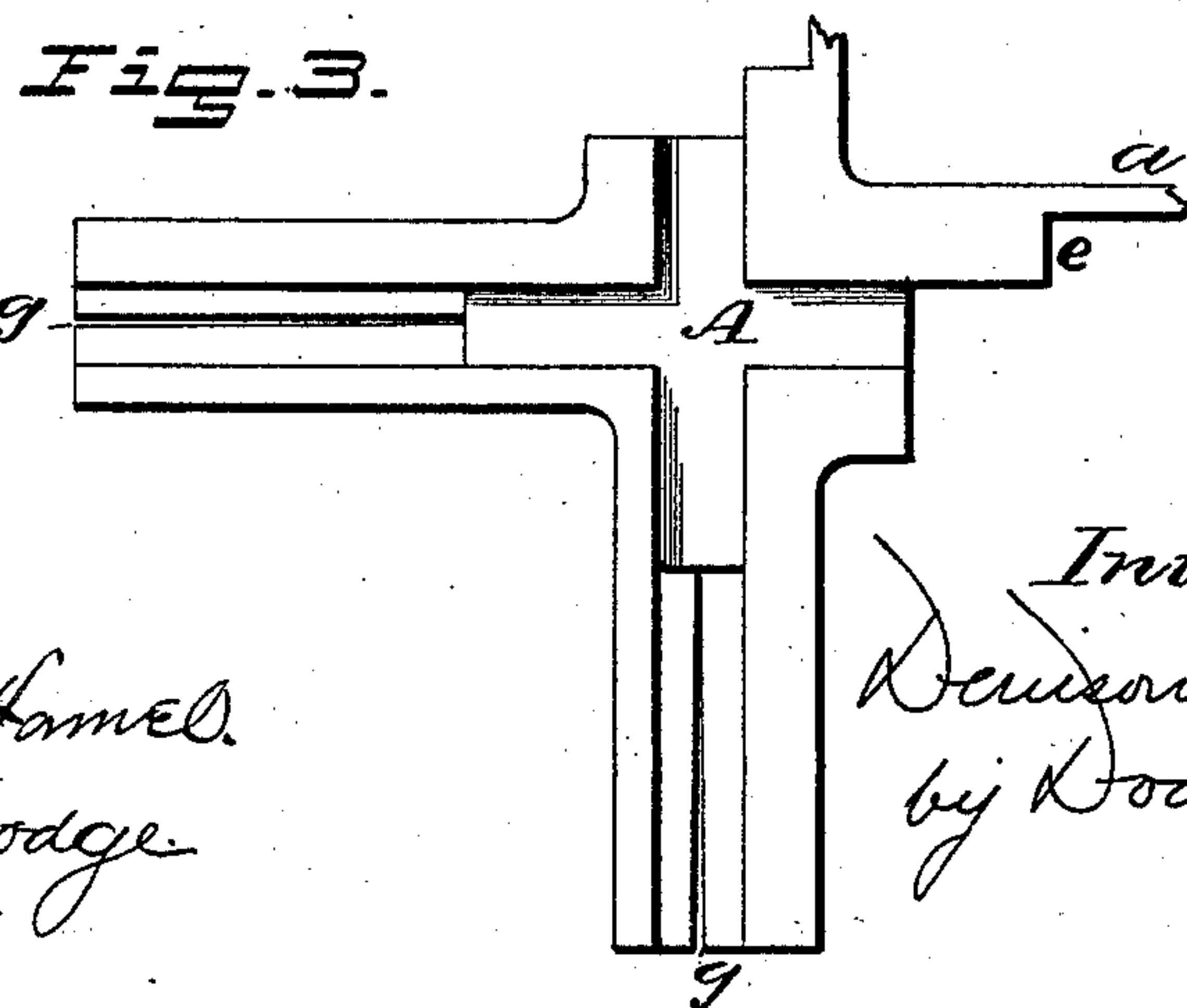
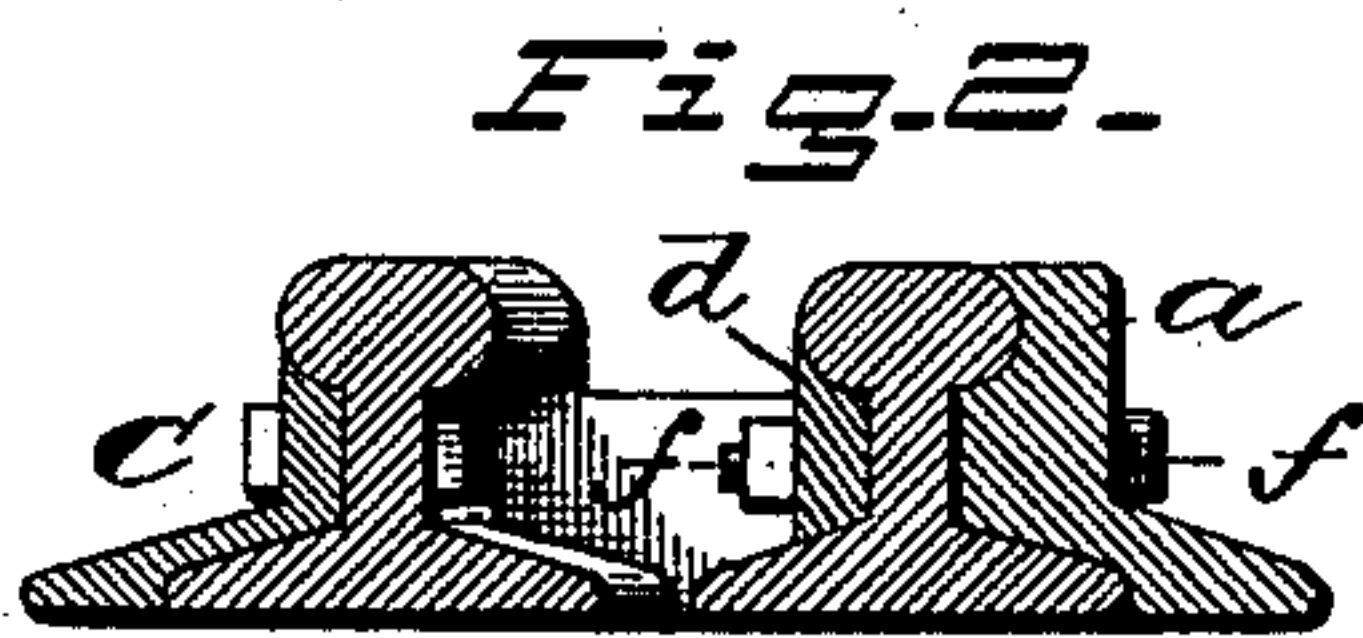
