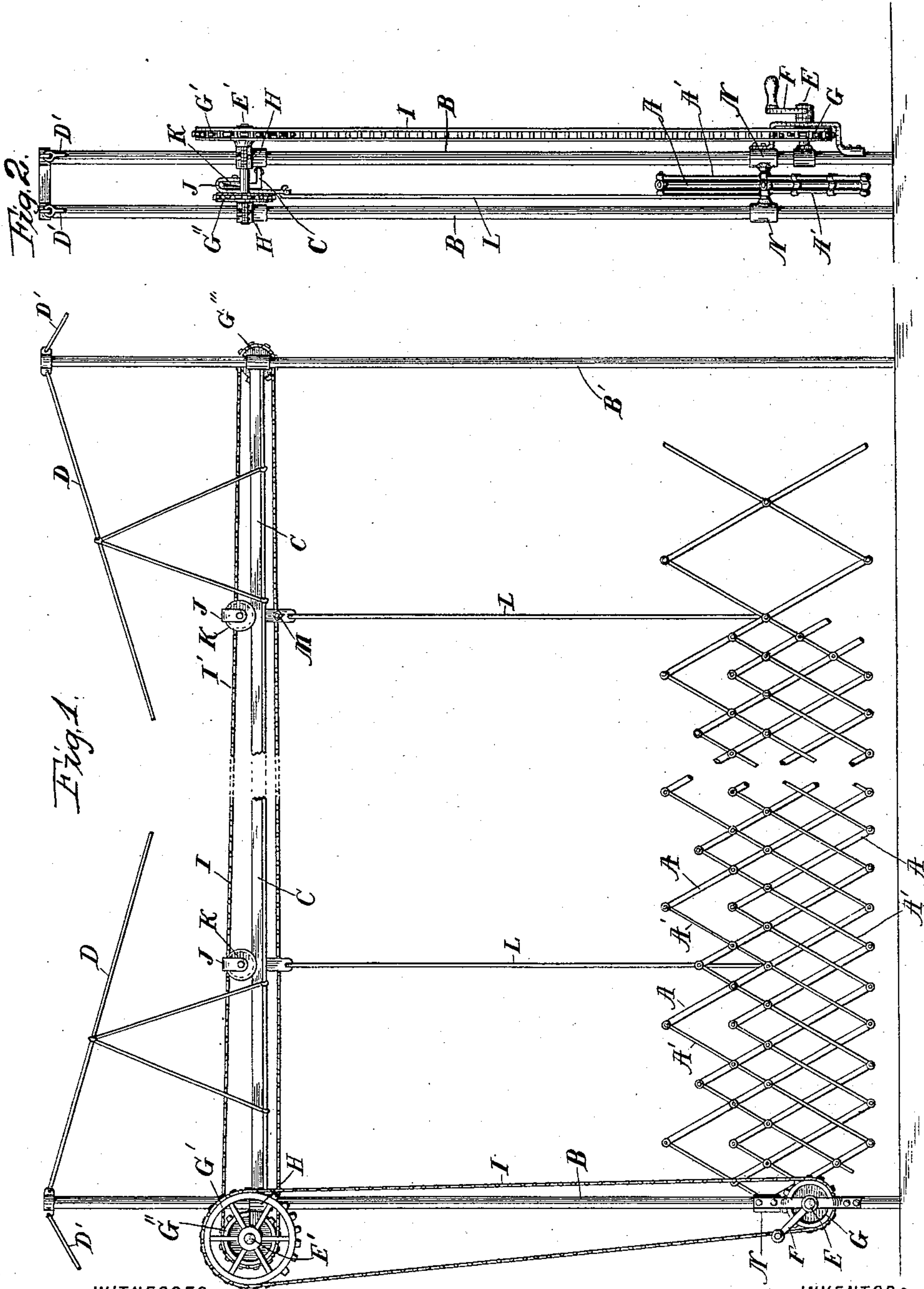


(No Model.)

