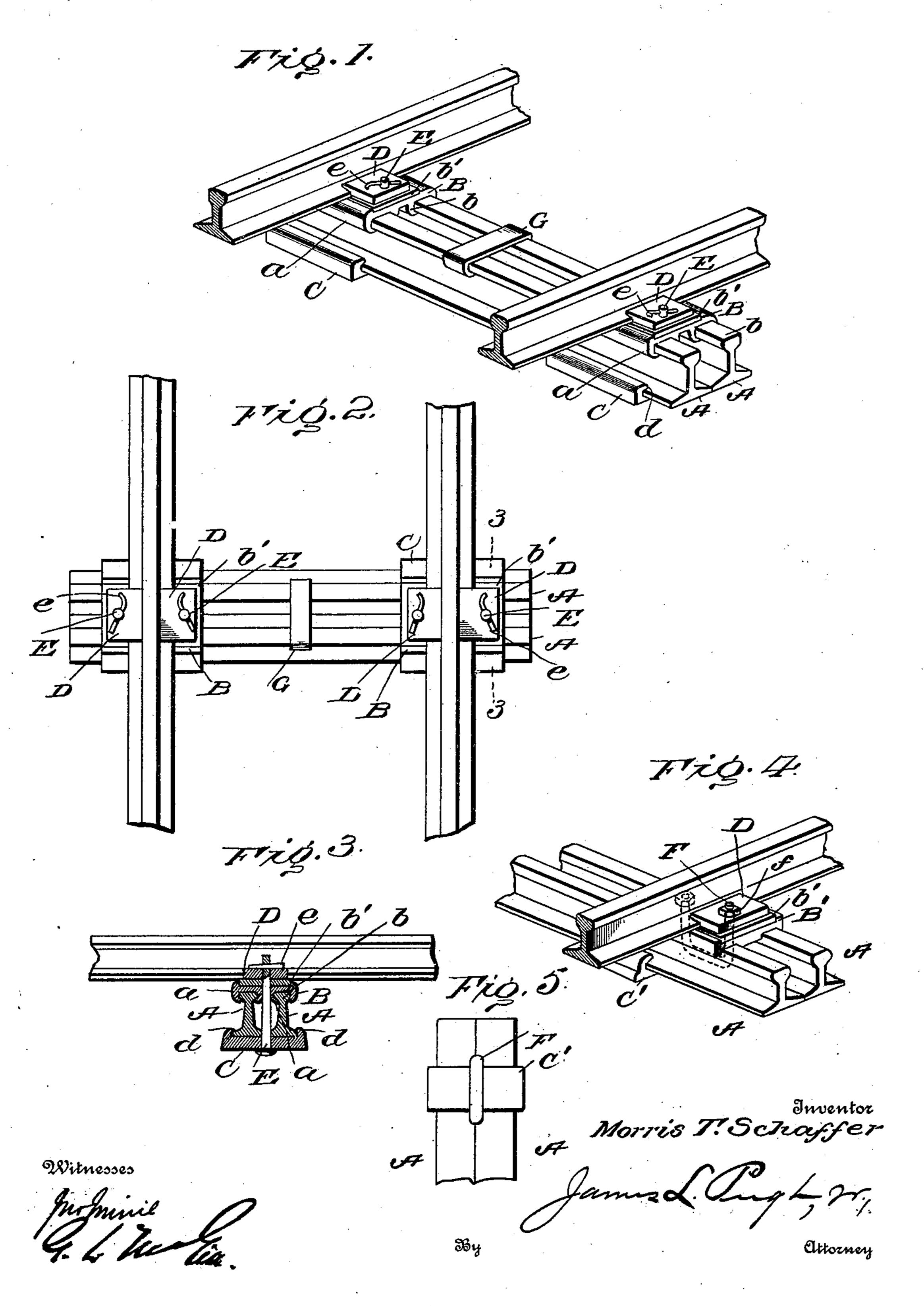
M. T. SCHAFFER. RAILROAD TIE.

(Application filed May 16, 1900.)

(Ne Model.)



UNITED STATES PATENT OFFICE.

MORRIS T. SCHAFFER, OF BETHLEHEM, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO EDWIN J. LICHTENWALNER, OF ALLENTOWN, PENNSYLVANIA.