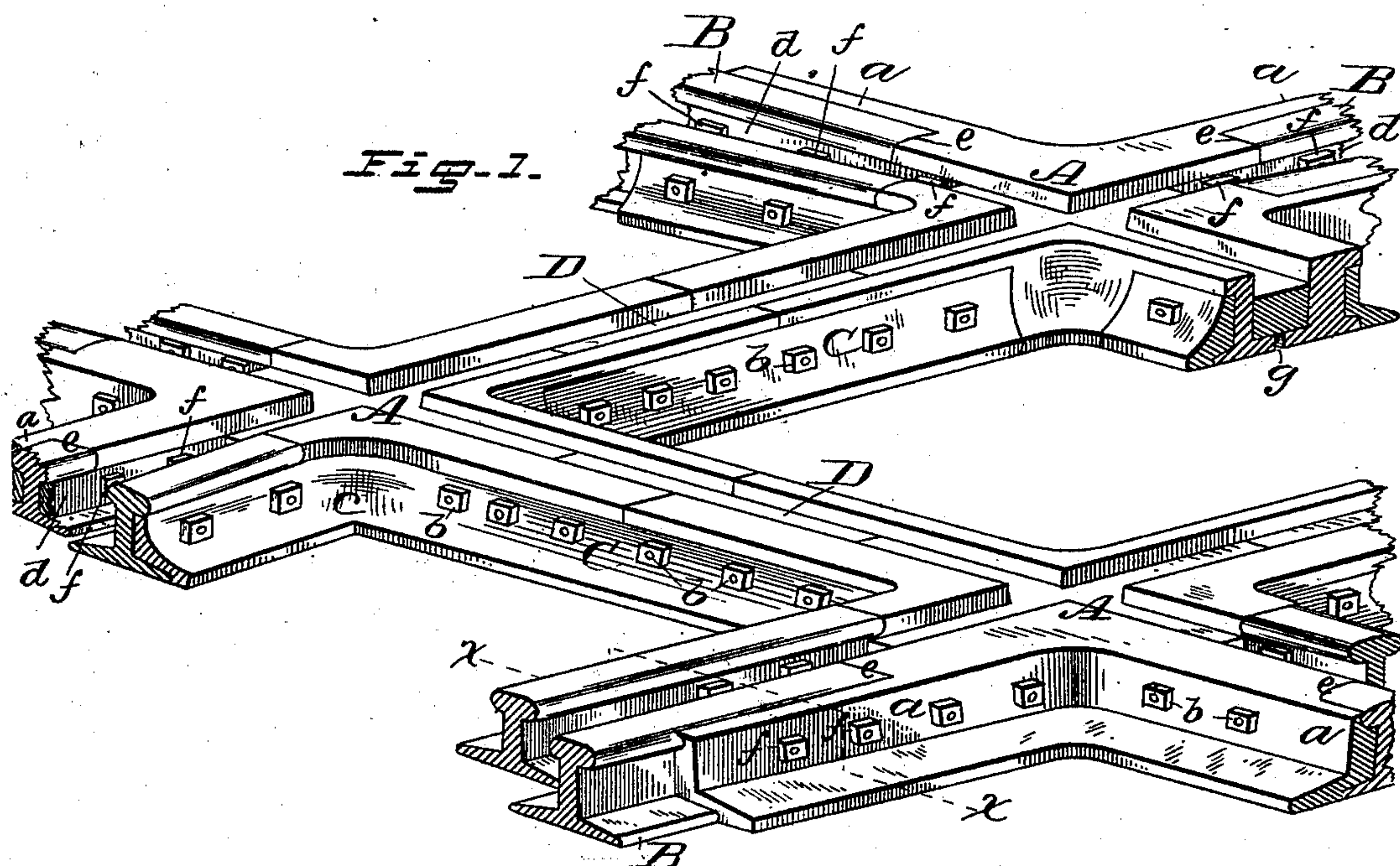


