C. E. GILLESPIE.

Farm Gates.

No. 133,980. Patented Dec. 17, 1872.

Fig. 1.

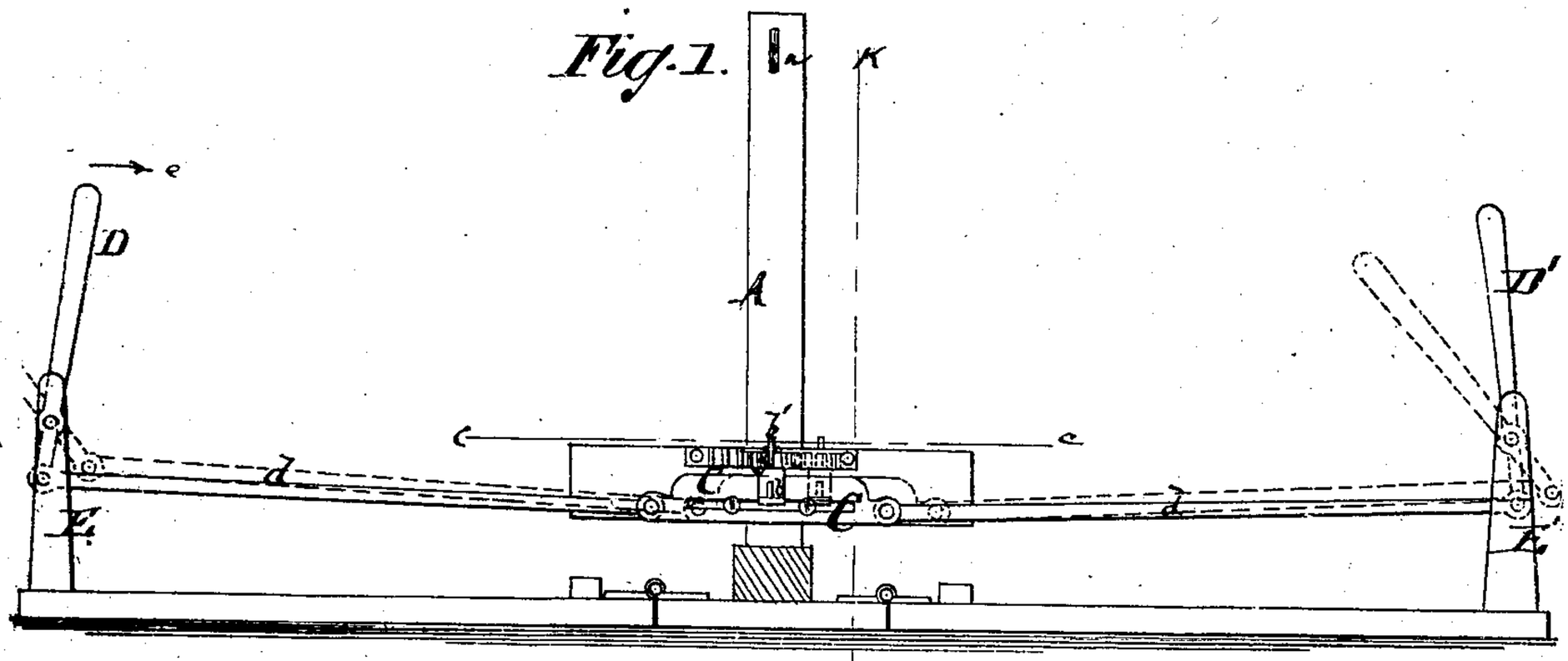


Fig. 2.

