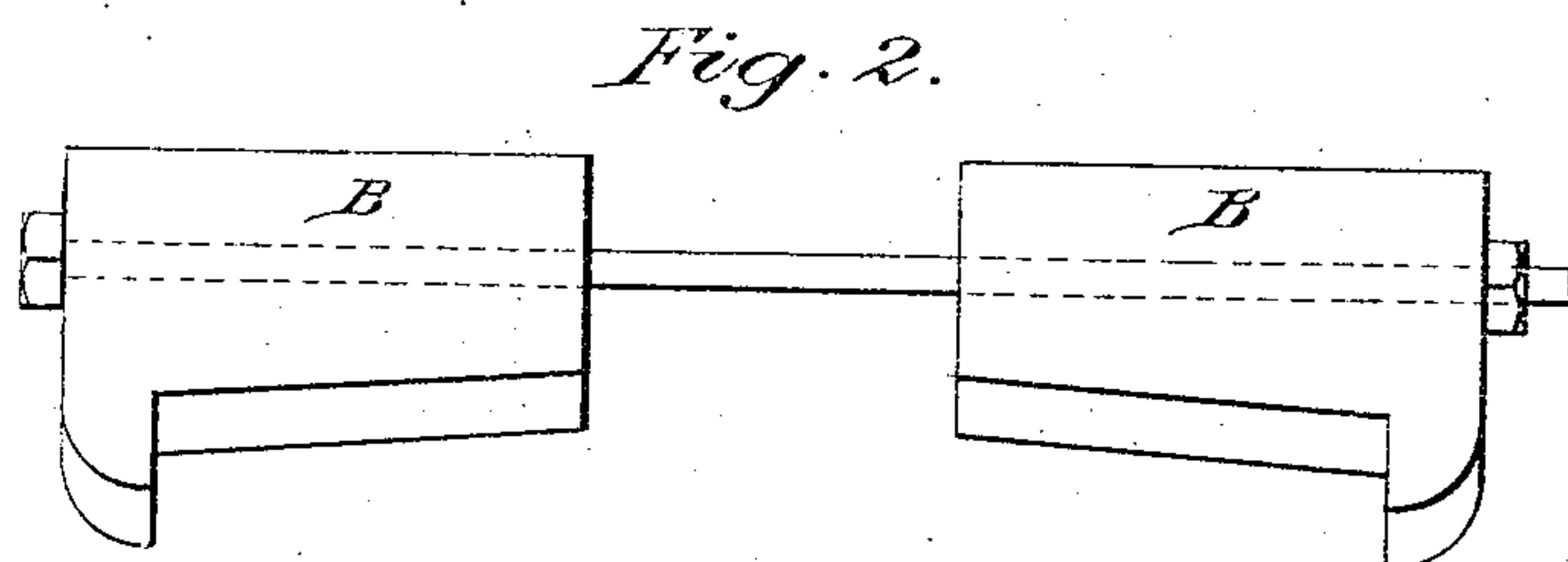
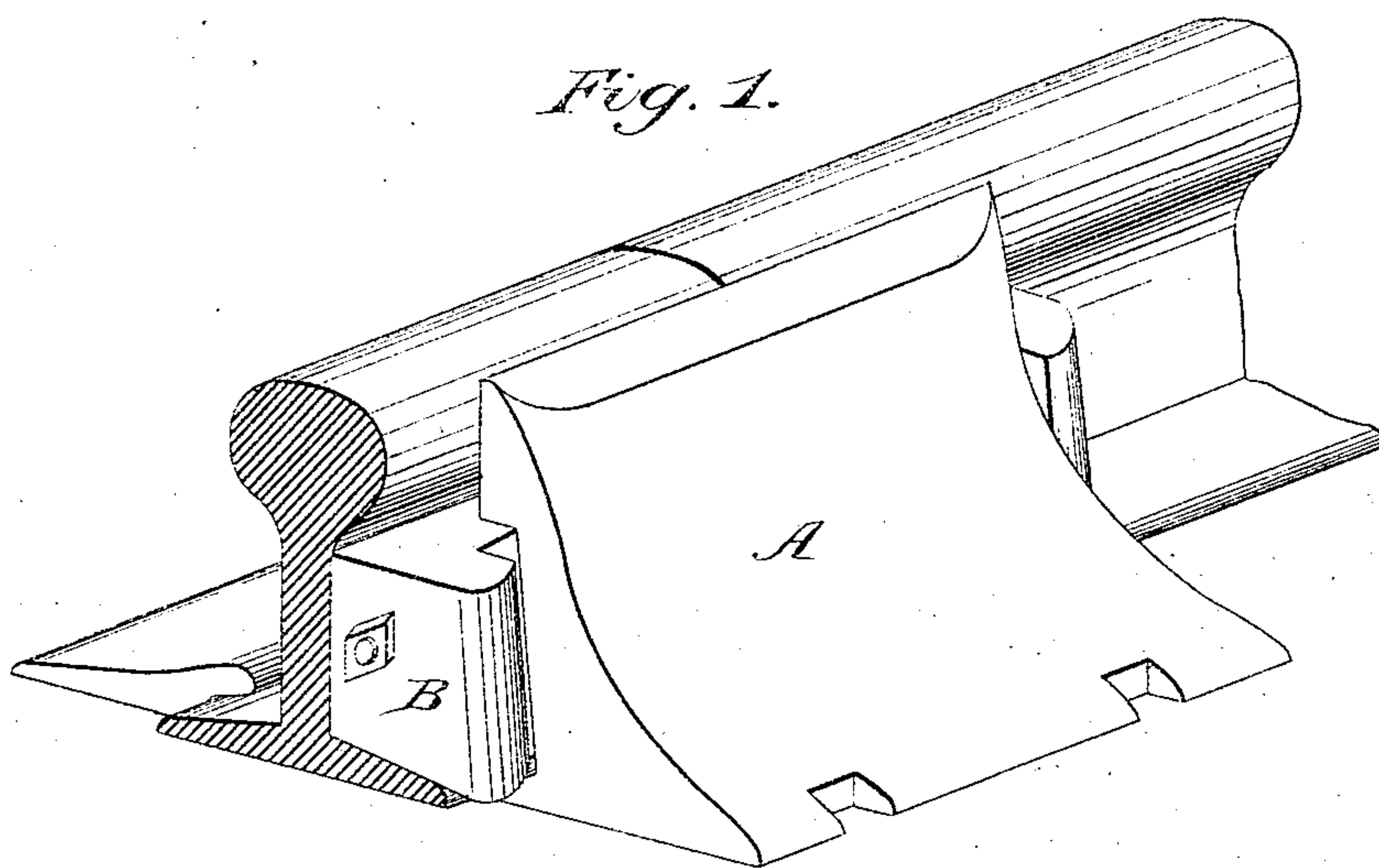


