

(No Model.)

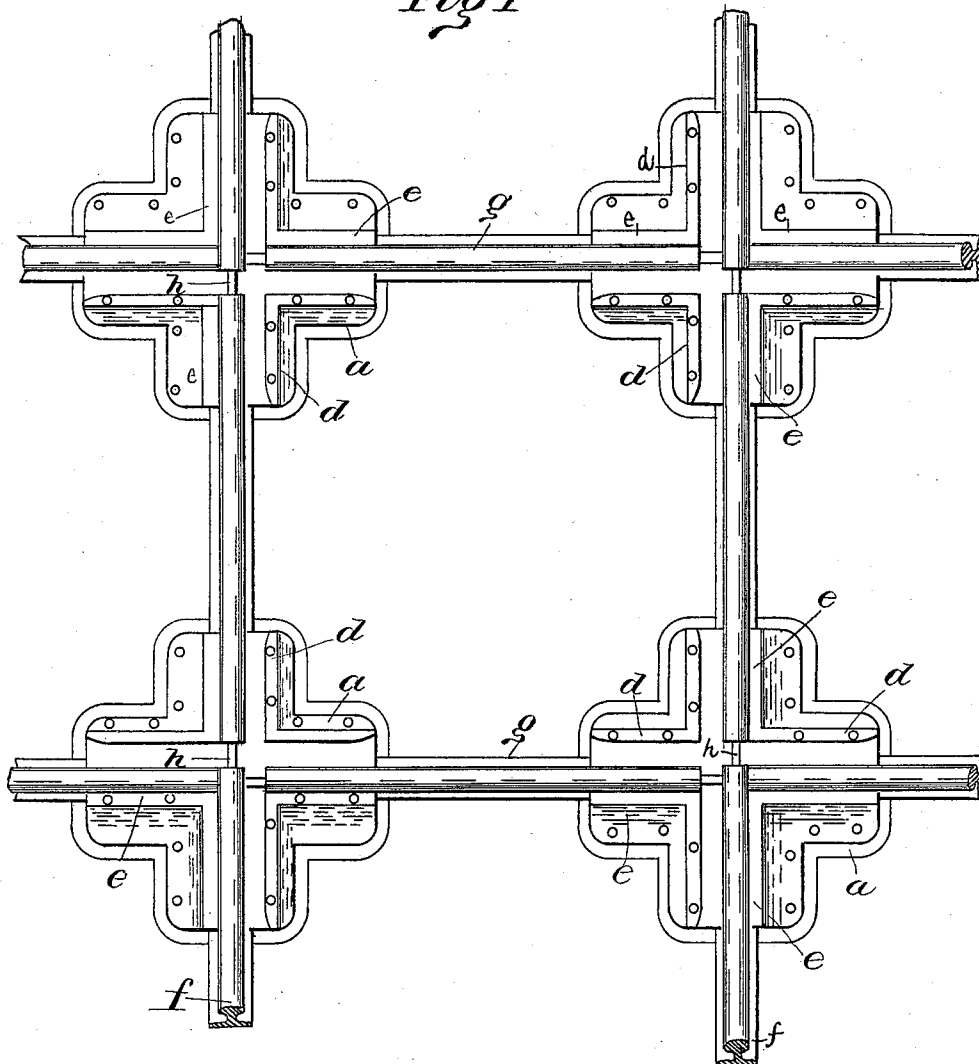
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W. S. EAST.
RAILROAD CROSSING.

No. 499,455.

Patented June 13, 1893.

Fig 1



WITNESS

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N. Hume Cauden

INVENTOR

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per D. J. Dwyer
ATTORNEYS.

(No Model.)

3 Sheets—Sheet 3.

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Fig 5

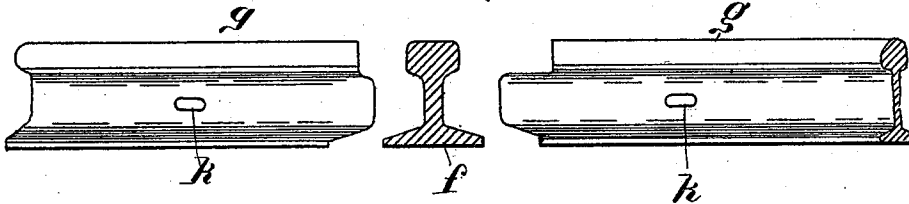
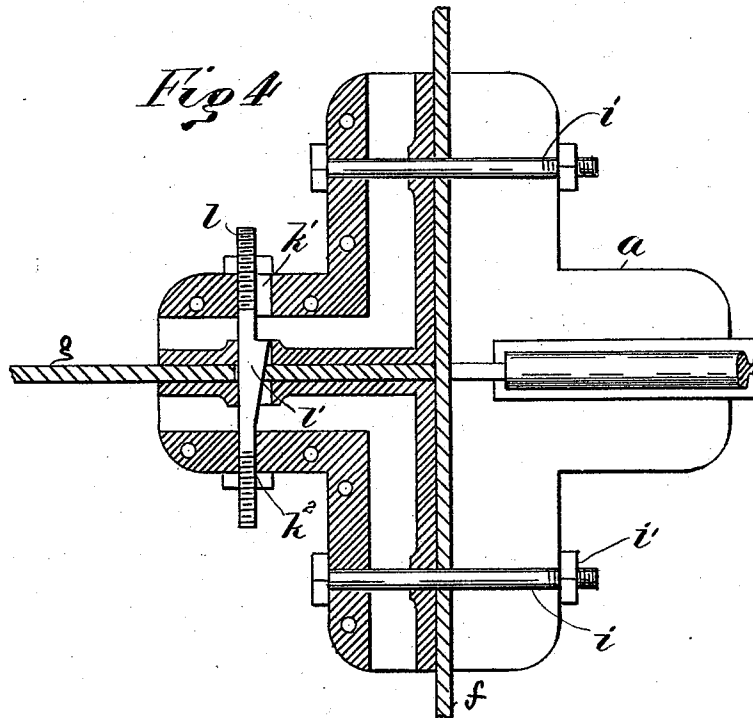