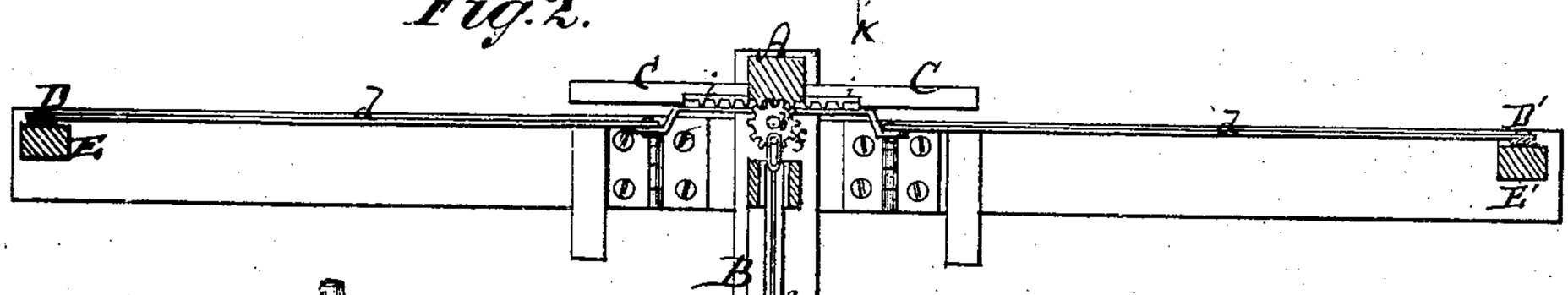
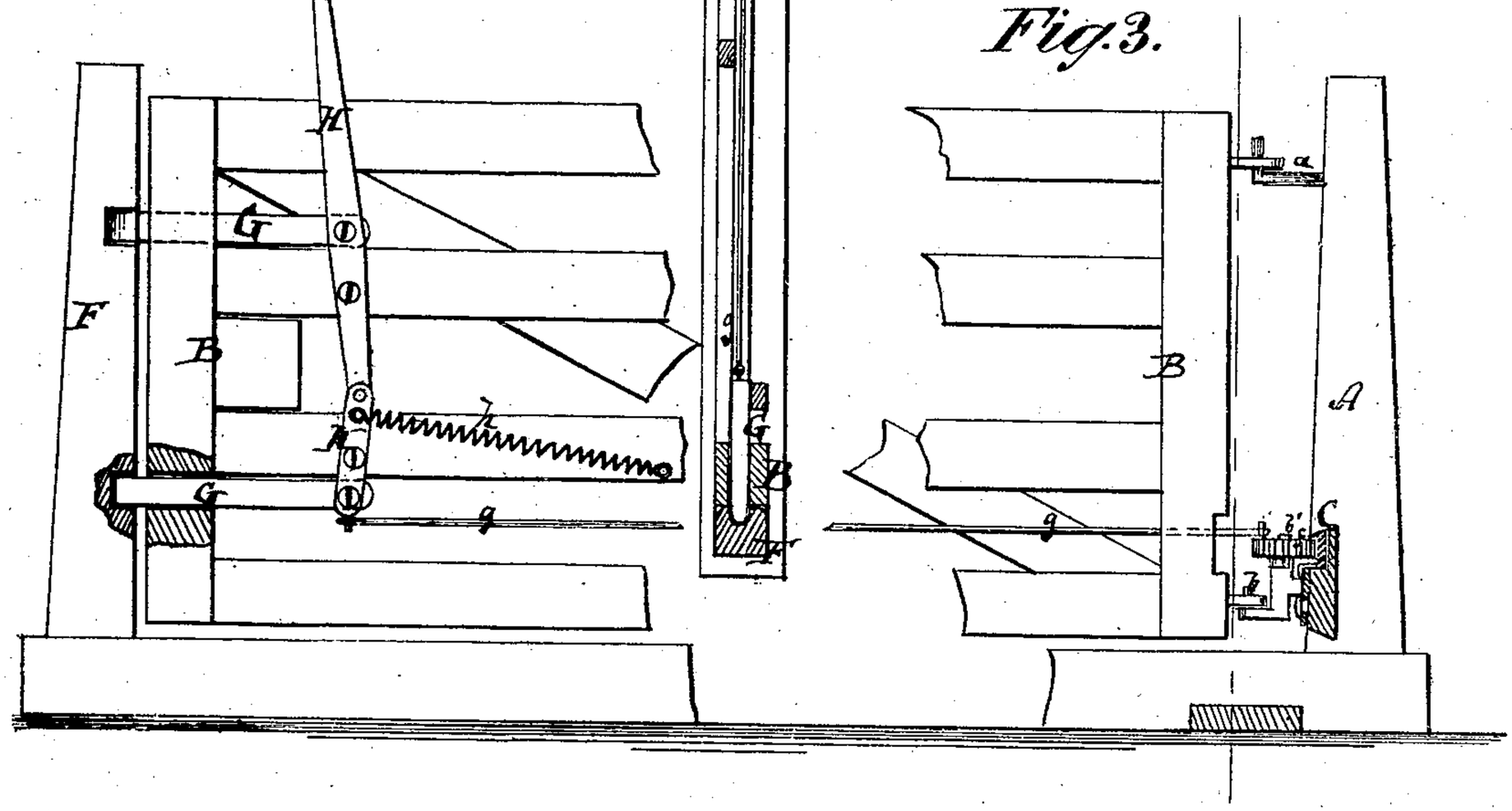


