

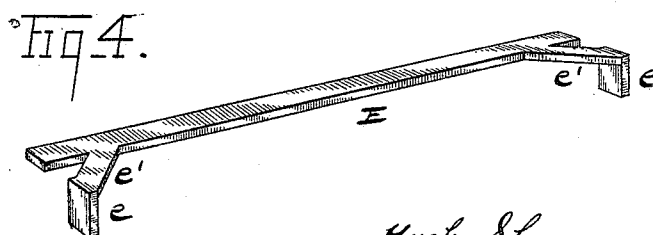
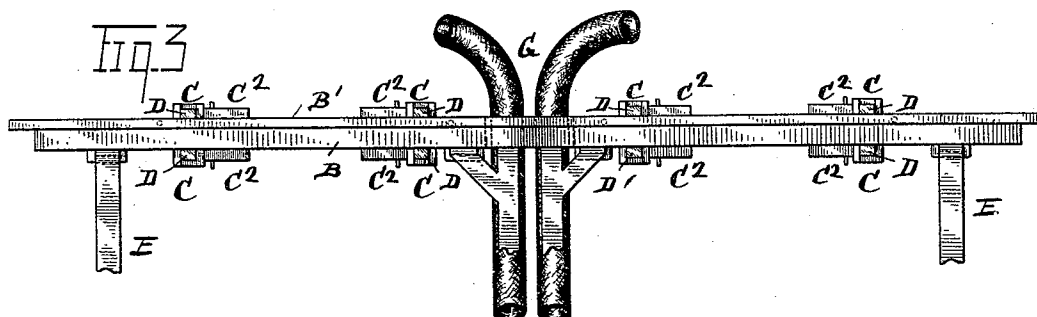
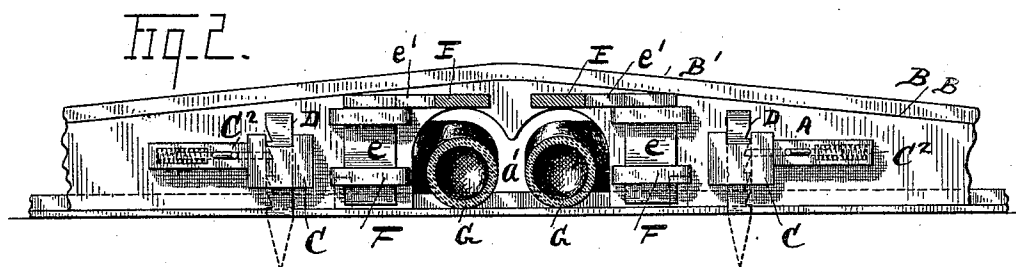
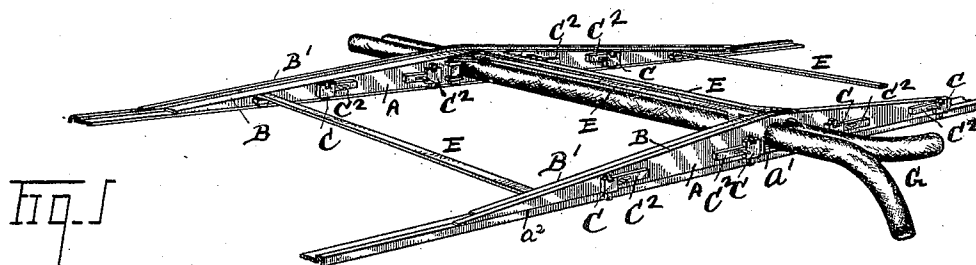
(No Model.)

2 Sheets—Sheet 1.

H. SHAY & E. KEATING.
CROSSING DEVICE FOR STREET CAR TRACKS.

No. 499,759.

Patented June 20, 1893.