Fig 4



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UNITED STATES PATENT OFFICE.

WILLIAM S. EAST, OF LIMA, OHIO.

RAILROAD-CROSSING.

SPECIFICATION forming part of Letters Patent No. 499,455, dated June 13, 1893.

Application filed June 17, 1892. Serial No. 437,077. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM S. EAST, a citizen of the United States, residing at Lima, in the county of Allen and State of Ohio, have
5 invented certain new and useful Improvements in Railroad-Crossings; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains
10 to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to a crossing for railroad
15 roads wherein the rails are sunk in a chair secured to a bed-plate; the rails being made in sections and removable to facilitate repairs.

The object of my invention is to so construct the crossing that it will wear much longer and withstand the strain that is brought
20 to bear upon it, and to enable it to be repaired and put together with greater facility.

With this object in view, my invention consists in the peculiar features and combinations of parts as will be more fully described
25 hereinafter and pointed out in the claims.

In the accompanying drawings: Figure 1 represents a plan view of my invention as
30 applied to a complete crossing. Fig. 2 represents an enlarged detail view of one of the rail chairs with the rails in place. Fig. 3 represents a side elevation of one of the chairs. Fig. 4 represents a plan view of one of the
35 rail chairs partly in section to show the manner of securing the rails. Fig. 5 represents a side elevation of the manner in which the sectional rails are cut, the single rail being shown in section.

40 In the drawings the reference letter *a* represents a rail-chair cast for a right-angle crossing, and provided with grooves which correspond with and receive rails *f* and *g*. The upper face of the chair has raised portions *d* and *e*, the portions *e* fitting close to the head of the rail, while the portions *d* are placed some distance from the rail-head, enabling the flange of the car-wheel to pass
45 along unobstructed. By having the portions *e* fit the rail snugly, the rails are strengthened against any lateral play that might be caused by the passage of trains. The rail *f* is made of an integral piece of metal, and at the point

where the two rails cross, a recess *h* is cut in its head, this allowing the flange of the wheel
55 running on the rail *g*, to pass unobstructed. The rail *g* is made in two pieces, the adjacent ends of which engage the rail *f*, being cut to fit the sides of the latter rail, as will be distinctly seen by examining Fig. 5. The
60 rail *f* is secured in place by bolts *i* passing therethrough, and through registering holes in the rail chair. Nuts *i'* fit the screw-threaded ends of the bolt, whereby the rail can be held securely in place. The sections of the
65 rail *g* are provided with oblong slots *k* registering with a corresponding slot *k'* in the side of one arm of the chair. The opposite side of the arm is provided with a round hole *k²*. A threaded bolt *l*, having an inclined
70 wedging surface *l'* at about its center, is inserted in the opening *k'* and its end is passed through the opening *k²*. Nuts *l²* are screwed on the ends of the bolt *l*, whereby the same, and hence the rail, is held securely to the
75 chair. Thus it will be seen that the rails are held securely in place, and can be forced against the crossing rail *f*, thereby forming a tight and rigid crossing.

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

1. In a crossing for railroads, rails provided with oblong slots, bolts having an inclined
85 wedging surface passing through said slots and securing said rails to a rail-chair, substantially as described.

2. In a railroad crossing, a rail-chair upon which the rails rest, oblong slots in said chair, rails provided with registering slots, and bolts
90 having an inclined wedging surface adapted to enter said slots and hold the rail securely to the rail-chair, substantially as described.

3. In a railroad crossing, a rail chair provided with slotted rails, in combination with
95 transverse bolts having their ends threaded to receive nuts, and a wedging surface on the bolts intermediate of the said ends, substantially as described.

In testimony whereof I affix my signature in
100 presence of two witnesses.

WILLIAM S. EAST.

Witnesses:

L. H. KIBBY,
J. C. RIDENOUR.