Fig. 3.



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UNITED STATES PATENT OFFICE.

CYRUS E. GILLESPIE, OF EDWARDSVILLE, ILLINOIS.

IMPROVEMENT IN FARM-GATES.

Specification forming part of Letters Patent No. **133,980**, dated December 17, 1872.

To all whom it may concern:

Be it known that I, CYRUS E. GILLESPIE, of Edwardsville, in the county of Madison and State of Illinois, have invented a new and useful Improvement in Gates, of which the following is a specification:

Figure 1 represents a face view of my apparatus for operating gates, the gate itself being removed. Fig. 2 is a horizontal section thereof on the line *c c*, Fig. 1, showing the gate; Fig. 3, a transverse section on the line *k k*, Fig. 1.

Similar letters of reference indicate corresponding parts.

This invention relates to an improved mechanism for operating gates on roadways at a distance therefrom so as to make it convenient for persons on horseback or in carriages to open such gates before reaching them, and to reclose them after they are passed, all without dismounting. The invention consists mainly in connecting the latch of the gate with a crank on a pinion that hangs on its lower pivot, so that as said pivot is moved to one side or the other the pinion will be turned and the latch opened to permit the opening of the gate.

In the accompanying drawing, the letter A represents the post to which the gate B is hung. *a* is the upper gate-pivot, fastened to the post. *b* is the lower gate-pivot, fastened to a horizontal slide, C, which is arranged on the face of the post at the lower part of the same. The slide C is, by rods *d*, connected with levers D D that are respectively pivoted to standards E E′ projecting from the ground at opposite sides of the gate at required distances therefrom. By swinging the lever D toward the gate in the direction of the arrow *e*, Fig. 1, the slide C will be drawn toward such lever D, and the pivot *b* with it. This will incline the gate so that it will open spontaneously and swing against the standard E′, provided such gate was closed against the post F, as in Fig. 2, previous to the aforementioned motion of the lever D. If the lever D′ is subsequently moved toward the post A the gate will be reclosed by the same process of shifting the pivot *b*. Upon a pin, *b′*, which is connected with the lower gate-pivot *b*, is hung a small pinion, *f*, which can be freely revolved on said pin *b*. A crank-pin of said pinion is, by a rod, *g*, connected with the latch G of the gate, which latch closes into the post F, as shown in Fig. 3, and is connected with a lever, H, and spring *h*. This spring tends to hold the latch closed; but when, by moving the slide C to either side, a rack, *i*, which is stationarily fixed to the post A, causes the pinion *f* to rotate while it is being shifted with the slide, its crank will be moved aside and will draw the rod *g*, and thereby pull the latch out of its socket in the post F, thus allowing the gate to open in the manner hereinbefore described.

The lever H can be used for opening the latch by persons on foot. The slide C is slotted and fastened to the face of the post by pins, so that it can be moved to either side.

The latch mechanism consists of the lever H, which has a knee-joint, kept straight by a spring, *h*, both parts being independently pivoted to the gate, and also pivoted together. Both parts are provided with latch-bolts that are both simultaneously moved in or out when the lever is swung on its pivot. The latch becomes thus double-acting.

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

1. The combination of the double or jointed lever and the sliding latch-bars pivoted thereto with the rod *g*, pinion, and rack, substantially as specified.

2. The pinion *f* hung on the slide C, and connected, by the rod *g*, with the gate-latch, as specified.

3. The rack *i*, fixed to the post A to gear into the pinion *f*, as and for the purpose set forth.

CYRUS E. GILLESPIE.

Witnesses:

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