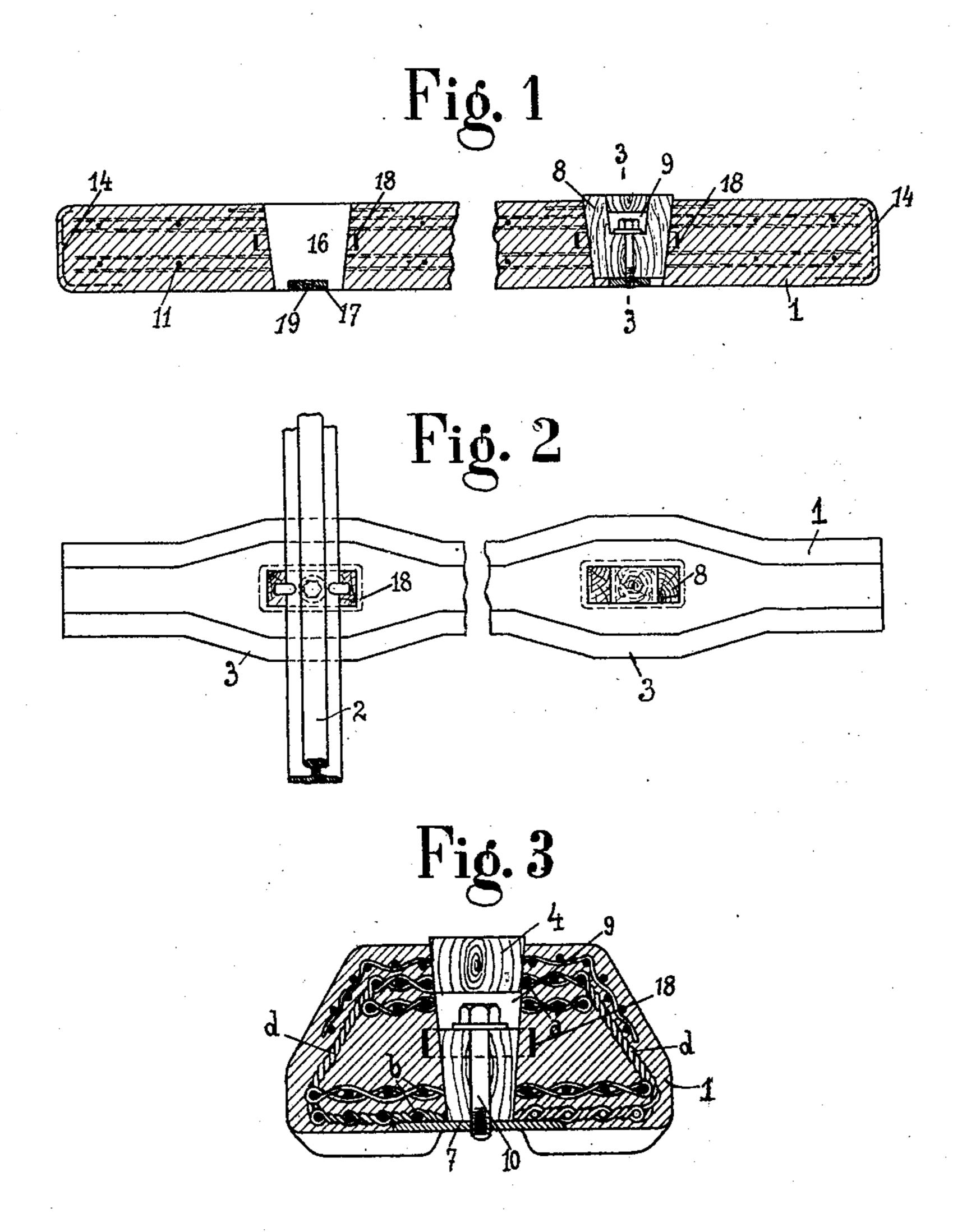
M. BRUKNER.

REINFORCED CONCRETE RAILWAY SLEEPER.

