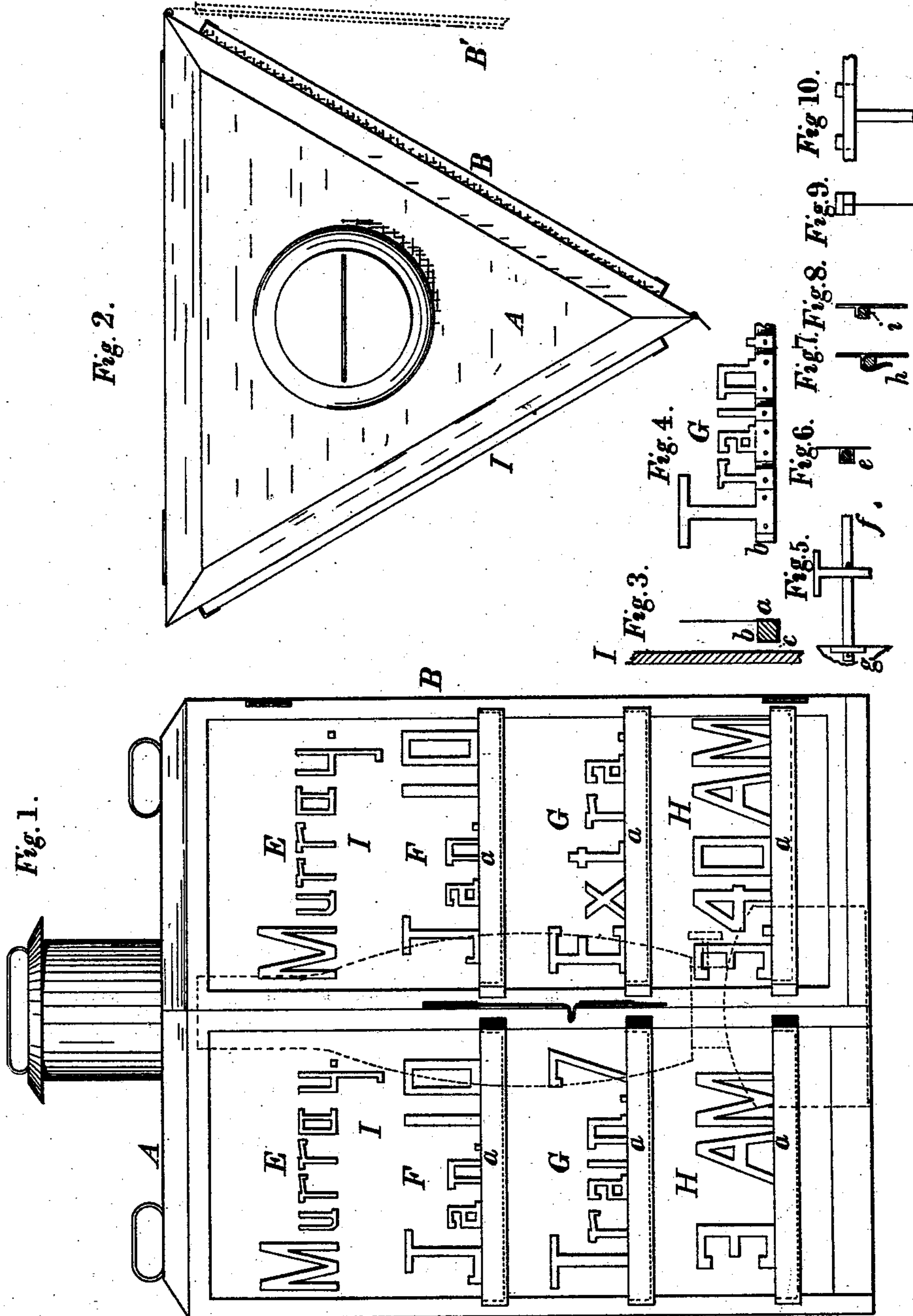


(No Model.)

J. M. KELLY.  
RAILWAY TIME INDICATOR.

No. 281,516.

Patented July 17, 1883.



WITNESSES-

H. G. Phillips.  
B. H. Caldwell.

A INVENTOR-

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# UNITED STATES PATENT OFFICE.

J. MILLER KELLY, OF ROCHESTER, NEW YORK.

## RAILWAY TIME-INDICATOR.

SPECIFICATION forming part of Letters Patent No. 281,516, dated July 17, 1883.

Application filed January 26, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, J. MILLER KELLY, of Rochester, New York, have invented an Improved Train-Indicator for Railway-Stations, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to an improved train-indicator for railway-stations, designed to indicate the time when the last train passed the station; and it consists of a train-indicator consisting of a case provided with translucent sides, internal means of illumination, and transverse troughs or supports adjacent to said sides, and with a series of independent characters adapted, substantially as described, for application to and removal from the supports freely and at will, and in the combination, with the ground or translucent glass of a train-indicator illuminated from the interior, of a permanent station-signal and detachable signals indicating the requisite information regarding preceding trains, as hereinafter specified in detail.

