No. 838,738. PATENTED DEC. 18, 1906.

F. J. & E. L. McGUIRE.

TRACK FASTENING.

APPLICATION FILED OCT. 1, 1906.

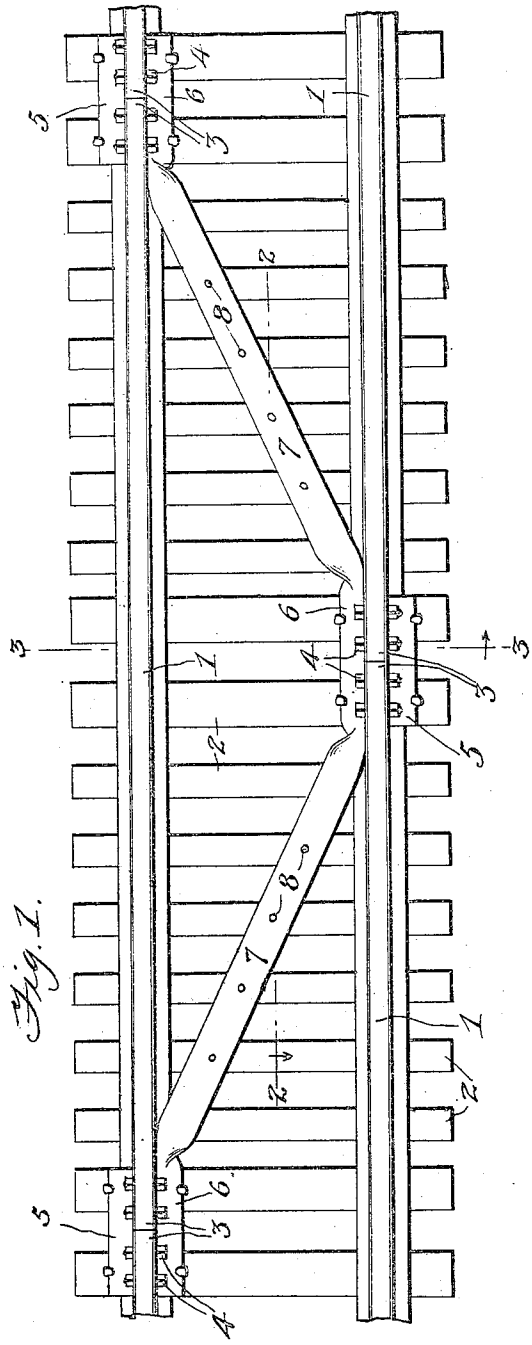

Fig. 1.

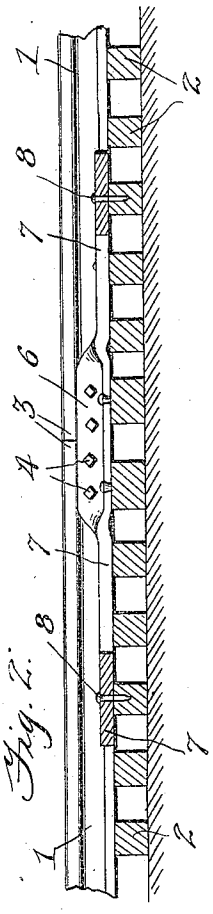

Fig. 2.

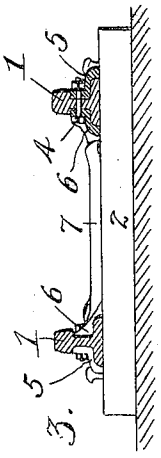

Fig. 3.

Witnesses

J. A. Griesbauer Jr.

C. H. Griesbauer

Inventors

F. J. and E. L. McGuire

by A. Bonsall & Co

Attorneys

UNITED STATES PATENT OFFICE.

FRANK JAMES McGUIRE, OF LONG EDDY, AND EDWARD L. McGUIRE, OF HANKINS, NEW YORK.

TRACK-FASTENING.

No. 838,738. Specification of Letters Patent. Patented Dec. 18, 1906.

Application filed October 1, 1906. Serial No. 336,970.

To all whom it may concern.

Be it known that we, FRANK JAMES McGUIRE, residing at Long Eddy, and EDWARD L. McGUIRE, residing at Hankins, in the county of Sullivan, State of New York, citizens of the United States, have invented certain new and useful Improvements in Track-Fastenings; and we do 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.

