

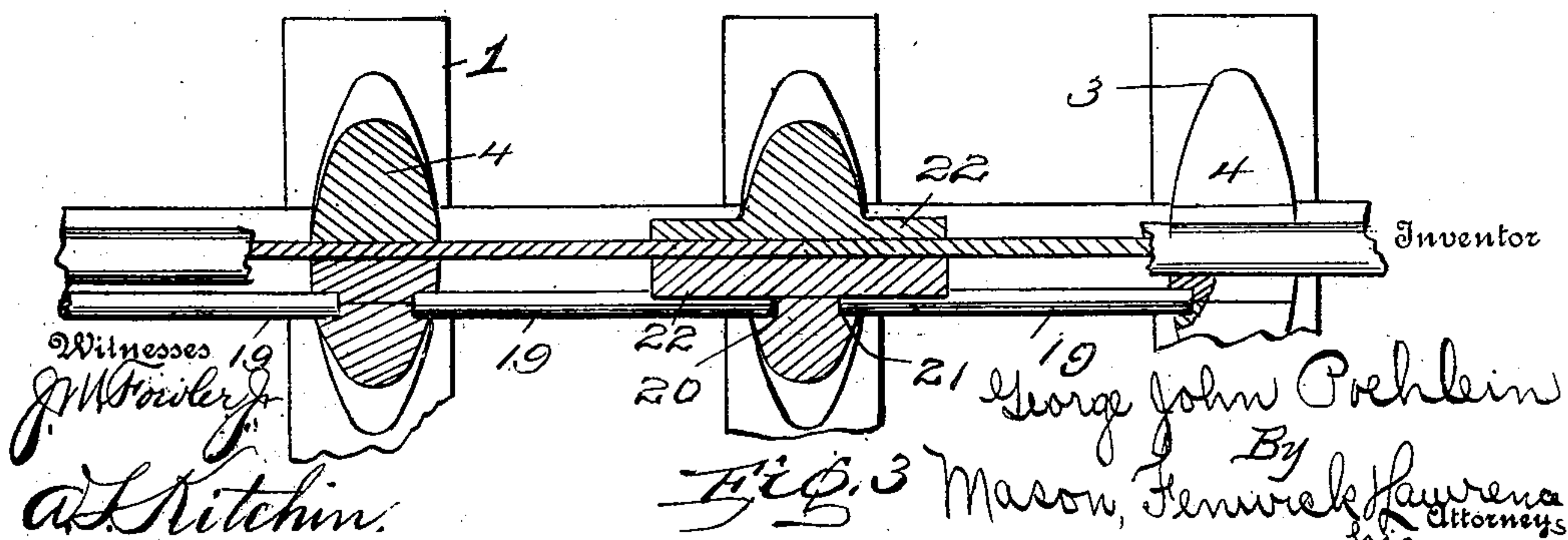
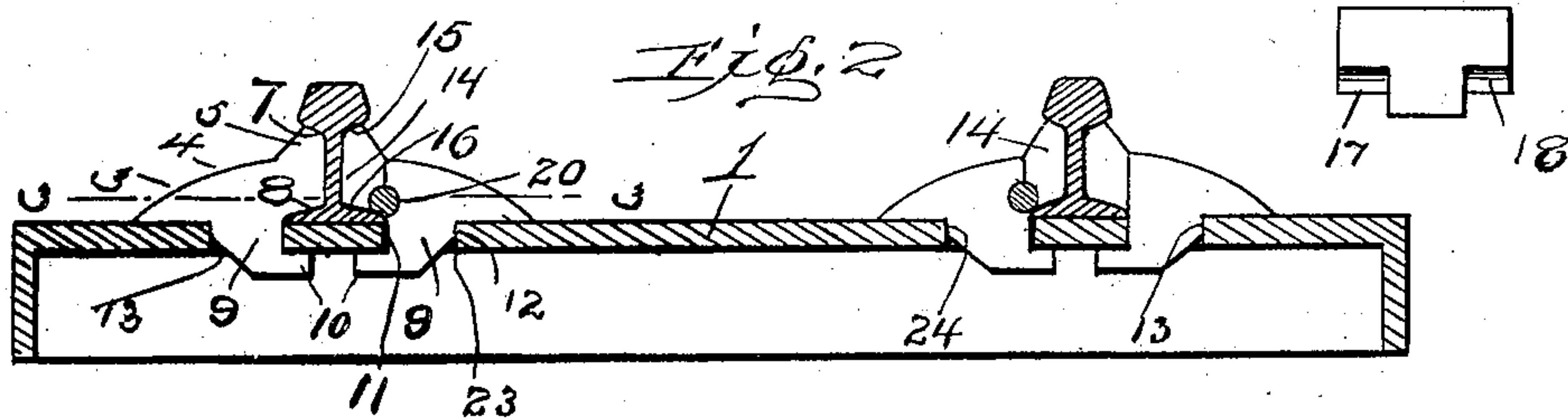
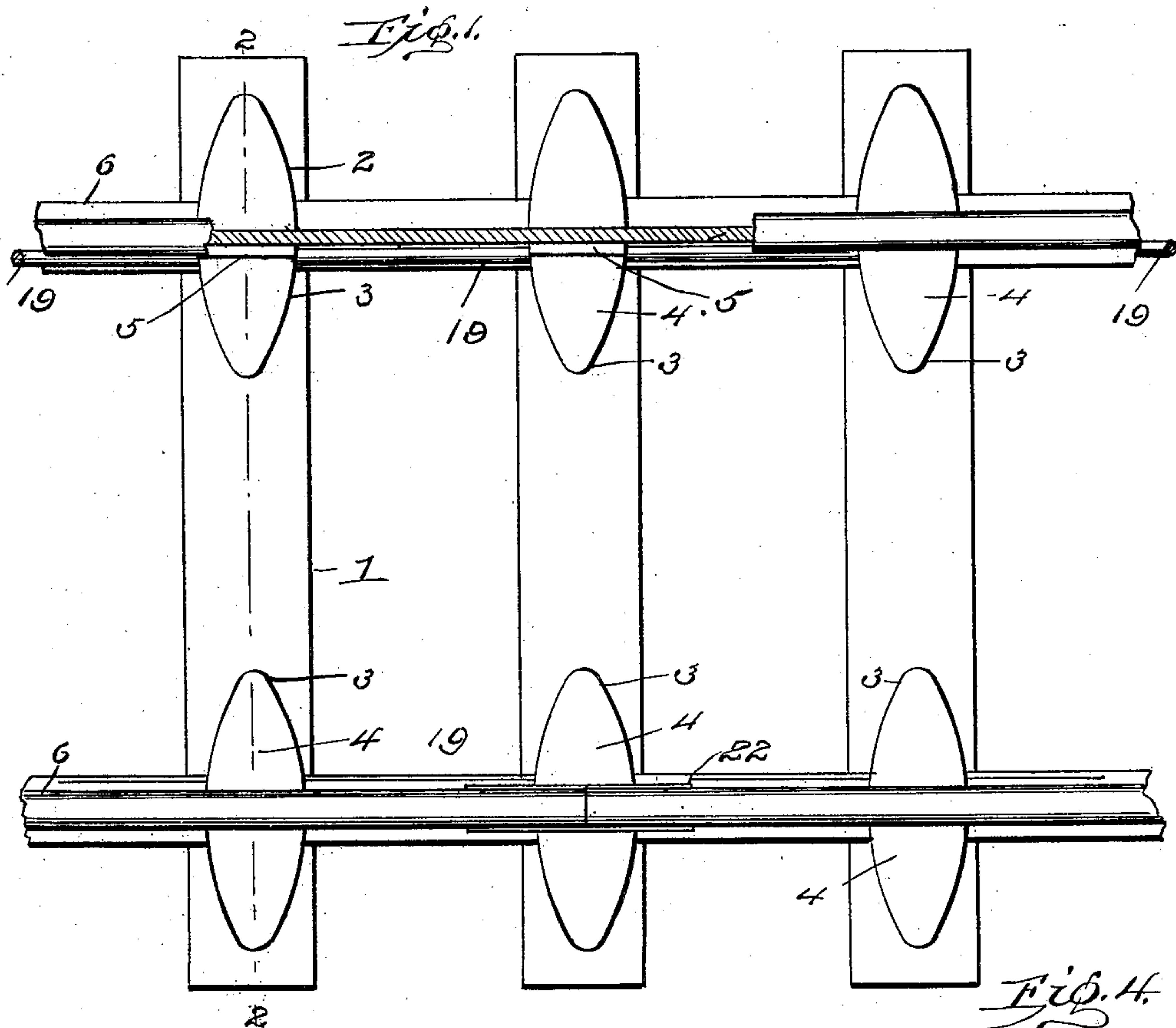
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PATENTED APR. 21, 1908.

