C. B. SHELDON.

Joint-Support for Street-Railway Rails.

No. 164,776. Patented June 22, 1875.

Fig. 1.

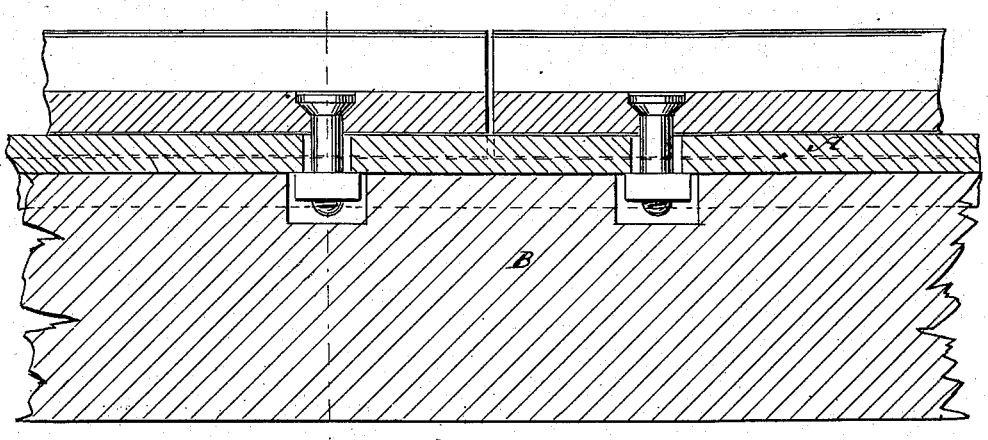
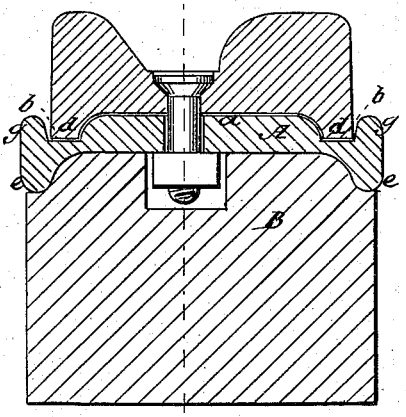


Fig. 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

CEVEDRA B. SHELDON, OF NEW YORK, N. Y.

IMPROVEMENT IN JOINT-SUPPORTS FOR STREET-RAILWAY RAILS.

Specification forming part of Letters Patent No. **164,776**, dated June 22, 1875; application filed May 3, 1875.

To all whom it may concern:

Be it known that I, CEVEDRA B. SHELDON, of the city, county, and State of New York, have invented a new and Improved Rail-Splice, of which the following is a specification:

My invention consists of a splice-plate for rails laid on stringers, as they are commonly arranged for street-railways, which is flanged on the under side to conform to the upper side of the stringer, the corners of which are commonly beveled off to prevent the plate from shifting laterally, and on its upper side it is crowning in the middle portion and grooved and flanged at the edges to conform to the grooved under side of the rail, and also to confine it between the flanges to prevent the rail from lateral movement; and the plate has elongated bolt-holes, through which it is firmly bolted to the rails by bolts whose heads are countersunk in the bottom of the groove in the upper side of the rail, so as to hold the rail ends and the plates firmly together to prevent the spring of the rails up and down—now so common on all street-roads, in consequence of the faulty arrangement of the ends. By my plan the two rails are firmly bolted to the plate so that one cannot rise without the other, and it is of no particular consequence whether the plate is fastened to the stringer or not; but I prefer to fasten it by spikes, and I will use nut-fastenings of any approved kind to prevent the nuts of the bolts from working loose. In the common arrangement the rail ends are laid on a short flat plate, and they are spiked back of the plate to the stringer, but the spikes soon draw so that the ends are free to spring independently of each other, and they soon become so loose, and the plate settles into the stringer so, that the jolting common to all roads ensues very soon, no matter how well laid.

Figure 1 is a longitudinal sectional elevation of my improved rail-splice. Fig. 2 is a cross-section.

Similar letters of reference indicate corresponding parts.

A is the splice-plate, which is arched transversely, or, in other words, has a crowning upper side, *a*, corresponding in form to the under side of the rail, with grooves *b* along the margins to receive, inside of ribs *g*, the ribs or flanges *d*, with which the rail is commonly provided on the under side to keep it on the stringer B, and on the margins of the lower side of the plate A is a rib or flange, *e*, to fit the beveled corners of the stringer. *f* represents the bolts for securing the rail ends and the plate together. They are countersunk at the head in the bottom of the groove in the upper side of the rail so as not to interfere with the flanges of the wheels. The holes for these bolts will be elongated in the rail or the plate to allow for expansion and contraction, and the nuts will be secured by fastenings of any approved kind.

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

1. A splice-plate for rails laid on stringers, firmly bolted to both rail ends, and having flanges to prevent lateral play on the stringer, also flanges to prevent lateral play of the rails, substantially as specified.

2. The spice-plate for rails laid on stringers having a crowning middle portion of the web corresponding with and fitting in the under side of the rail, in combination with ribs *g* for preventing lateral movement of the rails, substantially as specified.

CEVEDRA B. SHELDON.

Witnesses:

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C. SEDGWICK.