H. GRAYBILL.

RAILROAD GATE.

No. 178,628. Patented June 13, 1876.

Fig: 1.

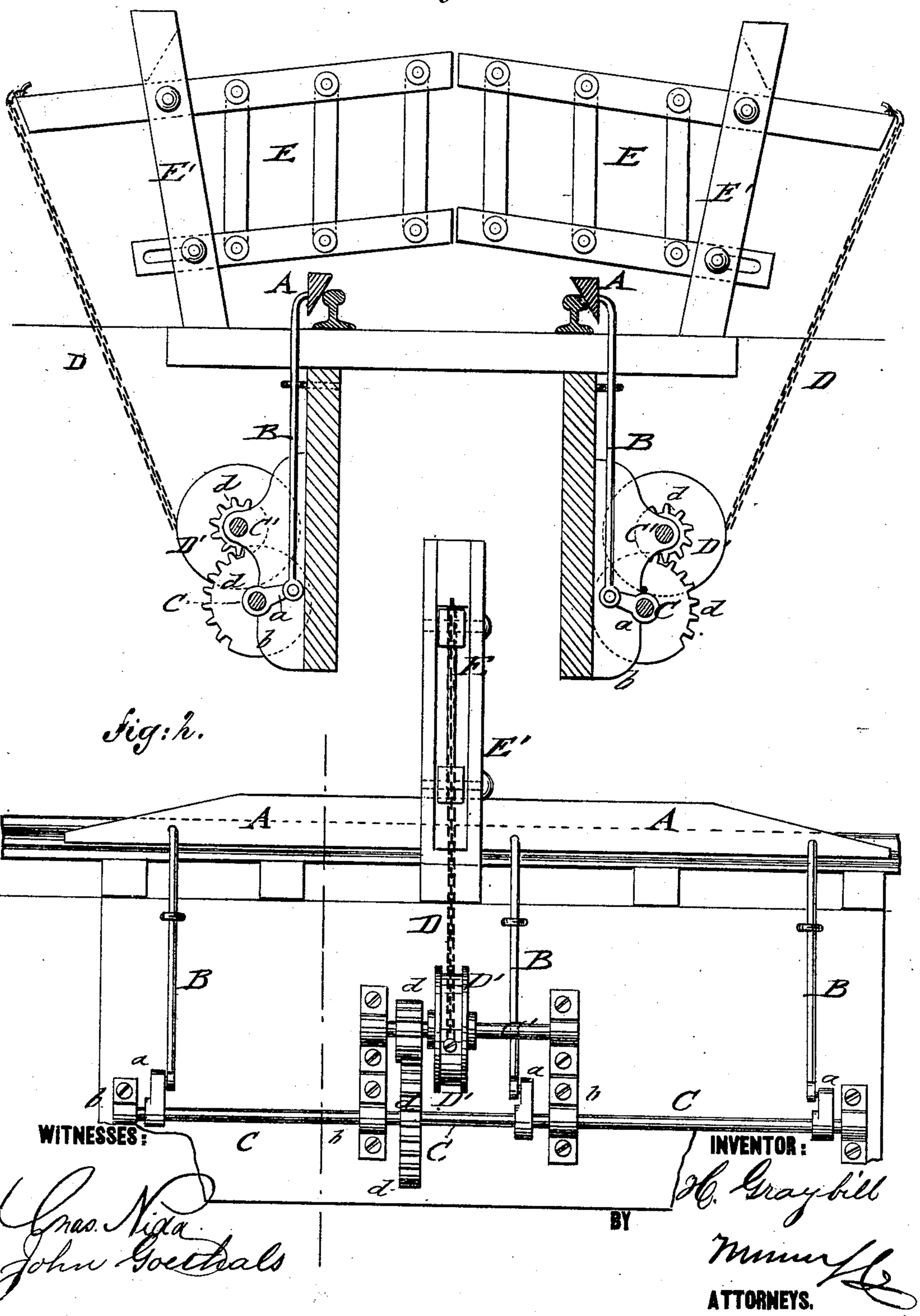

Fig: 2.

WITNESSES:

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UNITED STATES PATENT OFFICE.

HARMON GRAYBILL, OF CASSVILLE, WISCONSIN.

IMPROVEMENT IN RAILROAD-GATES.

Specification forming part of Letters Patent No. **178,628**, dated June 13, 1876; application filed April 25, 1876.

To all whom it may concern:

Be it known that I, HARMON GRAYBILL, of Cassville, in the county of Grant and State of Wisconsin, have invented a new and Improved Railroad-Gate, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a front elevation of my improved railroad-gate, shown in closed position as connected to the track, and Fig. 2 is a side view of the same.

Similar letters of reference indicate corresponding parts.

My invention has reference to an improved railroad, farm, or other gate that extends across the track and is automatically opened and closed by the trains; and the invention consists of swinging lateral gate-sections, that are thrown up to the outside of the track by the depression of the bearing-rails with inclined ends that operate by suitable transmitting mechanism the folding gate-sections.

In the drawing, A represents the bearing-rails with inclined ends, and of such shape as to project above the top of the rails in such a manner that they are depressed by the wheels of the cars, and raised again when the train has passed beyond the same. Each bearing-rail A is connected by a number of vertically-downward-extending crank-rods, B, that are guided in suitable staples with crank-arms *a* of a shaft, C, turning in bearings *b* of timber-supports, which are placed longitudinally below the track-rails to the length of the upper bearing-rails. The crank-shaft C revolves by mutilated pinions *d d*, a shorter drum carrying shaft C′, and produces the winding up of the gate-connecting chain D on the drum or cylinder D′. The chains D are attached to the upper extended rails of the gate-sections E, which are so pivoted to supporting-posts E′ that they fold and open readily by the action of the chains. The gate-sections E extend laterally across the track, and are made of top and bottom rails, with upright connecting-pieces pivoted thereto, so that when the train passes over the bearing-rails the chains wind up on the drums and swing the gate-sections upward in folded state to the outside of the track, allowing the train to pass. As soon as the wheels of the last car have left the actuating-rails the gates drop by their own weight and cause the return-motion of the bearing-rails into their former position ready for the next train. The actuating mechanism is protected against snow and moisture by being boxed up below the ties, and produces thus an automatic railroad-gate of reliable, simple, and durable construction.

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

The combination of the bearing-rail, crank-rods, crank-shaft, mutilated pinions, drum-shaft, drum, and chain, with the extended lever end of the top rail of the swinging gate-section, to produce opening and dropping of gate on depression and release of the bearing rail, substantially as specified.

HARMON GRAYBILL.

Witnesses:
J. B. ORTSCHEID,
T. B. WALKER.