

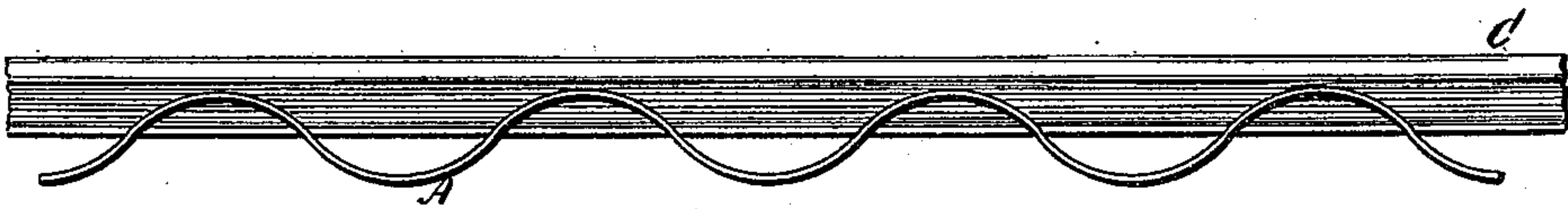
(No Model.)

S. FOX.  
SLEEPER FOR RAILWAYS.

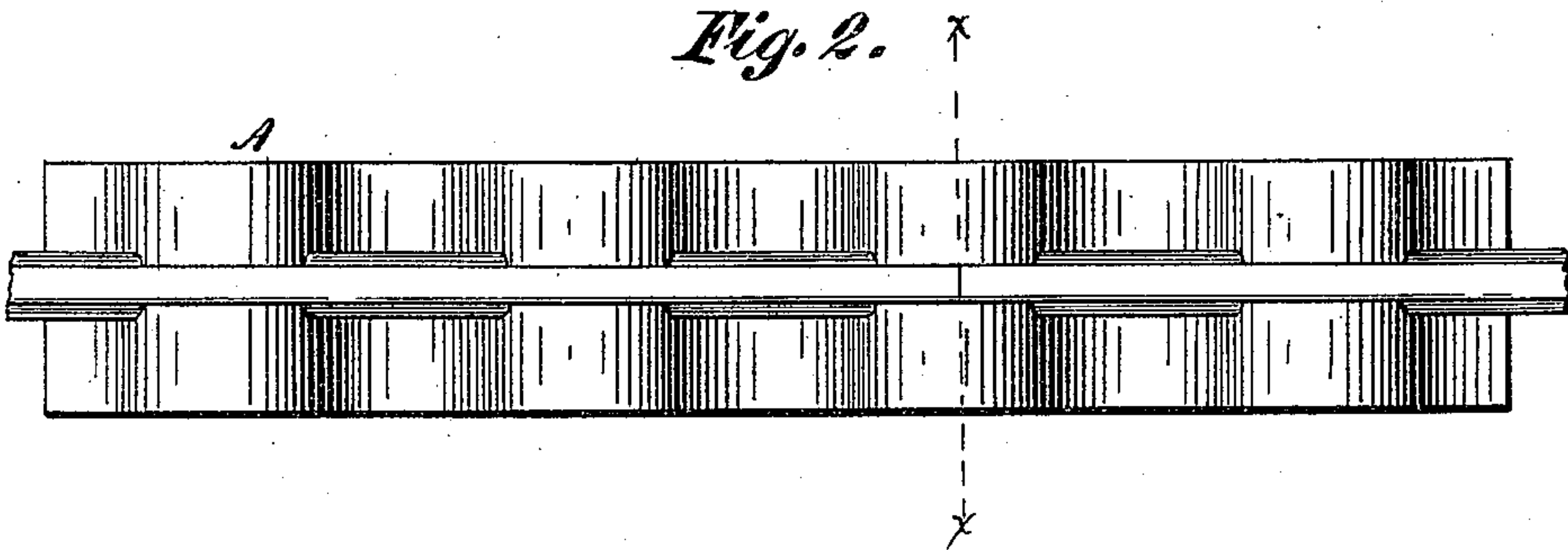
No. 429,613.

Patented June 10, 1890.

