No. 826,673. PATENTED JULY 24, 1906.

W. A. LAW.

ELEVATED TRACK.

APPLICATION FILED NOV. 20, 1905.

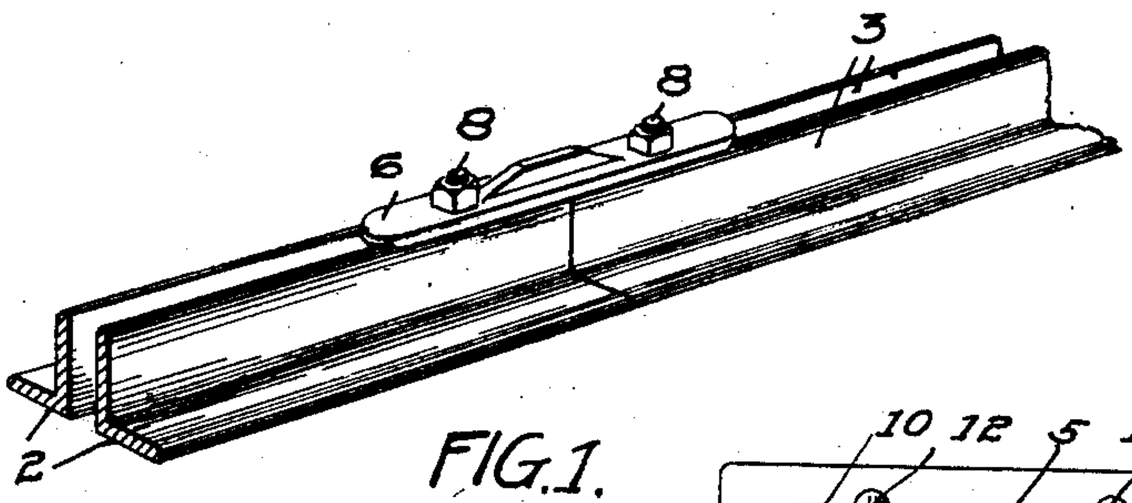

FIG. 1.

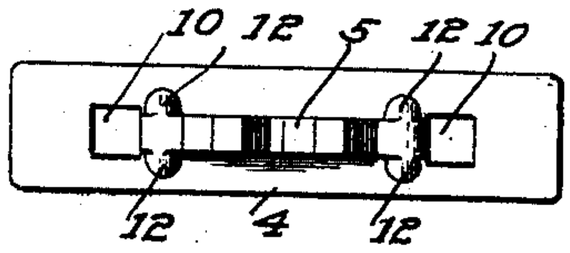

FIG. 4.

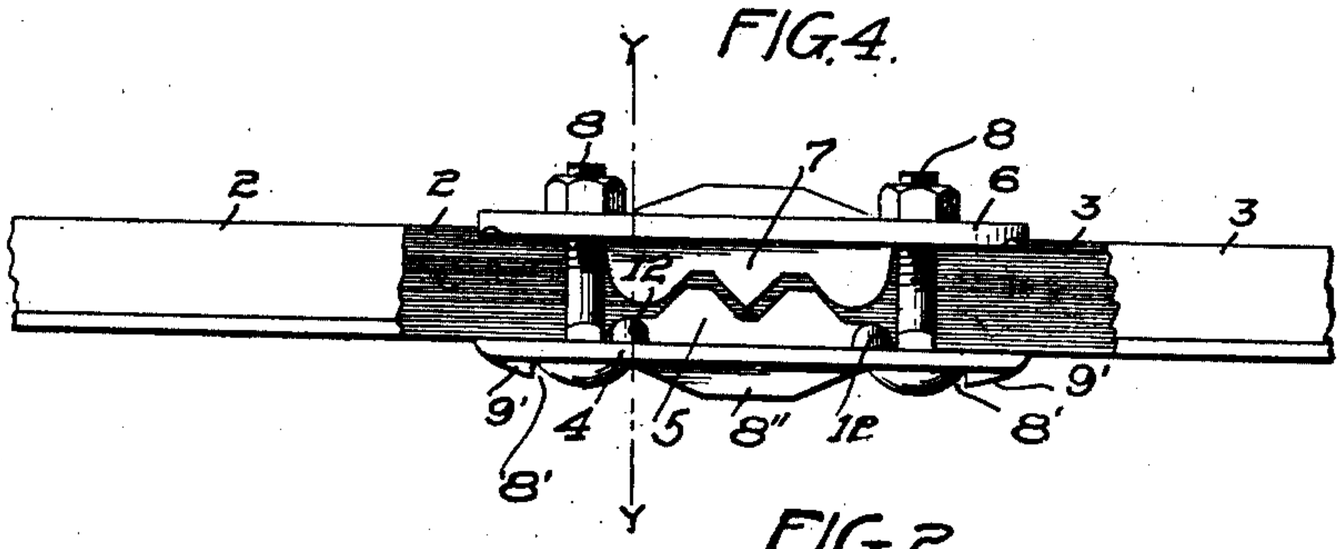

FIG. 2.

