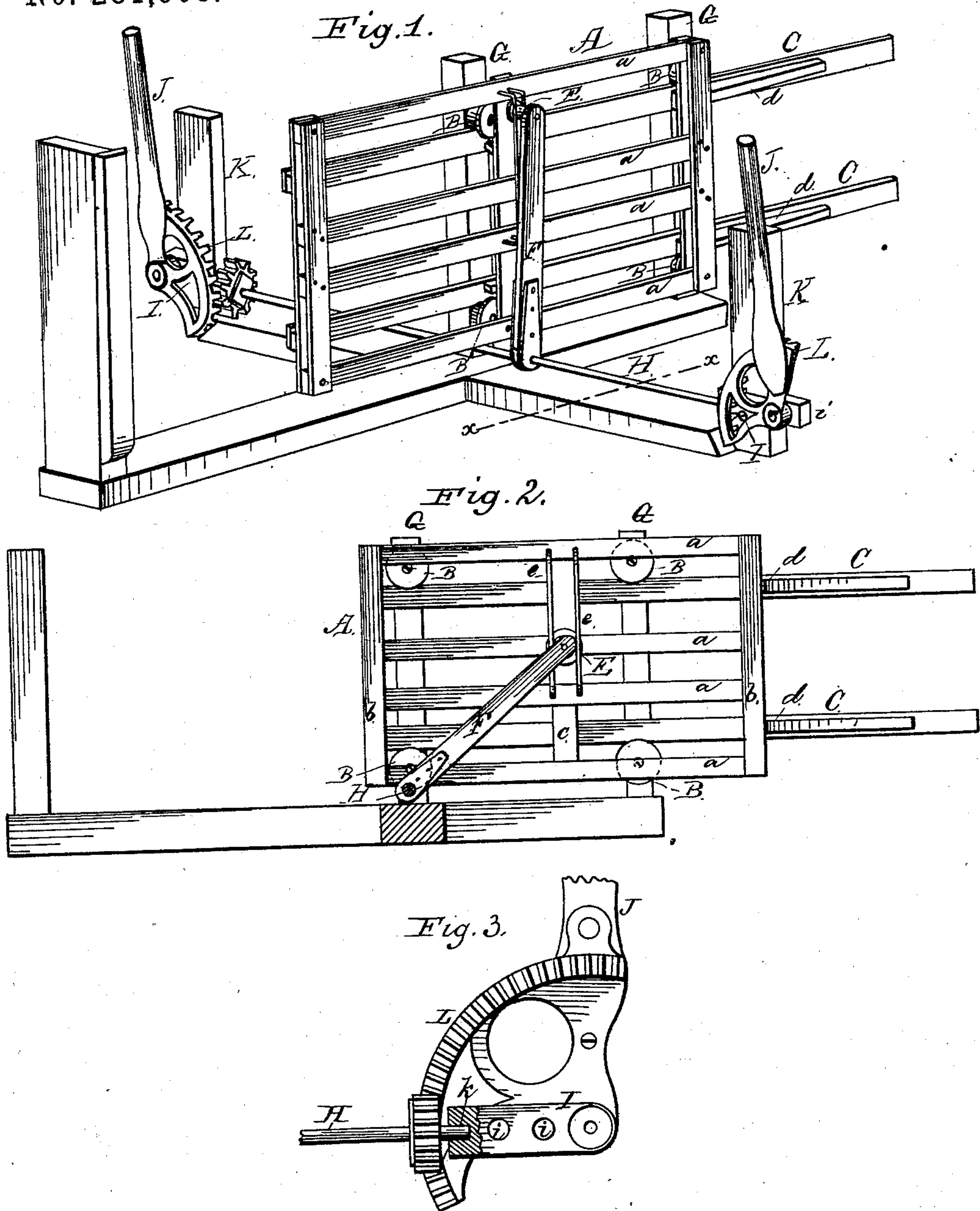
(No Model.)

S. J. MILLER.

SLIDING GATE.

No. 281,908.

Patented July 24, 1883.



Witnesses:

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SAMUEL J. MILLER, OF CAMBRIDGE CITY, INDIANA.

SLIDING GATE.

SPECIFICATION forming part of Letters Patent No. 281,908, dated July 24, 1883.