G. J. POEHLEIN.

FASTENER.

APPLICATION FILED JUNE 6, 1907.



UNITED STATES PATENT OFFICE.

GEORGE JOHN POEHLEIN, OF OWENSBORO, KENTUCKY.

FASTENER.

No. 885,645.

Specification of Letters Patent.

Patented April 21, 1908.

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To all whom it may concern:

Be it known that I, GEORGE JOHN POEHLEIN, a citizen of the United States, residing at Owensboro, in the county of Daviess and State of Kentucky, have invented certain new and useful Improvements in Fasteners; and I do hereby 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.

This invention relates to improvements in track fastening devices and particularly to fastening devices that dispense with bolts, pins and the like.

The invention comprises the production of bracing members that are designed to engage ties and wedging blocks adapted to be placed between the bracing members and the rails for holding the rails in position.

The invention further comprises the production of wedging blocks and bracing members formed with cut-out portions for accommodating braces positioned longitudinally of the track.

The object in view is the production of a track fastening device in which the use of pins, bolts or the like is obviated and yet the track is firmly held in position.

Another object in view is the production of a track fastening device having bracing means formed with engaging portions for engaging and holding bracing members and removable wedges held in place by the bracing members.

With these and other objects in view, the invention comprises certain novel constructions, combinations and arrangements of parts, as will be hereinafter fully described and claimed.