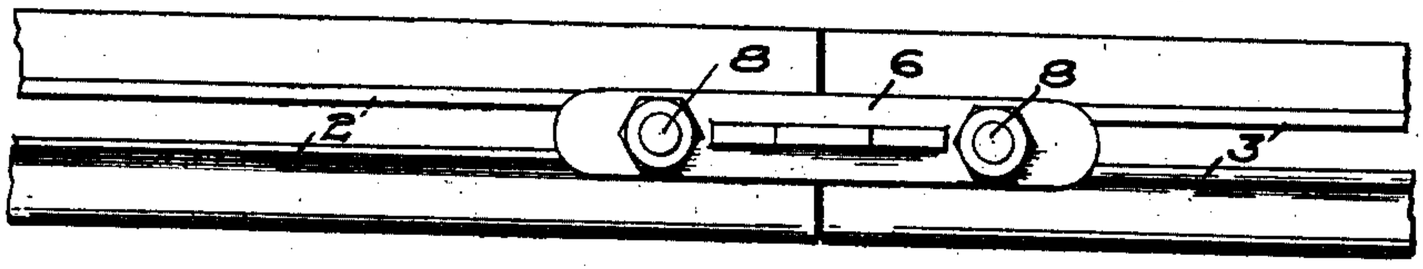

FIG. 3.

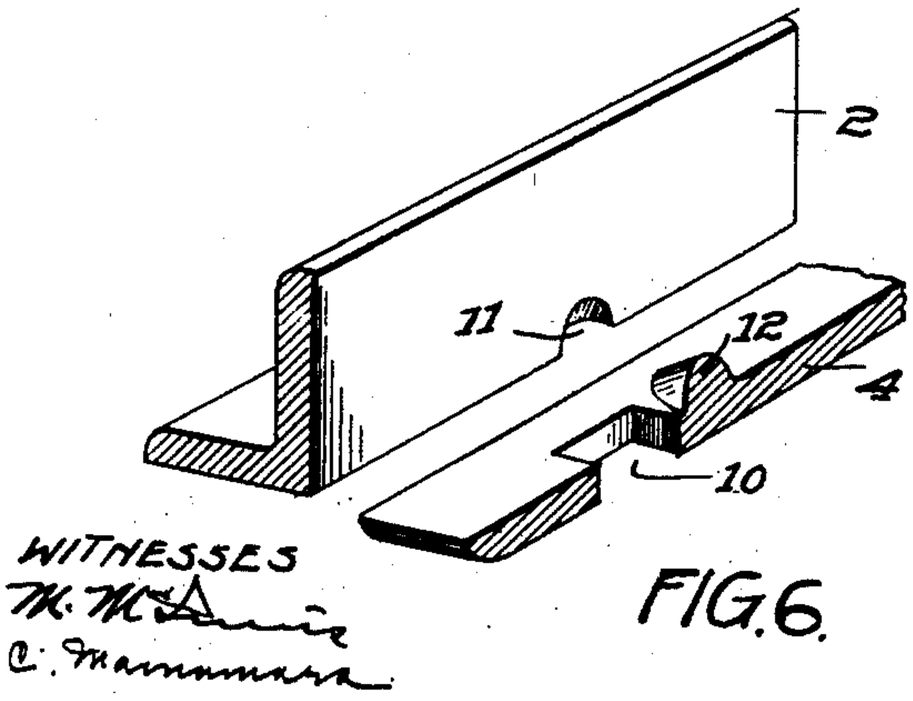

FIG. 6.

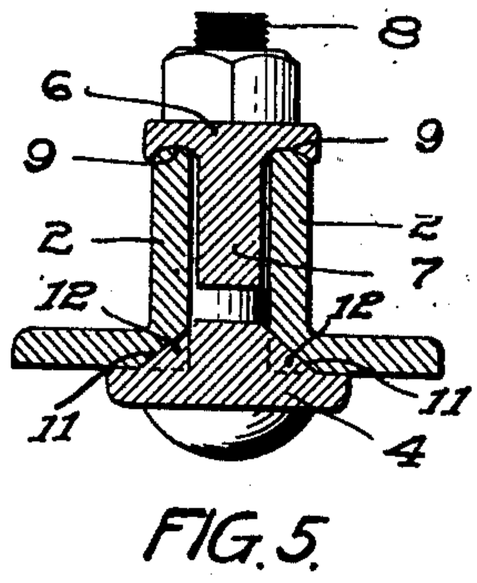

FIG. 5.

WITNESSES

INVENTOR

WILLIAM A. LAW

BY Paul & Paul

HIS ATTORNEYS

UNITED STATES PATENT OFFICE.