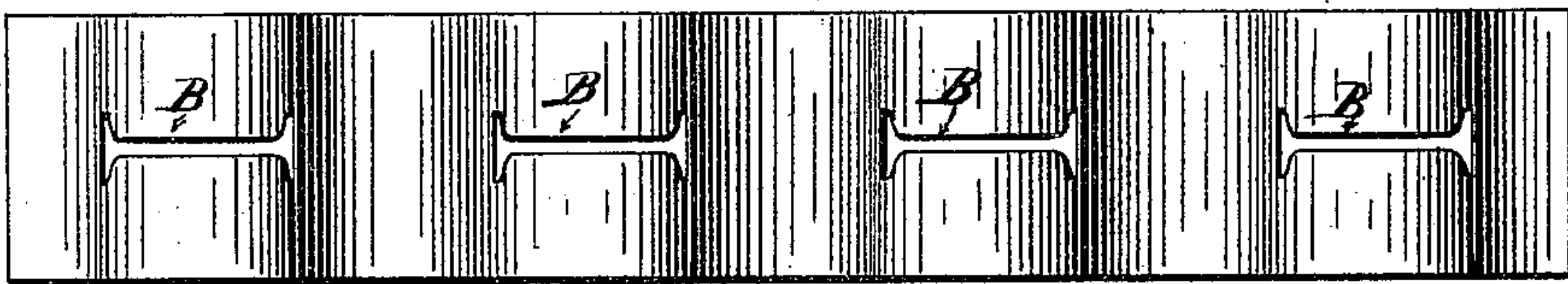
*Fig. 1.*



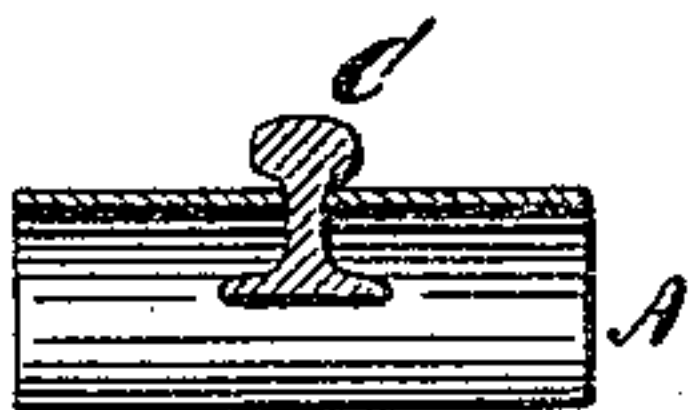
*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



Witnesses:  
D. W. Gardner.  
H. A. Pollock

Inventor:  
Samson Fox  
By his attorney,  
Foster & Freeman

# UNITED STATES PATENT OFFICE.

SAMSON FOX, OF LEEDS, COUNTY OF YORK, ENGLAND.

## SLEEPER FOR RAILWAYS.

**SPECIFICATION** forming part of Letters Patent No. 429,613, dated June 10, 1890.

Application filed February 27, 1889. Serial No. 301,316. (No model.) Patented in England July 30, 1878, No. 3,026.

*To all whom it may concern:*

Be it known that I, SAMSON FOX, of Leeds, in the county of York, England, have invented a new and useful Improvement in Sleepers for Railways, (for which Letters Patent were granted me in England, July 30, 1878, No. 3,026,) of which the following is a full, true, and exact description, reference being had to the accompanying drawings.

10 This invention relates to a sleeper intended to extend the length of the rail on a railway-track and support the rail. It does not necessarily, however, extend the entire length of said rail.

15 My invention will be readily understood from the accompanying drawings, in which—

Figure 1 represents a lateral view of the combined rail and sleeper; Fig. 2, a plan view of the same; Fig. 3, a view of the sleeper before the rail is inserted, and Fig. 4 a section through Fig. 2 on the line X X.

My invention consists, generally, of a corrugated longitudinal sleeper A, having openings B, in combination with the rail C.

25 My improved sleeper is formed by cutting the metal plates to length, and then by an ordinary punching - press having suitable punchers and dies I make at intervals the openings for the reception of the rails. I  
30 next proceed to form the corrugations by suit-

ably-shaped swages or dies, or in any other suitable manner. The result is to form a transversely corrugated or waved sleeper having longitudinal openings through it of such a shape that the rail can be slipped through 35 and locked therein without any additional contrivance. In practice, of course, the two lines of rails are held in position by suitable cross-fastenings attached to the sleepers, which may be strengthened likewise at the 40 joints by chairs, if required.

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

1. The transversely corrugated or waved sleeper herein shown, having longitudinal 45 openings B for locking the rail therein, substantially as described.

2. The combination of the transversely corrugated or waved longitudinal sleeper A, having longitudinal openings B, with the rail 50 C locked in said openings, substantially as described.

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

SAMSON FOX.

Witnesses:

BERNAL BAGSHAWE,

ARTHUR WILLIAM FOX,

*Both of Leeds Forge, Leeds.*