Witnesses
Bertha Orth.
John F. Miller

Hugh Shay
Edward Keating
Inventors
By their Attorney
Newell S. Wright

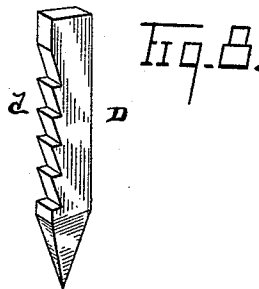
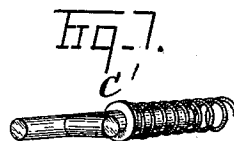
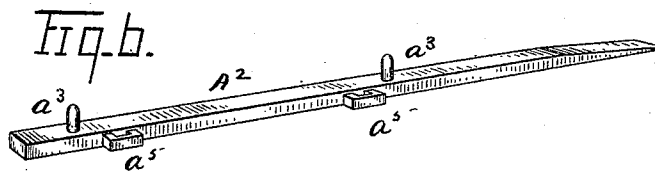
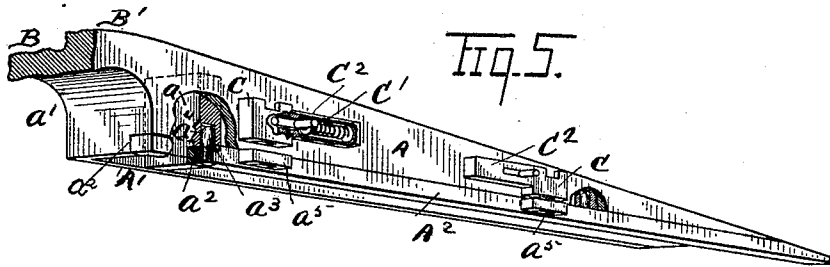
(No Model.)

2 Sheets—Sheet 2.

H. SHAY & E. KEATING.
CROSSING DEVICE FOR STREET CAR TRACKS.

No. 499,759.

Patented June 20, 1893.



Witnesses
Bertha Orth.
John F. Miller

Hugh Shay Inventor
Edward Keating
By their Attorney
M. W. Wright

UNITED STATES PATENT OFFICE.

HUGH SHAY AND EDWARD KEATING, OF DETROIT, MICHIGAN.

CROSSING DEVICE FOR STREET-CAR TRACKS.

SPECIFICATION forming part of Letters Patent No. 499,759, dated June 20, 1893.

Application filed December 15, 1892. Serial No. 455,273. (No model.)

To all whom it may concern:

Be it known that we, HUGH SHAY and EDWARD KEATING, citizens of the United States, residing at Detroit, county of Wayne, State of Michigan, have invented a certain new and useful Improvement in Crossing Devices for Street-Car Tracks; and we declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

Our invention has for its object, a new and useful crossing device, designed more particularly to enable street-cars to cross a fire hose.

It is well understood that oft-times, when a fire appears and it becomes necessary to stretch a hose across the street-car-track, the run of the street-cars is thereby prevented, and the operation of the whole street-car-line is much interrupted in consequence. Our invention is intended to overcome this difficulty, and to provide a means whereby a temporary crossing may be quickly and easily applied to the track, whereby the cars may continue to run, passing over the hose without any liability, whatsoever, of damaging the hose, and preventing any interference with the street-car travel, in consequence of the hose being laid across the track.

Our invention is designed to provide such means to effect these results, of a simple, economical and efficient character.

To these ends our invention consists of the construction, combination and arrangement of devices and appliances, hereinafter described and claimed, and illustrated in the accompanying drawings, in which—

Figure 1, is a view in perspective embodying our invention. Fig. 2, is an enlarged partial side elevation of one of the crossings, the same being broken away at its ends. Fig. 3, is a plan view of one of the crossings. Fig. 4, is a view in perspective of one of the center braces. Fig. 5, is a view in perspective of one end of one of the crossings. Fig. 6 is a separate view of one of the detachable bars. Fig. 7, is a detailed view of the spring latch. Fig. 8, is a detailed view of one of the driving stakes.

We carry out our invention as follows:

A, A', represent two risers united by suitable braces "a," said risers preferably made rounding intermediate their ends and rising toward the center thereof from each end, and being cut away toward the middle thereof to extend over one or more lines of hose as shown at "a'." At the upper edges of said risers is formed a track plate B, shaped to conform to the upper edges of said risers.

B', is a flange located upon the outer edge of said track-plate, the extremities of the flange projecting so as to lie in close proximity to the rails of the street-car-track, when in place, so that the car-wheel will readily ride upon the crossing device.

For certain forms of track, as for the ordinary tram-rails, the lower edge of the outer riser is cut away, as shown at "a²" Fig. 5, so that the crossing device can fit upon the track. For other forms of track, however, as for the ordinary grooved rail, said outer riser need not be cut away necessarily. But to adapt the crossing device for either form of rail, the outer risers may be cut away as above described, and a detachable bar A², may be provided which may be readily applied to fit in the cut away portion of one of the risers, two such detachable bars A², being required for the two ends of the outer riser. To readily apply said bars A², when required, each bar may be constructed with pins "a³" to fit into corresponding sockets "a⁴" in the cross braces "a." Upon the exterior surface of said risers is located a series of sockets C, to receive driving stakes D.