Our invention relates to improvements in railway-tracks, and more particularly in the fastening means which connect the track-rails together for the purpose of preventing them from spreading and creeping.

The object of the invention is to provide a track-fastening of this character which will be of simple and comparatively inexpensive construction, very strong and durable, and well adapted for the purpose intended.

With the above and other objects in view the invention consists of certain novel features of construction, combination, and arrangement of parts hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a plan view of a portion of a railway-track, showing the application of our invention thereto. Fig. 2 is a detail vertical longitudinal sectional view taken on the plane indicated by the line 2 2 in Fig. 1, and Fig. 3 is a vertical transverse sectional view taken on the line 3 3 in Fig. 1.

Referring to the drawings by numeral, 1 denotes the usual track-rails secured upon the usual cross-ties 2 by spikes or other suitable fastening means, so that the rail-sections upon the opposite sides of the track break joints. The abutting ends 3 of these rail-sections 1 are connected by bolts or similar fastening devices 4, which are passed through the usual fish-plates 5, arranged upon the outer sides of the track-rails, and fish-plates 6, which are disposed upon the inner sides of said track-rails and are formed integral with a truss bar or brace 7, which connects the two sides of the track together and is secured upon the cross-ties 2, so that creeping and spreading of the track is prevented. This improved connecting device 7 is formed, preferably, from a flat metal rod or bar which is bent at suitable points to provide the fish-plates 6, which extend vertically or at right angles to the intermediate portions 7, which latter are disposed angularly or diagonally and lie in a horizontal plane upon the tops of the cross-ties 2. These flat connecting portions 7 may be secured upon the cross-ties 2 by spikes 8 or any other suitable fastening means. Both the fish-plates 5 and 6 are shaped to fit the vertical web portions and the horizontal base-flanges of the track-rails 1, and they are formed with alining openings, which register or aline with elongated openings in the ends 3 of the track-rails 1, so as to receive the fastening-bolts or the like 4. The fish-plates are also secured upon the cross-ties by the usual spikes, as shown. While the truss bar or brace 7 may be of any desired length, we preferably make it of slightly greater length than a rail-section and have one of the fish-plates at its center and one at each of its ends, the fish-plates being connected by the two diagonal portions, as clearly shown in Fig. 1 of the drawings.

From the foregoing description, taken in connection with the accompanying drawings, the construction, operation, and advantages of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of the invention as defined by the appended claims.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The combination with a base and track-rails secured thereon, of a connecting-brace bent to form longitudinal portions and angular or diagonal portions, means for securing said diagonal portions upon said base, and means for securing said longitudinal portions upon said track-rails.

2. The combination with a base and track-rails secured thereon, of a connecting-bar bent to provide longitudinally-extending vertical portions or fish-plates adapted to engage the inner faces of said rails, and intermediate diagonal connecting portions adapted to rest upon said base, and fastening devices for securing said longitudinal por-

tions to said rails and said diagonal portions to said base, substantially as described.

3. The combination with a base and track-rails secured thereon, the sections of said rails upon opposite sides of the track being arranged to break joints, of fish-plates upon the outer sides of said rails at their abutting ends, a connecting-bar having longitudinal portions shaped to form fish-plates and engaged with the inner faces of said rails at their abutting ends and diagonal connecting portions engaged with said base, means for securing said diagonal portions upon said base, and fastening means passed through said fish-plates and said rails for securing the same together, substantially as described.

4. The combination with cross-ties and track-rails secured thereon, the rail-sections upon opposite sides of the track being arranged to break joints, of fish-plates engaged with the outer faces of said rails at their abutting ends, a connecting-bar bent to provide longitudinally-disposed vertical portions or fish-plates adapted to engage the inner faces of said rails at their abutting ends, and flat, horizontal, diagonally-extending portions engaged with the tops of said cross-ties, means for fastening said diagonal portions upon the cross-ties, and bolts or the like passed through said fish-plates and said rails, substantially as shown and described.

In testimony whereof we have hereunto set our hands in presence of two subscribing witnesses.

FRANK JAMES McGUIRE.
EDWARD L. McGUIRE.

Witnesses:
MORGAN L. McKOON,
EMMA McGUIRE.