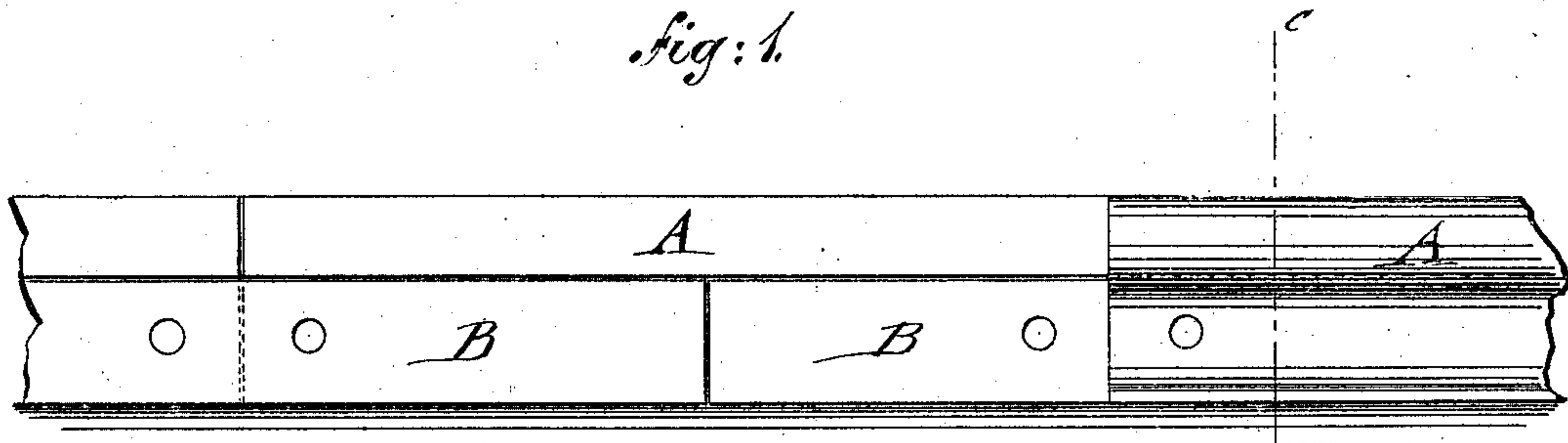


S. SUTTON.  
RAILROAD-RAILS.

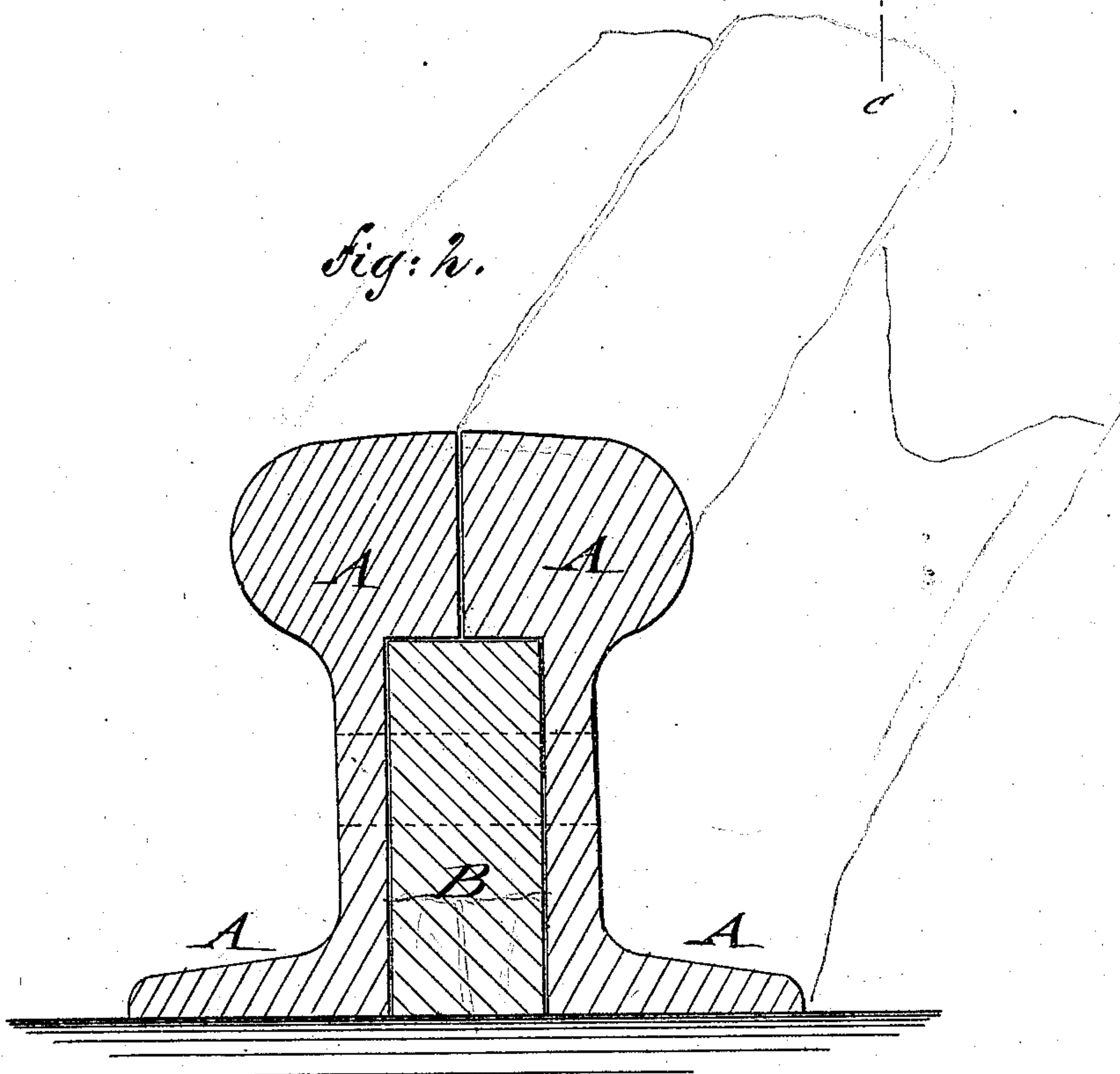
No. 174,319.

