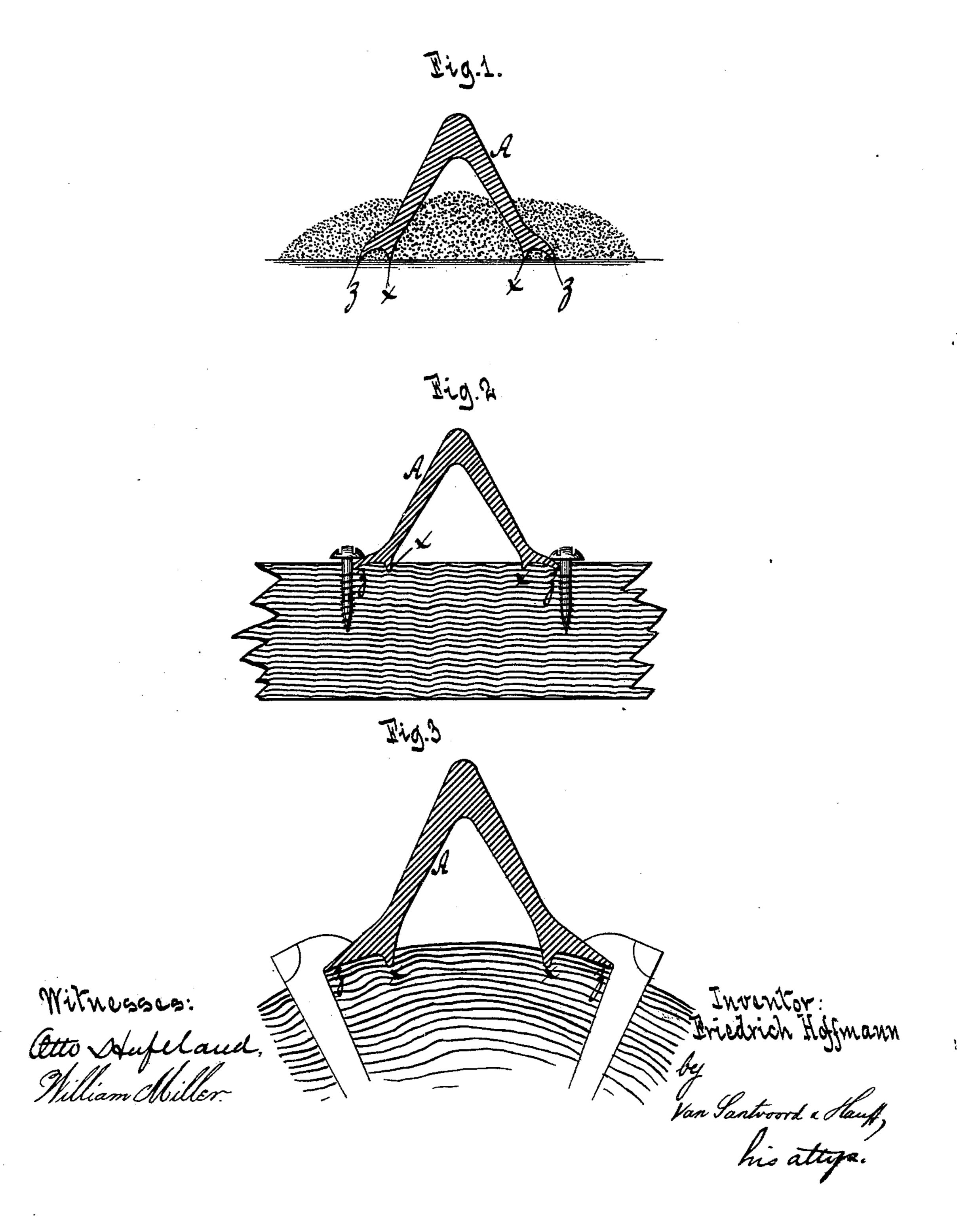
(No Model.)

F. HOFFMANN. Railroad Rail.

No. 229,410.

Patented June 29, 1880.



United States Patent Office.

FRIEDRICH HOFFMANN, OF BERLIN, PRUSSIA, GERMANY.

RAILROAD-RAIL.

SPECIFICATION forming part of Letters Patent No. 229,410, dated June 29, 1880.

Application filed April 20, 1880. (No model.) Patented in Germany May 18, 1879.

To all whom it may concern:

Be it known that I, FRIEDRICH HOFFMANN, a subject of the King of Prussia, residing at Berlin, in the Kingdom of Prussia and Empire of Germany, have invented a new and useful Improvement in Railroad-Rails, of which the following is a specification.

This invention relates to an improved rail-road-rail consisting of two diverging shanks and a rounded head, said shanks being provided at their ends with spurs, whereby a firm hold of said rail on the tie is obtained and liability of tilting or displacement by lateral

pressure is avoided.

This invention is illustrated in the accompanying drawings, in which Figure 1 represents a vertical section of my rail embedded in cement. Fig. 2 is a similar section, showing the rail as resting on a rectilinear tie. Fig. 3 is a like section, the rail resting on a convex

tie.

Similar letters indicate corresponding parts. In the drawings, the letter A designates a rail constructed according to my invention.

This rail, instead of being made solid, as is the case in most rails, consists, chiefly, of two diverging shanks meeting in a common head, and presents somewhat the form of an equilateral triangle.

In order that the rail may rest firmly on the bed or tie without being liable to tilt or become displaced by lateral pressure of the cars, I provide the shanks of said rail with spurs x, as shown. These spurs obtain a firm hold in the cement, tie, or other substance which

forms the bed on which said rail rests.

Spikes may be driven in so as to catch over the spurs and hold the rail more firmly, as

shown in Fig. 3.

I am aware that rails have been constructed which were provided with shanks, as such are

illustrated in Volume III of Knight's Mechanical Dictionary, under the title "Rail"—as, for example, "Barlow's Rail" or "Seaton's Saddle-Rail;" but these rails have to rest on 45 a foundation specially prepared, and their attachment is not effected so readily or cheaply as in my rail.

By providing spurs at the lower ends of the shanks I can rest my rail on any ordinary 50 foundation, and the rail also stands firmly, and the direction of pressure on the shanks is such that said shanks are not readily broken. Said rail also, as it uses a comparatively small amount of material, is cheaper, and as it is 55 lighter it can be transported without so great expenses.

A railroad-rail has heretofore been constructed of a wooden base having inclined upper surfaces and a tenon capped by a metallic 60 covering of a U form, the ends of such U-shaped cap being extended to conform to the inclined surface of the wooden base, and the inner lower edges of the U-shaped portion of the cap having spurs which engage the wood. 65 Such is not my invention, and is hereby disclaimed.

What I claim as new, and desire to secure by Letters Patent, is—

A railroad-rail consisting of two shanks di-70 verging uniformly from the rounded head, each of said shanks having its base constructed with an inner and outer projecting spur, substantially as herein described and shown.

In testimony whereof I have hereunto set 75 my hand in the presence of two subscribing witnesses.

FRIEDRICH HOFFMANN. [L. S.]

Witnesses:

HERMANN ESCHERICH, BERTHOLD ROI.