(No Model.)

D. C. PIERCE.
RAILROAD CROSSING.

No. 285,511.

Patented Sept. 25, 1883.



Witnesses:

Mrs. F. DuRoi.
 Walter S. Dodge.

Inventor:

Wmison C. Pierce,
by Hodges Son,
Attys.

UNITED STATES PATENT OFFICE

DENISON C. PIERCE, OF CHICAGO, ILLINOIS.

RAILROAD-CROSSING.

SPECIFICATION forming part of Letters Patent No. 285,511, dated September 25, 1883.

Application filed November 3, 1882. (No model.)

To all whom it may concern:

Be it known that I, DENISON C. PIERCE, of Chicago, in the county of Cook and State of Illinois, have invented certain Improvements in Railroad-Crossings, of which the following is a specification.

My invention relates to certain improvements on the "railroad-crossing" for which Letters Patent were issued to me bearing date the 4th day of April, 1882, and numbered 255,811; and the improvements consist in the formation upon the crossing-plates of extensions or ears to support and prevent the spreading of the rails connected thereto, in the application of fish-plates to the joints connecting the four sections of the crossing, and in extending the fish-plates from the joint connecting the crossing-sections around the angles and across the joints of the rails connected to the crossing, whereby the whole is rendered more solid and firm and the rails more efficiently supported and held against spreading.

In the accompanying drawings I have represented the crossing in perspective in Fig. 1. Fig. 2 shows a cross-section on the line *x x* of Fig. 1; Fig. 3, a plan view of one corner section.

The crossing is composed of four corner-plates or angle-pieces, A, of similar form, each of which I now form with wings or extensions *a*, fashioned to conform closely to the contour of the side faces of the rails B, which they serve to support, and which are firmly bolted to said extensions. The wings or extensions *a* are on the outer sides of the rails, and consequently serve to support them against spreading, and they also afford a body to bolt the rails to, as shown, a fish-plate, *d*, being placed across the joint formed by the end of the rail abutting against the shoulder *e* of the corner section, and the rail, the fish-plate, and the corner section being firmly tied together by bolts *f*. The corner sections, A, are joined together by fish-plates C, extending across the joints, and by blocks or bars D, fitting in seats in the adjoining ends of the corner sections, and extending across the joints of said parts, the whole being tied together by bolts *b*, passing through the fish-plates, corner sections, and blocks D, as shown in Figs. 1 and 2.

In order that the parts may be drawn firmly and snugly together, a slit or narrow opening, *g*, is formed in the inwardly-extending portions or wings of the corner pieces, thus permitting a limited amount of springing of said portions, and enabling the bolts *b* to draw the parts into close contact. In this way a more rigid and unyielding joint is secured than could otherwise be done.

In order to further stiffen the crossing and the rails connected therewith, and particularly to prevent the spreading or displacement of the rails, the fish-plates C are preferably carried around the corner or bend of the corner pieces, each side of the joints uniting them and extended across the joint or union of the rails with the crossing, as shown at *c*, Fig. 1. While not absolutely essential, this last feature is deemed advantageous and important in giving greater strength.

I am aware that it is not broadly new at the present time to form crossing-plates with extensions against which the ends of the rails bear, to which they are bolted, and by which they are supported; and I do not herein make claim thereto, broadly considered.

Having thus described my invention, what I claim is—

1. In combination with sections A, blocks D and fish-plates C, bolted together, substantially as described and shown.

2. In combination with the crossing plates or sections abutting one against another, and with rails abutting against the sections, a fish-plate extending across the joints formed by the abutting of the sections against each other and against the rails.

3. In combination with corner section A, having extension *a*, and with a rail overlapping the extension, fish-plate *d* and bolts *f*, substantially as shown.

4. A crossing plate or section, A, having a slit or opening, *g*, as and for the purpose explained.

DENISON C. PIERCE.

Witnesses:

CHAS. H. FERGUSON,
FRED H. KILBOURN.