M. R. SHALTERS & S. RAY.

Railway Rail-Joints.

No. 153,205.

Patented July 21, 1874.



Witnesses.
Ernest Valentine
S. V. Essick

Inventor.
Moses R. Shalters.
Samuel Ray

UNITED STATES PATENT OFFICE.

MOSES R. SHALTERS AND SAMUEL RAY, OF ALLIANCE, OHIO, ASSIGNORS
TO WILLIAM A. NIXON, OF SAME PLACE.

IMPROVEMENT IN RAILWAY-RAIL JOINTS.

Specification forming part of Letters Patent No. **153,205**, dated July 21, 1874; application filed
December 24, 1873.

To all whom it may concern:

Be it known that we, MOSES R. SHALTERS and SAMUEL RAY, of Alliance, Stark county Ohio, have invented an Improvement in Railway-Rail Joints, of which the following is a specification:

The object of this invention is to provide a secure and permanent rail-coupling at the joints of a railway-track, and at the same time to protect the ends of the rails from being worn and battered down, and also prevent the sliding or slipping of the rail out of the chair.

The chair is cast of any suitable metal in one solid piece, with a suitable recess to receive both ends of the rails, and that part of the chair that is outside of the rail is raised to a level with, or a fraction higher than, the rail, and made of nearly the same width as the tread of the rail, and long enough to receive and carry the weight of the train while passing over the joint. Said raised or elevated portion is either chilled or surface-plated with steel, and the center a trifle higher, so as to receive the weight exactly at the ends of the rails. The ends of the rails are kept solid and firm in said chair by means of two perforated keys or wedges, one at each end of the chair, and on the outside of the rail, as at B B, a bolt passing through both. By drawing up the nut both keys are drawn toward the center, which device holds both ends of the

rails firmly in their place. There is also a lug or small projection at the bottom of and on the key side of the chair to fit corresponding notches at the ends of the rails, so that when the rails are put in the chair and the keys in place the rail cannot pull out of the chair unless the keys are removed. The whole being combined forms, as it were, a continuous rail, the keys or wedges assisting in strengthening that portion of the chair that carries the weight over the joints.

We are aware that it is not new to make a railway-chair with an elevated outside bearing for the wheel at the joint, and also that clamp-keys of wedge form at the joint are not new.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

A railway-rail joint consisting of the rail-chair cast in one piece, and having an elevated bearing for the wheel on the outside of the rail, in combination with two perforated wedge-formed keys, B B, and a screw-bolt passing through them, by which said keys are drawn together, substantially as set forth.

MOSES R. SHALTERS.
SAMUEL RAY.

Witnesses:

ERNEST VALENTINE,
S. V. ESSICK.