C' denotes spring latches located adjacent to the socket C, and communicating therewith, said latches reciprocating in suitable ways C². The driving stakes are constructed with a ratcheted edge as shown at "d," so shaped as to permit the ready driving of the stakes downward past the adjacent ends of the spring latches; the latches, however, normally preventing the upward movement of the stakes when driven, but allowing the removal of the stakes when the latch is disengaged therewith. The bars A² may be provided with loops or sockets a⁵, through which the driving stakes may be passed to aid in holding said bars in place. These detachable bars may readily be used when needed,

their extremities extending longitudinally past the extremities of the flange B'.

It will be understood that the device above described is duplicated for the opposite rail of the street car track, the two duplicated devices being connected by suitable braces E. These braces are preferably made removable so that the entire crossing device may be more compactly stored when not in use, and more readily transferred to the scene of action. For this purpose the two inner risers of the two duplicated devices may be constructed with sockets F, the braces being constructed with arms "e," to be readily engaged in said sockets F. We prefer to locate these connecting braces E, toward the outer extremities of the two duplicated crossing devices, and also adjacent to the middle thereof, as shown in Fig. 1. To more thoroughly protect the hose at the middle point, the two connecting braces may be located on each side of the hose, and be made to offset toward the center of the riser plates B, as shown in Fig. 1, the brace E and the arms e, being united by an angular brace arm e', arranged to make the adjacent cross brace offset from the vertical plane of the socket into which the corresponding arm e is engaged. This arrangement of the center cross braces not only tends to hold the two crossing devices in place but also to protect the hose from the feet of the horses in crossing the hose.

G, represents a line of hose over which the crossing devices are placed.

What we claim as our invention is—

1. In a crossing device for the purpose described, the combination of risers, cut away intermediate their ends, and at their outer lower edges a track plate and flange to guide a car-wheel, detachable bars for the cut away edges of the risers and a series of stake sockets located upon the sides of said risers, and of the bars, and stakes to fit said sockets substantially as set forth.

2. In a crossing device for the purpose described, the combination of risers, a track-plate and flange located upon their upper edges and rising toward the center, a series of stake sockets located on the outer faces of the risers, and spring latches located adjacent to said sockets, and extending thereinto, substantially as set forth.

3. In a crossing device for the purpose described, risers for each car track provided with track-plates and flanges located there-

upon, brace sockets upon said risers and connecting braces to connect the risers for two adjacent railway-rails, each of said braces being provided at each end with an angular brace arm, the outer end of which arm is provided with a depending projection for engaging with the brace sockets of the risers, whereby the main portion of each brace may occupy a position more nearly vertical above the hose substantially as set forth.

4. In a crossing device for the purpose described, risers for each railway-rail, braces connecting the risers of said rails intermediate the extremities of the risers, said braces offset toward the center of the risers, substantially as set forth.

5. In a crossing device for the purpose described, risers cut away intermediate their extremities and upon their outer lower edges for each rail of the car-track, provided with top track plates and flanges, and removable connecting braces to unite the risers of the two railway-rails, and detachable bars to fit the cut away portions of the edges, each of said bars being provided with pins to fit suitable sockets in the risers substantially as set forth.

6. In a crossing device for the purpose described, a track-plate, a guide flange, risers supporting said flange and track-plate, cut away intermediate their extremities, and rising toward the center thereof, a series of stake sockets engaged upon said risers, spring latches located adjacent to said sockets, and driving stakes having a ratcheted edge to engage in said sockets, substantially as set forth.

7. In a crossing device for the purpose described, risers A, A', extended upward intermediate their extremities and centrally cut away to extend over a fire hose, a track-plate and flange engaged thereupon, outside riser being cut away, substantially as set forth.

8. In a crossing device for the purpose described, risers A, A', having in combination therewith a track-plate and flange, the outer riser cut away and a detachable bar A² to fit into the cut away portion of said outer riser, substantially as set forth.

In testimony whereof we sign this specification in the presence of two witnesses.

HUGH SHAY.

EDWARD KEATING.

Witnesses:

N. S. WRIGHT,

JOHN F. MILLER.