Application filed November 6, 1882. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL J. MILLER, a citizen of the United States of America, residing at Cambridge City, in the county of Wayne and State of Indiana, have invented certain new and useful Improvements in Sliding Gates; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

This invention relates to certain new and useful improvements in sliding gates and mechanism for operating the same, whereby the gate may be opened or closed by equestrians or persons in vehicles as they approach or leave the gate; and it consists in the construction of the gate, and in the combination therewith of the operating mechanism, as will be hereinafter set forth, and pointed out in the claim.

In the annexed drawings, Figure 1 is a perspective view of my invention. Fig. 2 is a side view, partly in sections, said sections being taken through the line *xx*, Fig. 1. Fig. 3 is a detailed view of a casting which forms the bearing for the rock-shaft and gear-segment.

A represents a gate which is composed of horizontal and vertical slats, the horizontal slats *a a* being placed above each other on the same vertical plane, though at different distances from each other, the inner or central slats being arranged at equal distances from the outer ones, as shown in the annexed drawings. These longitudinal slats are connected to each other by vertical battens *b b*, which embrace the ends of the same. These longitudinal slats are further secured to each other by a vertical central batten, C, which is cut away on the rear at its upper and lower ends for the passage of the rollers B B, which support the guide and gate.

On the rear of the gate, and to the vertical battens *b b c*, opposite opening between the top and bottom longitudinal slats, are secured guides and supporting-rails C C, which extend beyond the end of the gate. These rails are provided at their portion adjacent to the end of the gate with strips or braces, *d d*, which are

attached to the supporting-rail and the end of the gate. These braces prevent the supporting and guide rails from springing and strengthen the same. By arranging these slats C C upon the gate as described, a uniform appearance is given to the same, and additional longitudinal rails between the battens are dispensed with. The supporting-rails C C extend beyond the end of the gate to a distance equal to one-half the length of the same, at which distance one of the supporting-posts with rollers is located. The strips or braces *d d*, which are attached to the rails C C, at right angles with the same, allow the flanges of the rollers B B to overlap said rails and hold the gate in place.

Attached to the front of the gate, opposite the central vertical batten *c*, are two parallel bars or rods, *e e*, which project beyond the same. The ends of these rods are bent at right angles, and are secured to the longitudinal rails and vertical battens *c*. These rods embrace the flanged roller E, which is attached to the end of the operating-lever F.

The gate hereinbefore described is supported on the lower rail, which rests upon the flanged rollers attached to the lower portion of the posts G G, which posts are provided near their tops with similar rollers having flanges which overlap the upper portion of the top rail. These rollers embrace the guide-rail, so as to support the gate and prevent the same from tilting and being displaced laterally, and allow the same to be slid backward or forward to open or close the gate.

The lever F, which is provided on its end with a flanged roller, E, which is embraced between the rods *e e*, is connected at its lower end to a rock-shaft, H, which extends at right angles with the gate. This rock-shaft is provided at its end with bearing and pinion, said pinion being rigidly attached near the end of the shaft H. The ends of this transverse shaft rest within bearings formed in the end of the casting I I, which are attached to the lower portion of the posts K K. These castings I I, as shown in Fig. 3, consist of a rectangular plate, I', which is provided with end bearing or recess, *k*, and perforations *i i*, for attaching the same to the post. The opposite end of this casting is provided with an opening through which passes the pivot or bolt by means of

which the segment-gear L is attached to the same. This segment-gear is provided with an operating-lever J, which is bent so as to be within easy reach of a person in the vehicle.

5 This segment-gear meshes with the pinion on the shaft H, to which the lever for opening and closing the gate is attached.

By the construction and arrangement of the parts as hereinbefore described, I provide a gate
10 which is strong and not liable to sag, and which is easily operated, and from its simplicity is not liable to get out of order.

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

In combination with a sliding gate having supporting-rails C C, the flanged rollers B B, embracing said rails, vertical rods *ee*, and lever F, having flanged rollers E, and secured to a rock-shaft, H, having pinion and end bearing, 20 the same being operated by segment-gear L, with handles J, substantially as shown, and for the purpose set forth.

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

SAMUEL J. MILLER.

Witnesses:

THOMAS R. JESSUP,
WILLIAM E. COX.