In the drawings:—Figure 1 is a top plan view of part of a track showing in connection therewith my improved track fastener, parts being broken away to better disclose the construction thereof. Fig. 2 is a transverse section through Fig. 1 on line 2—2. Fig. 3 is a horizontal section through Fig. 2 on line 3—3, Fig. 4 is a plan view of one of the wedges forming a part of the present invention.

In constructing the fastener according to the present invention I preferably use a metallic tie or sleeper 1 that is formed hollow so as to afford easy means for forming apertures into which braces 2 and 3 are designed to be placed. Brace 3 is formed with a contact member or portion 4 that is designed to

rest upon a tie 1 and with a second contact portion 5 that is designed to rest against rail 6 for holding the same in place. The member or portion 5 is preferably formed with beveled portions 7 and 8 for snugly fitting the rail and for consequently holding the same in correct position. Upon contact portions 4 is formed a downwardly extending member 9 which has a portion 10 extending at right angles thereto or at a substantial right angle for forming a hook for holding the brace member 3 in position. Member 9 has formed on one side, as 11, a straight portion that is at right angles to a portion 4 and also to the surface of tie 1. Upon the opposite side to straight portion 11 is a straight portion 12 which is parallel to portion 11 and consequently at right angles to portion 4. Member 9 is formed with straight portions 11 and 12 in order to engage an aperture 13 formed in tie 1. It will be observed that the walls of aperture 13 are at right angles to the surface of the tie so that as straight portions 11 and 12 engage the side walls of aperture 13, the brace 3 is held against movement, especially in view of the fact that extension 10 engages the under surface of the tie.

Ordinarily braces 3 are formed with members or portions 5 of the same width as portion 4 but when two rails are to have their abutting ends held in place I form member 5 of considerable length so as to provide a contact portion for both rails even though the same may separate somewhat by contraction.

Brace members 3 are preferably positioned on the outside of the rails but it will be evident that they may be placed on the inside without departing from the spirit of the invention. Preferably positioned on the inner side of the rails are bracing members 2 which are formed similar to bracing member 3 except that the wedge 14 is not secured to the brace as member 5 is secured to brace 3. Wedge 14 is preferably formed on its inner surface with beveled portions 15 and 16 for more firmly contacting with the rail. Member 14 is also formed with notched out portions 17 and 18 for accommodating the end of the longitudinal bracing member 19. Notched out portions 20 and 21 are also formed in brace 2 and are designed to coincide with the notched out portions in wedge 14 when the same is in position. The notched out portions in wedge 14 and brace 2 form a substantially cylindrical depression or socket

into which a longitudinal brace 19 is designed to fit, the brace 19 being preferably cylindrical for snugly fitting into the socket. When member or brace 5 is elongated so as to hold in position the abutting ends of two rails a corresponding wedge 22 is used for brace 2. The elongated wedge 22 is not notched like wedge 14 but the longitudinal brace 19 is cut away for fitting into the cut away portion in brace 2 and for fitting against member 22.

In operation after ties 1 have been laid in position rails 6 are placed between apertures 13 and 23 and bracing members 2 and 3 placed in position. The longitudinal brace 19 is then placed in position and wedges 14 forced in their position in front of braces 2 and in engagement with the longitudinal braces. By this construction of braces and means for holding the same in position a track fastener is provided that will securely hold the rails in correct position but permit longitudinal movement for taking up the contraction and expansion of the rails. The straight portions formed on braces 2 and 3 which engage the walls 13' and 24 of apertures 13 and 23 firmly hold the bracing members from any tendency to rise or move from place unless wedges 14 are removed. It will be observed that apertures 13 and 23 are a sufficient distance apart for the insertion and removal of brace 2 without moving the rail. When members 5 are formed integral with the remaining portion of brace 3, the brace cannot be removed without first removing the rail to one side, but if desired member 5 may be made separately and held in position by longitudinal braces similar to braces 19, but ordinarily are formed integral with the remaining portion of brace 3.

It will be observed that members 5 are all made exactly alike except the one used where the rails abut and in that instance they are of the same general structure but considerably longer in order to form a contact surface for both rails even though the same may contract on account of the weather.

What I claim is:—

1. A device of the character described comprising a plurality of bracing members positioned on each side of a rail, wedges positioned between the rail and one of said braces, and a bracing member connecting said wedges for holding the same in position.

2. A device of the character described, comprising a bracing member formed with a hook-shaped depending portion, said depending portion being formed with straight front and rear faces, the second brace positioned in opposition to the first-mentioned brace, a wedge positioned between said second-mentioned brace and said rail, and a tie formed with apertures formed with straight walls, said walls being designed to engage the straight portions of said hook shaped depending portion, but preventing any movement of said first-mentioned brace.

3. A device of the character described comprising a plurality of braces, a wedge formed with a cut out portion positioned between one of said braces and the rail, and a longitudinal brace engaging said cut-out portion for holding said wedge in position.

In testimony whereof, I affix my signature in presence of two witnesses.

GEORGE JOHN POEHLEIN.

Witnesses:

H. B. ENGLES,
O. N. MAGRUDER.