

(No Model.)

W. J. SHELDON.

FISH PLATE SPLICE FOR CONNECTING RAILROAD RAILS.

No. 521,481.

Patented June 19, 1894.

Fig. 1.

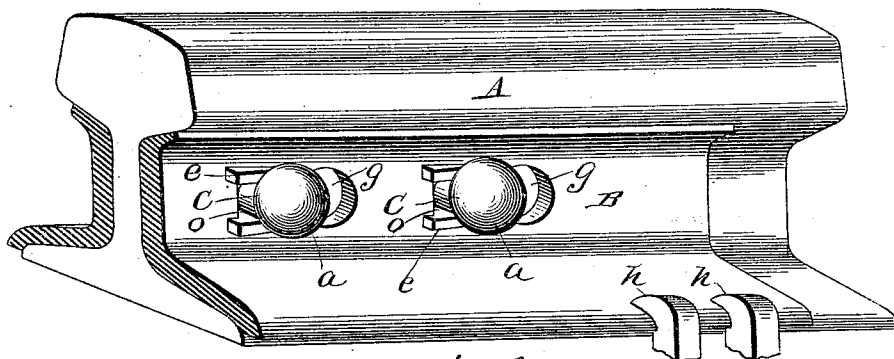


Fig. 2.

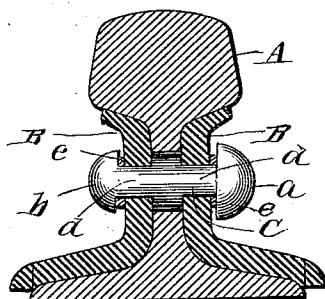


Fig. 4.

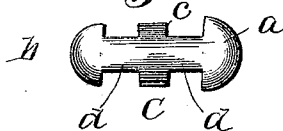


Fig. 5.

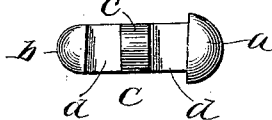
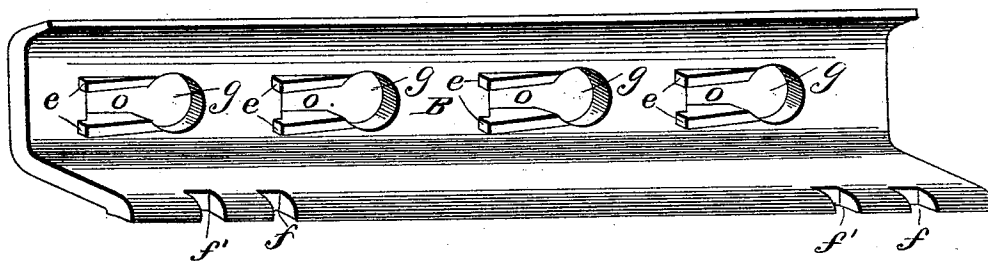


Fig. 3.



Witnesses:

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UNITED STATES PATENT OFFICE.

WILLIAM J. SHELDON, OF MIDDLETOWN, PENNSYLVANIA.

FISH-PLATE SPLICE FOR CONNECTING RAILROAD-RAILS.

SPECIFICATION forming part of Letters Patent No. 521,481, dated June 19, 1894.

Application filed January 21, 1893. Serial No. 459,153. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM J. SHELDON, a citizen of the United States, residing at Middletown, in the county of Dauphin and State of Pennsylvania, have invented a new and useful Fish-Plate Splice for Connecting Railroad-Rails, of which the following is a specification.

My invention relates to improvements in connecting rail road rails; and the objects of said improvements are, first, to dispense with bolts, nuts and washers; second, to obtain a uniform tension on the splice, caused by the expansion and contraction of the rails; third, to retain the strength of the splice and absolute safety by reason of its automatic fastening; fourth, to avoid the necessity of having a different constructed plate for each side of the rail; fifth, to economize in the cost of manufacturing the parts; and sixth, to economize in the labor of connecting and disconnecting the parts to and from the rails. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1, is a horizontal section of the one-half of the plates attached to the rail. Fig. 2, is a vertical section of the plates attached to the rail showing the key in place. Fig. 3 is a horizontal view of the fish plate, showing the drafts or wedges on side of plate on either side of the slot or square part of hole in the plate. Figs. 4 and 5 show the key in two different perspective views, showing heads, drafts and relative sizes.

Similar letters refer to similar parts throughout the several views.

A. represents the rail, B. the plate and C. the key for fastening the plates to the rail.

The key is composed of the following parts:—*a.* being the large head; *b.* the small head; *c.* being the same size as the small head *b.* and when attached fills the hole in the rail, thereby strengthening it; and *d. d.* being the thickness of key and corresponds in size with the slot or holes *o. o.* in plate B.

The plate is composed of the following parts:—*e. e.* being the drafts or wedges rolled

or pressed on the plate on either side of the slot or square part of hole; *f* and *f'* being spike holes in plate through which it is fastened to the tie; *g. g.* being circular holes in the plate corresponding in size and distance apart with the holes in the rail; *o. o.* being the slots or square parts of the holes in the plate for the entrance of the parts *d. d.* of the key C.; *h. h.* being the spikes for fastening rail and fish plate to the ties, and for holding the fish plate in position.

I prefer to carry out the features of my invention as follows:—After laying two rails A so that the ends abut, then apply a plate B. to each side, as shown in Fig. 2., so that holes *g. g.* in the plate B. are in line with the holes in rail A, then insert a key C. in each hole *g.* from the inside of rail, entering the small head *b.* of key C through the rail and both plates until the head *a.* comes against plate B. on the inside of rail; then slide plate B on outside of rail so that the parts *d. d.* of key C enters slot or square part of hole *o.* in plate B.; then fasten said plate B. with spike *h. h.* in holes *f.* and *f'.*; then slide plate B. on the inside of the rail so that the parts *d. d.* of key C. enter the slot or square part of hole *o.* in plate B. until tight, then fasten plate B. by spikes *h. h.* in holes *f. f.* to the ties, thereby making a solid and secure splice.

I am aware that prior to my invention fish plates or angle irons have been used for splicing rail road rails and I therefore do not claim such a combination broadly.

I claim for my invention the following:

The combination with the fish plates provided with the bolt holes and the slots leading therefrom, having adjacent wedge surface, of the bolt C, having the large and small heads, and the middle portion *c* in full size, and the flattened and reduced portion *d, d.* substantially as described.

WILLIAM J. SHELDON.

Witnesses:

JAY REWALT,
WALTER E. WATSON.