

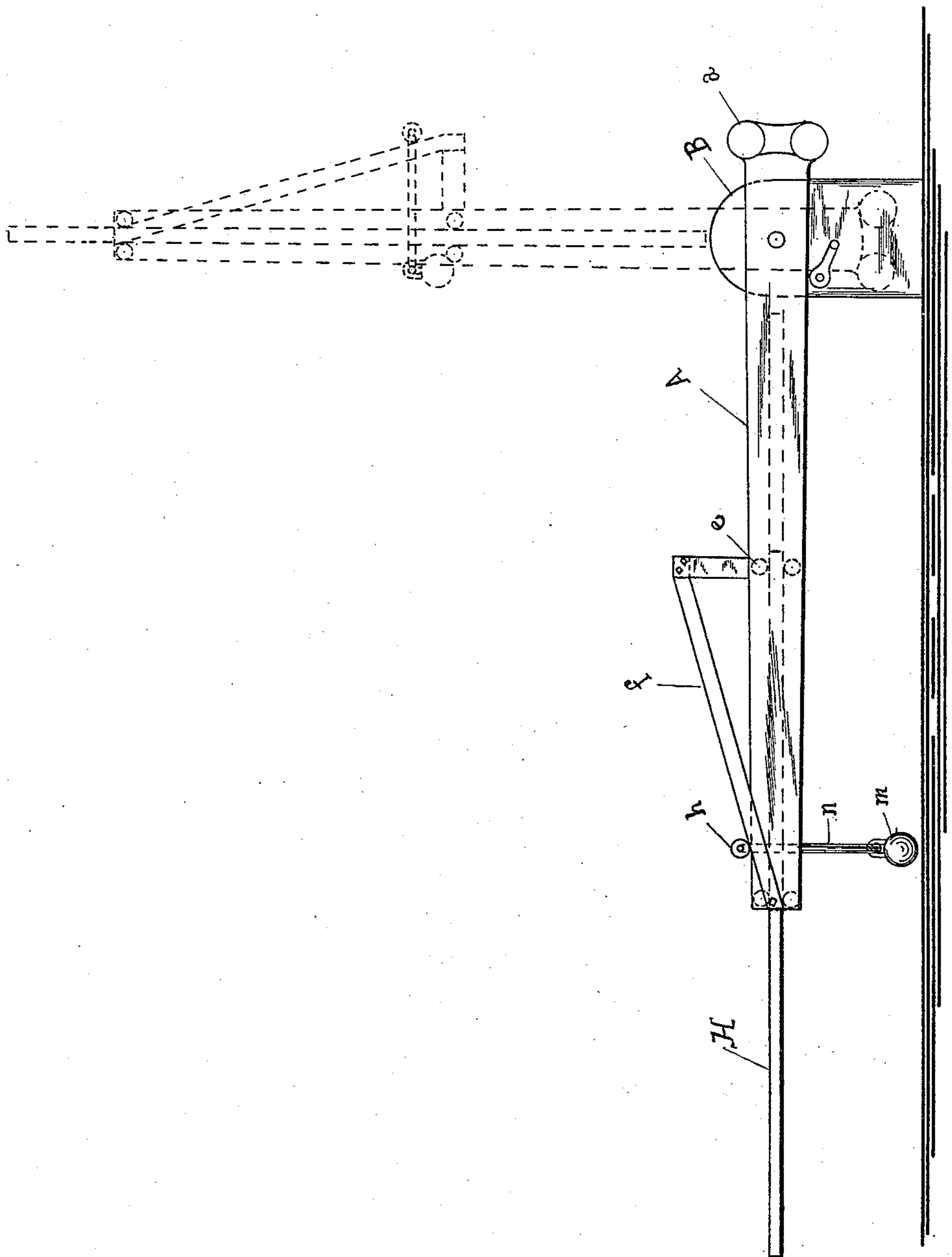
(No Model.)

A. R. BLETHEN & L. H. ALEXANDER.

RAILROAD CROSSING GATE.

No. 441,226.

Patented Nov. 25, 1890.



WITNESSES:

J. Foster Buscoe.  
C. E. Hamill

INVENTORS:

A. R. Blethen  
L. H. Alexander

By C. B. Tuttle  
Att'y

# UNITED STATES PATENT OFFICE.

ANDREW R. BLETHEN AND LEVI H. ALEXANDER, OF LYNN, MASSACHUSETTS.

## RAILROAD-CROSSING GATE.

SPECIFICATION forming part of Letters Patent No. 441,226, dated November 25, 1890.

Application filed May 2, 1890. Serial No. 350,325. (No model.)

*To all whom it may concern:*

Be it known that we, ANDREW R. BLETHEN and LEVI H. ALEXANDER, of Lynn, in the county of Essex and Commonwealth of Massachusetts, have invented certain Improvements in Railroad-Crossing Gates, of which the following, taken in connection with the accompanying drawing, is a specification.

This invention relates to that class of gates commonly used by railway companies at points where highways cross the railway to protect from danger highway travelers.

More specifically this invention relates to that class of the gates referred to which are mounted on sustaining-posts and tilted thereon from a horizontal to a vertical position, and which during the tilting movements are protracted and contracted longitudinally for the purpose of avoiding contact with overhead obstructions.

The object of this invention is to provide means to facilitate the said longitudinal movements of the gate; and to that end the invention consists, mainly, in matters of construction whereby a portion of the gate-arm is supported and moved longitudinally on the supporting and tilting part of said arm, as more fully described, and then specifically claimed hereinafter.

In the accompanying drawing our improved gate is represented in side elevation as extended across the roadway, and in dotted lines it is represented as shortened by the overlapping of its parts in a vertical position.

The gate comprises section A, which is mounted upon a supporting-post B, so as to tilt freely thereon from the vertical to the horizontal position, to which end it is counterbalanced by weights *a*. The section A supports the movable section H between anti-friction wheels *e*, which to that end are supported to turn on pins fixed to the section A.

Said section A further supports an inclined way-frame *f*, and supported to travel on the frame *f* is a wheel *h*, from which is pivotally suspended the rod *n*. Said rod *n* passes through a hole in the movable section H and has on its bottom end a weight *m*.

In operation the gate remains normally in the vertical position shown by dotted lines. In this position the section H is moved backwardly, as indicated. When the gate is moving from the vertical to the horizontal position, the incline *f* operates to carry forward the wheel *h*, together with its weighted rod *n*, and the section H of the gate-arm is forced forward to extend the gate-arm across the highway. When the gate-section A is being moved from the horizontal to the vertical position, the incline *f* becomes reversed and the wheel *h* moves backward, carrying the section H rearwardly alongside of section A, and thus the gate-arm is shortened, so as to avoid overhanging obstructions. It will be understood that the section H may be more or less extended—that is, constructed of a greater or less length, according to the amount of extension and shortening of the gate-arm that may be required. The incline *f* can be extended according to the length of section H, so as to cause the section H to ride completely by the side of section A.

We claim—

The combination, with the swinging mast A, of the sliding section H, inclined way-frame *f*, and the intermediate connections, substantially as described.

Signed at Lynn, Massachusetts, this 30th day of April, A. D. 1890.

ANDREW R. BLETHEN.  
LEVI H. ALEXANDER.

Witnesses:

JOHN E. MORSE,  
C. B. TUTTLE.