Patented Feb. 29, 1876.

*Fig: 1.*



*Fig: 2.*



WITNESSES:

*John Goethals*  
*J. H. Scarborough*

INVENTOR:

*S. Sutton*  
BY *Munn & Co.*  
ATTORNEYS.

# UNITED STATES PATENT OFFICE.

SAMSON SUTTON, OF LISBON, IOWA.

## IMPROVEMENT IN RAILROAD-RAILS.

Specification forming part of Letters Patent No. **174,319**, dated February 29, 1876; application filed February 5, 1876.

*To all whom it may concern :*

Be it known that I, SAMSON SUTTON, of Lisbon, in the county of Linn and State of Iowa, have invented a new and Improved Railway-Rail, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a side view; and Fig. 2, a vertical transverse section on line *c c*, Fig. 1.

Similar letters of reference indicate corresponding parts.

The invention relates to an improved continuous rail for railways, by which the battering and breaking of the ends of the rail at the joints is avoided, and less wear and injury to the rolling-stock produced.

The invention consists of two symmetrical rail-sections that are joined longitudinally and provided with a central wooden rail or core.

In the drawing, A represents two rail-sections of symmetrical shape, with base-flange and head, each rail resembling the section of a common rail split into two halves along the longitudinal axis.

The rail-sections A are joined longitudinally and provided with interior recesses for a longitudinal rail or core, B, of wood, that extends throughout the rail-sections. The rail-sections A may be laid so as to break joint, which avoids the battering at the ends and makes the rails more durable until worn out along the entire length. The rolling-stock is thereby less exposed to wear, as the jolting and jamming at the joints is obviated.

A compound rail thus constructed is stiffer

and stronger throughout, while the wooden center rail or core imparts a certain degree of elasticity to the same.

The top of the rail is somewhat broader than that of the common rail, giving thereby more wearing-surface, without requiring more iron and without increasing the cost to any extent, on account of the cheap center rail.

The interior wooden rail is covered on all sides and protected against the weather, so that it can last a long time, being easily replaced when required.

As the joints of the rail-sections reach only half-way across the rail-head, the other half bears the wheel, and allows the wheels to pass thereby over any shrunken joint without battering, jolting, or breaking.

The fish-plates at the joint require fewer bolts to secure the rail-ends, while connecting them to the solid adjoining section in a firmer and stronger manner, furnishing a strong, durable, and more reliable rail.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

A railroad-rail constructed of two symmetrical rail-sections joined in longitudinal direction and having a central wooden rail or core, substantially in the manner and for the purpose set forth.

SAMSON SUTTON.

Witnesses :

SAMUEL BOVEY,  
ADAM RUNKLE.