RAILROAD-TIE.

SPECIFICATION forming part of Letters Patent No. 667,405, dated February 5, 1901.

Application filed May 16, 1900. Serial No. 16,906. (No model.)

To all whom it may concern:

Be it known that I, Morris T. Schaffer, of Bethlehem, in the county of Northampton and State of Pennsylvania, have invented certain new and useful Improvements in Railroad-Ties; 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 contemplates certain new and useful improvements in railroad-ties.

The primary object of the invention is to utilize cast-away or discarded railroad-rails as ties for track-rails, it being well known that timber for wooden ties is now becoming very scarce.

In carrying out my invention I take two rail-sections of proper length and mount upon them plates having engaging devices for accommodating and holding the base of a trackrail, such plates being held in position by means which also serve to retain the rail-sections in their proper relation.

The invention will be hereinafter fully set forth, and particularly pointed out in the

claims.

In the accompanying drawings, Figure 1 is a view in perspective. Fig. 2 is a plan view. 30 Fig. 3 is a cross-sectional view on line 33, Fig. 2. Figs. 4 and 5 show a slight modification.

Referring to the drawings, A A designate two rail-sections, each of the length usual in

35 railroad-ties.

B is a plate mounted on and held to the track-sections, the form shown in Figs. 1 to 3 having depending flanges a, forming spaces to accommodate the treads b of the two rail-sections. In a groove in the top of plate B is placed a wooden cushion-block b' to serve to deaden the noise or prevent rattle.

C is a second plate, having two overhanging flanges d, the space between which is designed to be occupied by the two rail-sections, said flanges engaging the outer side of the

bases of each section.

D designates engaging devices, which are shown as consisting of plates having over-based hanging flanges for accommodating the base of a track-rail, the latter in fitting between the engaging devices resting upon the wooden

blocks b'. In Figs. 1 to 3 I have shown the means for binding the plates B and C and also the track-rail-engaging devices D as consisting of upright bolts E, which are passed upwardly between the rail-sections and are held by keys e inserted through slots in the ends of the bolts. It is obvious, however, that different means may be employed for 60 securing the rail-sections together, and also that the plates B and C may be differently constructed, without departing from the spirit of my invention.

In Figs. 4 and 5 I have shown the bottom 65 plate C' as being narrower than the plate C and spanned by a clip F, the ends of which are threaded to accommodate nuts f. In this figure I have also shown the rail-bearing plate B' as simply grooved in its under side 70 to accommodate the treads of the rail-sections, obtaining thereby substantially the same results as in the employment of the depending flanges. The rail-sections may be additionally braced by a cross-plate G, having hooked ends for engaging their treads at

The advantages of my invention are apparent to those skilled in the art. It will be observed that by the employment thereof old 80 railroad-rails, otherwise useless, may be utilized to decided advantage, especially in those sections of the country where railroad-tie timber is scarce or not obtainable. It will be understood that I do not restrict myself 85 to the details of construction of the various parts entering into the formation of the tie composed of rail-sections.

I claim as my invention—

1. A railroad-tie composed of track-sections, 90 plates in which such sections rest, keepers mounted on such track-sections formed with depending portions on their under sides between which the tread of each track-section is designed to fit, and means for binding the 95 plates, rail-sections and keepers, substantially as set forth.

2. A railroad-tie composed of two rail-sections, plates in which such sections rest, keeper-plates on the tops of such rail-sections roo formed with depending portions on their under sides between which the tread of each track-section is designed to fit, devices for engaging the track-rails mounted on said keeper-

plates, and holding devices for binding said plates and engaging devices, substantially as set forth.

3. The combination with the rail-sections, of a plate having overhanging flanges between which the rail-sections are designed to fit, a keeper-plate having depending flanges between which the treads of the rail-sections are designed to be located, wooden blocks no mounted on said keeper-plates, engaging plates on said blocks, and rods engaging the

latter plates, the keeper-plates and the engaging plates, and means for binding said rods, substantially as set forth.

In testimony whereof I have signed this 15 specification in the presence of two subscribing witnesses.

MORRIS T. SCHAFFER.

Witnesses:

WM. H. LOWDEN, E. J. LICHTENWALNER.