WILLIAM A. LAW, OF ST. PAUL, MINNESOTA.

ELEVATED TRACK.

No. 826,673. Specification of Letters Patent. Patented July 24, 1906.

Application filed November 20, 1905. Serial No. 288,159.

To all whom it may concern:

Be it known that I, WILLIAM A. LAW, a citizen of the United States, residing at St. Paul, Ramsey county, State of Minnesota, have invented certain new and useful Improvements in Elevated Tracks, of which the following is a specification.

My invention relates to elevated tracks such as are usually employed in connection with hay-carriers for supporting the carriage or car.

The object of my invention is to provide a track of simple construction and one which will be strong and durable and which cannot rack or twist at the joints.

My invention consists generally in an improved coupling device for locking the sections of track together at the joints and preventing lateral and longitudinal movement thereof.

In the accompanying drawings, forming part of this specification, Figure 1 is a perspective view of an elevated track-joint embodying my invention. Fig. 2 is a side view with one of the track-rails broken away, showing the construction of the coupling. Fig. 3 is a plan view. Fig. 4 is a detail view of the bottom plate of the coupling. Fig. 5 is a transverse sectional view on the line *y y* of Fig. 2, and Fig. 6 is a perspective view showing the locking means provided between the track-rails and the lower coupling-plate.

In the drawings, 2 2 and 3 3 represent the track-sections, composed, preferably, of angle-bar iron of suitable dimensions. The abutting ends of the track-sections are secured together by a coupling device, which I will describe in detail.

4 is the bottom plate, having a longitudinal upwardly-projecting web 5, and 6 is the top plate, having a similar depending web 7, the contiguous edges of said webs being toothed to allow them to interlock and prevent longitudinal movement of the plates when the coupling is clamped on the track. The webs lie between the vertical flanges of the track-rails when the coupling is put in place and serve to hold these flanges apart. Square-shanked carriage-bolts 8 are provided to connect the plates and permit them to be drawn snugly against the top and bottom of the track-rails and bind the abutting ends of the rails together at the joint. The upper plate 6 is preferably provided with longitudinal grooves 9 in its lower face to receive the upper edges of the vertical flanges of the track-rails and prevent the rails from spreading. (See Fig. 5.) The lower plate has square holes 10 to receive the squared shanks of the bolts and prevent them from turning and facilitate the adjustment of the coupling on the joint. The square shanks of the bolts serve as abutments against which the inner faces of the rails bear when the coupling is clamped on the joint. The use of the carriage-bolt insures a broad bearing-surface for the track-rails, and in some instances the webs provided on the upper and lower plates may be omitted, the flat surfaces of the bolt-shanks forming a sufficient bearing for the rails and holding them apart. The heads of the bolts are oval, as shown, and fit into recesses 8′, provided in a strengthening-rib 8″ on the lower plate. At the ends of this rib inclined surfaces 9′ are provided, which prevent the hay-carrier from striking the heads of the bolts.

To prevent longitudinal movement of the rails in the coupling, I provide recesses 11 in each rail, preferably at the angle formed by the intersection of the vertical and horizontal flanges, and lugs 12 are formed on the lower plate 4 to enter these recesses and lock the rails and the coupling-plates against relative longitudinal movement. At suitable intervals between the joints of the track cross-rivets may be provided connecting the rails. These, however, form no part of my present invention, and I have not thought it necessary to illustrate them in this case, as they are entirely independent of the coupling device. A coupling of this kind will be comparatively inexpensive to manufacture, can be easily applied when the track is set up, and will bind the track-sections securely at the joints and positively prevent lateral or longitudinal movement of the rails at that point.

I claim as my invention—

1. The combination with the angle-bar track-rails, of a coupling comprising an upper and a lower plate and means securing them together, and said upper plate having longitudinal grooves to receive the upper edges of the vertical flanges of said rails and prevent them from spreading, substantially as described.

2. The combination with the angle-bar track-rails having recesses in the angle formed by the intersection of the horizontal and vertical flanges, of a coupling comprising a lower plate having lugs to enter said re-

cesses, and means for clamping said plate to the bottom of said rails, substantially as described.

3. The combination with the angle-bar track-rails having recesses formed at the intersection of their horizontal and vertical flanges, and a coupling comprising a lower plate having lugs to enter said recesses, and an upper plate to rest upon the vertical flanges of said rails, and bolts connecting said upper and lower plates.

4. The combination with the track-rails having recesses formed therein, of a coupling comprising a lower plate having lugs to enter said recesses, an upper plate and bolts connecting said upper and lower plates and binding them securely together, substantially as described.

In witness whereof I have hereunto set my hand this 17th day of November, 1905.

WILLIAM A. LAW.

Witnesses:

RICHARD PAUL,

C. MACNAMARA.