## 1. Pester

## Pailroad Irack.

JY 253,50%

Patented Mar.21, 1866.

Fig.I.

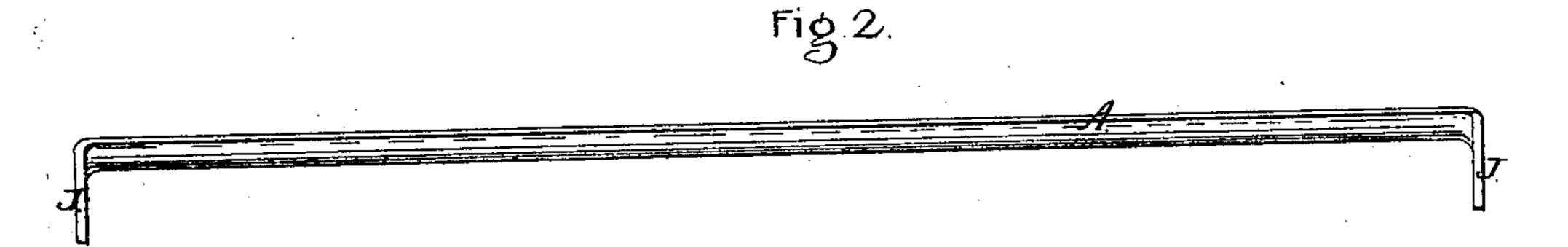
a

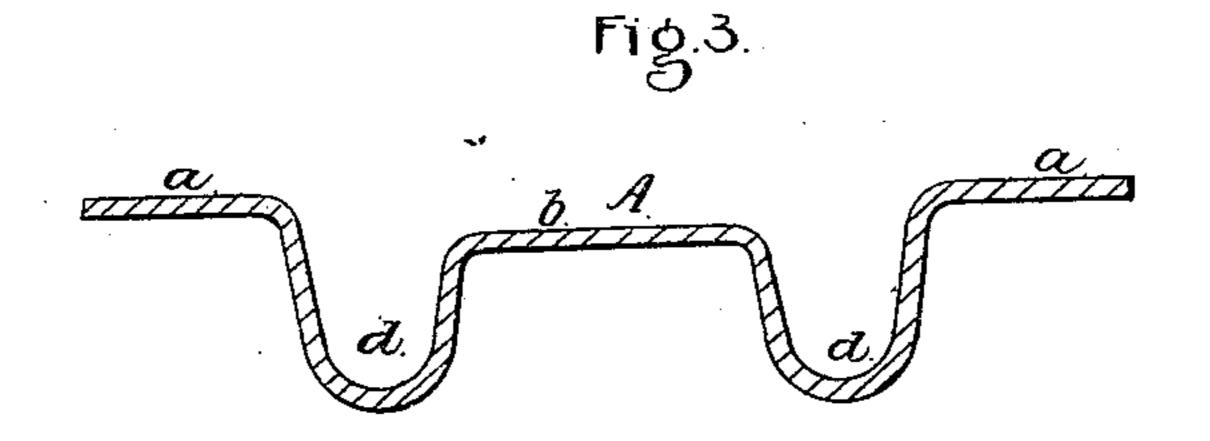
b

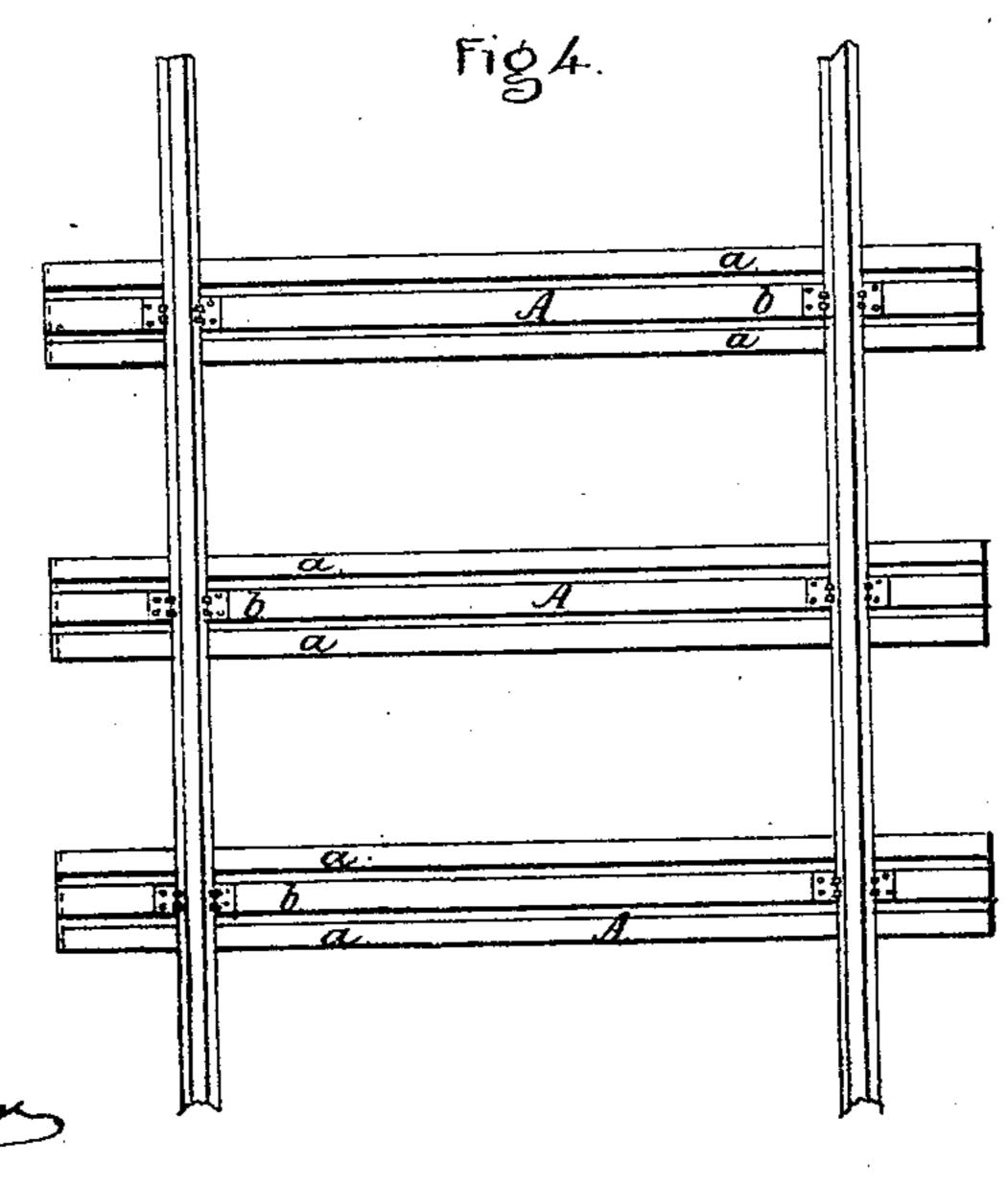
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Wilnesses:

David mashes

Inventor:

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## UNITED STATES PATENT OFFICE.

FRANZ VESTER, NEWARK, OF NEW JERSEY.

## IMPROVED IRON RAILWAY-SLEEPER.

Specification forming part of Letters Patent No. 53,507, dated March 27, 1866.

To all whom it may concern:

Be it known that I, FRANZ VESTER, of Newark, in the county of Essex, in the State of New Jersey, have invented a new and Improved Iron Railway-Tie; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon.

Figure I represents a top view; Fig. II, a side view, and Fig. III a cross-section, on an enlarged scale, of my improved tie. Fig. IV shows a plan of three ties with the rails attached.

Similar letters represent similar parts.

This improved tie, A, is made in its crosssection of three plane straight surfaces, a, a, and b, with hollows or corrugated parts, d d, between. The central part, b, is made so much lower than the two outside parts, a a, as the thickness of the rail-chair, so that when the rails are fastened in the chairs, which are attached to this central part, b, said rails shall have a bearing on the outer surfaces, a a.

The ends J of the ties A are either bent downward (see Fig. II) or small castings may be made and screwed to said ends, forming an angle or knee, projecting downward. The object of these turned-down ends is to hold the ties when laid into the sand or earth of the

road from moving sidewise, particularly in those parts where the rails form a curve.

I propose to make these ties of wroughtiron, and, from their shape and cross-section, they can be easily rolled of the desired configuration and thickness and the required length, having either their ends bent downward or the knee-castings fastened on, as may be desired.

The central part, b, to which the rail-chairs are attached, is made of such a width as to correspond with the width of the lower part of the chair. The chairs may either be bolted onto the ties or be attached to the same by screwbolts.

The end pieces, J, need not be attached to every tie, and it is only necessary to have every third or fourth tie provided with these bent end pieces, while the intermediate ones may be straight, except on very short turns, where every tie should be made with end pieces at least on the outside of the road.

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

The herein-described iron railroad-tie constructed in the manner substantially as set forth, as a new article of manufacture.

FRANZ VESTER.

Witnesses:

HENRY E. ROEDER, DAVID MOSHER.