APPLICATION FILED OUT. 10, 1908.

912,227.

Patented Feb. 9, 1909.



Witnesses: Anthur Ormay S. Bornbaum Suventor: Maurice Brukluer by Fremma Herzoes his attorney

NITED STATES PATENT OFFICE.

MAURICE BRUKNER, OF BUDAPEST, AUSTRIA-HUNGARY.

REINFORCED CONCRETE RAILWAY-SLEEPER.

No. 912,227.

Specification of Letters Patent.

Patented Feb. 9, 1909.

Original application filed October 23, 1907, Serial No. 398,763. Divided and this application filed October 10, 1908. Serial Mo. 457,139.

To all whom it may concern:

Be it known that I, MAURICE BRUKNER, a subject of the King of Hungary, and resident of Budapest, in the Empire of Austria-5 Hungary, have invented certain new and useful Improvements in Reinforced Concrete Railway-Sleepers, of which the following is a specification, being a division of my application, Serial No. 398,763, filed October 10 23, 1907.

My invention relates to railway sleepers constructed of concrete with iron reinforcement and more especially to a construction of the wood wedges serving to receive the

15 tirefonds or bolts, allowing an easy renewal of the wedges when they are worn out.

My invention is described with reference

to the annexed drawing in which—

Figure 1 is a sectional elevation and Fig. 2 20 a plan view of the improved sleeper. Fig. 3 is an enlarged cross section on line 3—3 of Fig. 1.

1 is the concrete body of the sleepers, -aand -b— are longitudinal iron bars and 25 — d— are wire binders forming together with the longitudinal iron bars a strong framework embedded in the concrete.

The sleeper is formed with widened parts 3, 3 in which the holes 16, 16 are provided, 30 said holes being tapered from top to bottom. At the bottom of the holes 16, iron cross plates 17 are arranged, provided with a screw threaded central boring 19. Into the holes 16 are fitted the wood wedges 8 having a re-35 cess 9. This recess 9 is narrower, than the width of the foot of the rail 2 so that the rail rests upon the upper face of the wood wedge. The wood wedge has a vertical boring through which extends a screw bolt 10 40 engaging the screw thread of the boring 19 of the plate 17. The head of the screw bolt 10 lies on the bottom of the recess 9 and a wood wedge 4 fitted in said recess serves to protect the screw head.

By this construction the wood wedge can be easily removed and tightened if necessary. The means securing the wood wedge in the

sleeper are well protected against external influences and being arranged underneath the foot of the rail, they do not require an 50 enlargement of the width of the wood wedge, hence allow to keep the dimensions of the wood wedges and of the holes 16 as small as possible. Thus the costs of the wedges are reduced and the parts of the sleeper contain- 55 ing the wedges are not weakened as it would happen with larger wedges and holes.

To protect the concrete against strains caused by the wedges, hoops 18 may be arranged surrounding the holes 16.

At the ends of the sleeper preferably wire nets 14 are embedded near to the surface.

Having described my invention, what I

claim is:

1. In a reinforced concrete sleeper, a 65 wooden wedge inserted with its smaller end downwards in a correspondingly shaped hole. in the concrete, a recess in the upper part of the wooden wedge, an iron plate arranged at the bottom of said hole, a screw bolt ex- 70 tending vertically through the wedge and engaging with a screw threaded boring of said iron plate, the head of said screw bolt resting within the recess of the wooden wedge.

2. In a reinferced concrete sleeper, a wooden wedge inserted with its smaller end downwards in a correspondingly shaped hole in the concrete, a recess in the upper part of the wooden wedge, an iron plate arranged at 80 the bottom of said hole, a screw bolt extending vertically through the wedge and engaging with a screw threaded boring of said iron plate, the head of said screw bolt resting within the recess of the wooden wedge, and 85 a stopper block closing the recess of the wooden wedge.

In testimony whereof, I have signed my name to this specification in the presence of two subscribing witnesses.

MAURICE BRUKNER.

Witnesses:

EUGENE HARRONY, MICHAEL WINAN.