C. H. & G. D. WESTOVER.
SAFETY GATE.

No. 471,738.

Patented Mar. 29, 1892.



WITNESSES:

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CHARLES H. WESTOVER AND GEORGE D. WESTOVER, OF GRAND RAPIDS,
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SAFETY-GATE.

SPECIFICATION forming part of Letters Patent No. 471,738, dated March 29, 1892.

Application filed March 11, 1891. Serial No. 384,604. (No model.)

To all whom it may concern:

Be it known that we, CHARLES H. WESTOVER and GEORGE D. WESTOVER, citizens of the United States, residing at Grand Rapids, in the county of Kent and State of Michigan, have invented certain new and useful Improvements in Safety-Gates; and we do hereby declare the following to be a full, clear, and exact description of the invention, such
10 will enable others skilled in the art to which it appertains to make and use the same.

Our invention relates to improvements in safety-gates for railway-crossings, bridges, and other like places; and it consists in certain new and useful devices for operating the same, hereinafter more fully described, and particularly pointed out in the claim, reference being had to the accompanying drawings, in which—

20 Figure 1 is a side elevation of a device embodying our invention, and Fig. 2 an end view of the same.

Like letters refer to like parts in both the figures.

25 The gate proper consists of a series of bars, or preferably iron pipes A and A', pivoted to each other at their extremities, and also at a portion of their crossing-points, as shown, and arranged to turn on said pivots in a vertical plane, the structure thus being capable
30 of longitudinal extension, having the usual lazy-tongs movement. At opposite sides of the street-crossing or other passage-way across which said gate is to be extended we erect posts B and B', of suitable height, between which is suspended a suitable track C,
35 of angle-iron, having its respective ends attached to said posts and sustained at intermediate points by suspension-rods D, attached to the top of the posts B B', to which
40 posts are also attached suitable guys D' to counteract the strain of the rods D. One end of the gate is pivoted to the collars N N on the posts B B', and at various points in the same horizontal plane are pivoted to
45 said gates suspension rods or cables L L, having at their upper ends hangers J, in which hangers are journaled grooved wheels K, adapted to traverse the track C. The gate
50 is thus suspended from an elevated track and

free to expand or contract longitudinally. The lateral or vertical contraction as the gate is extended will be in opposite directions toward the plane of the pivot and points of attachment described. If it is desirable that
55 the gate should run close to the surface below it, these pivots may be located along the bottom, which will then at all times remain in the same plane. To open and close this gate, we provide a shaft E, journaled in suitable bearings on one of the posts B and provided with a crank F and sprocket-wheel G,
60 which latter is connected with a sprocket-wheel G' on a counter-shaft E', journaled in hangers H H on the posts B B', opposite the
65 end of the track C. Said shaft E' is also provided with a sprocket-wheel G'', engaging another sprocket-chain I', which chain extends parallel with said track to and around a
70 wheel G''' on the opposite post B', thence back to the wheel G''. This chain is attached to the outer hanger J at M and serves to propel the same along the track C as the crank F is
75 turned, and thus opens and closes the gate.

From the foregoing description the operation of our device is obvious and needs no further explanation.

What we claim is—

The combination of posts at each side of the way to be closed, a gate of the class described pivoted at one end to said posts, an
80 elevated track in line with said gate, wheels adapted to traverse said track and supporting said gate, a shaft having a crank and sprocket-wheel near the pivoted end of said
85 gate, a counter-shaft near the end of said track having sprocket-wheels, a sprocket-chain connecting the crank-shaft and counter-shaft, and a sprocket-chain extending from
90 said counter-shaft parallel with said track and around a wheel at the opposite end thereof, said chain being attached to the outer wheel on said track, substantially as described.

In testimony whereof we affix our signatures in presence of two witnesses.

CHARLES H. WESTOVER.

GEORGE D. WESTOVER.

Witnesses:

LUTHER V. MOULTON,
MAY MOULTON.