My improved train-indicator is represented in the accompanying drawings, in which Figure 1 is a front view. Fig. 2 is a plan view. Figs. 3 and 4 represent the signals detached. Figs. 5, 6, 7, 8, 9, and 10 represent modifications of the mode of attaching the signals.

My improved train-indicator consists of a case or frame, A, of suitable size, provided with ground or painted glass I I on its two exposed sides, and illuminated by a suitable lamp in its interior. In the drawings, Fig. 1, I have represented an ordinary kerosene-lamp as used for the illumination; but when the indicator is used at stations where gas can be obtained the signals may be displayed at night by the latter illuminant. One of the sides is formed by a door, B, consisting of a frame having translucent or ground glass sides and provided with suitable hinges and a catch, as represented in the drawings, so that access may be had to the interior of the case by opening the door, as represented at B', Fig. 2. The glass plates are preferably attached to the case by being slid into grooves at their edges formed of strips of sheet metal bent into proper shape and fastened to the case, this arrangement permitting the renewal of the glass with facility; but any other suitable mode of attaching the

glass may be employed. A reflector may be placed behind the lamp; but as the back of the case is either formed of bright metal or painted white it will not be found necessary to use a reflector. The name of the station at which the indicator is designed to be used is painted or otherwise permanently affixed to the translucent glass on both sides of the case, as indicated at E E.

The removable signals F G H, which, in general, will be the day of the month or the week, the number or descriptive name of the last train which has passed the station, and the time when it passed, are attached to the sides of the case in the following manner: A trough or support, a, which is preferably formed of sheet metal bent into the required shape, is affixed adjacent to the case or the door, so as to extend horizontally across the glass, at some little distance in front thereof. (See Fig. 3.) The detachable signals consist of characters, as letters or figures, formed of any suitable material, and provided at their lower ends with a block of wood or metal, b, Fig. 3, which fits the trough a, so that the signals may be readily removed from or applied to the trough. A number of troughs are employed—sufficient to afford support for the requisite signals. The interval c, Fig. 3, between the inner side of the trough and the front of the glass prevents any accumulation of snow, which otherwise might obscure the signals during the winter.

The glass may be either ground or painted white on its inner face; but I prefer to use ground glass, as the paint is liable to flake off after a time, and the ground glass not only affords the best illumination at night, but also forms a brilliant white background, against which the signals stand out boldly during the day-time. The name of the station and the troughs for sustaining the changeable signals are used on each of the glazed sides of the case, one of the sides showing the signals for trains passing in one direction and the other for trains passing in the opposite direction. The triangular form of the case is not essential; but it is desirable that the signals should be displayed at an angle with the track, as

Access might be had to the lamp in the in-



terior of the case through the rear thereof; but as the device, when put up for use, will generally be affixed to the wall of the station-house or other building, one of the glazed sides  
 5 is made to open as a door, as indicated in the drawings. Each indicator is furnished with a sufficient number of detached signals to convey the information desired as to the date of the month or the day of the week, the num-  
 10 ber or character of the last train, and the time when it passed the given station. The signals are preferably of a black or dark color.

In the practical use of my improved train-indicator the station-agent or other railway  
 15 employé at any given station, after the passage of a train, changes the signals, so as to indicate to the train-men of the next train proceeding in the same direction the character of the preceding train and the time when it passed  
 20 the station in question.

In Figs. 5, 6, 7, 8, 9, and 10, I have represented modifications of the means adopted for supporting the signals in front of the ground glass. Thus in Figs. 5 and 6 an eye, *e*, is af-  
 25 fixed to the back of the signals, and this slides over a bar, *f*, attached to the case or door, by being inserted in a hole in sockets *g*. In Fig. 7 the signal is attached to a bar by a spring-clip, *h*, which embraces the bar. In Fig. 8  
 30 the signal is provided with pins *i*, which are inserted in holes in the bar. In Figs. 9 and 10 the signal is inserted between two bars, being provided at its top with lugs or pins which sustain it in position.

35 I am aware that an opaque body containing an internal means of illumination and having

letters or characters cut through its sides has been provided with slides by means of which said openings could be closed.

I am also aware that street-lamps have been  
 40 provided with letters or characters attached thereto by means of two grooved bars, the characters being, however, designed to remain unchanged, and being secured permanently to  
 45 the frame by which they were carried, and the frame in turn attached permanently to the lamp.

This invention is restricted to the matters and things specifically claimed herein, the right  
 50 being reserved to make any other patentable features herein contained the subject of a separate application.

I claim—

1. In a train-indicator for railways, a case provided with translucent sides, internal means  
 55 of illumination, and transverse supports or troughs adjacent to said sides, with a series of independent characters adapted, substantially as described, for application to and removal  
 60 from the supports at will.

2. The combination, with the ground or whitened glass of a train-indicator illuminated from its interior, of the permanent station-sig-  
 65 nal E and the detachable signals indicating the requisite information about the last preceding train, substantially as and for the purposes set forth.

J. MILLER KELLY.

Witnesses:

CHAS. BUSH,  
 H. G. PHILLIPS.