

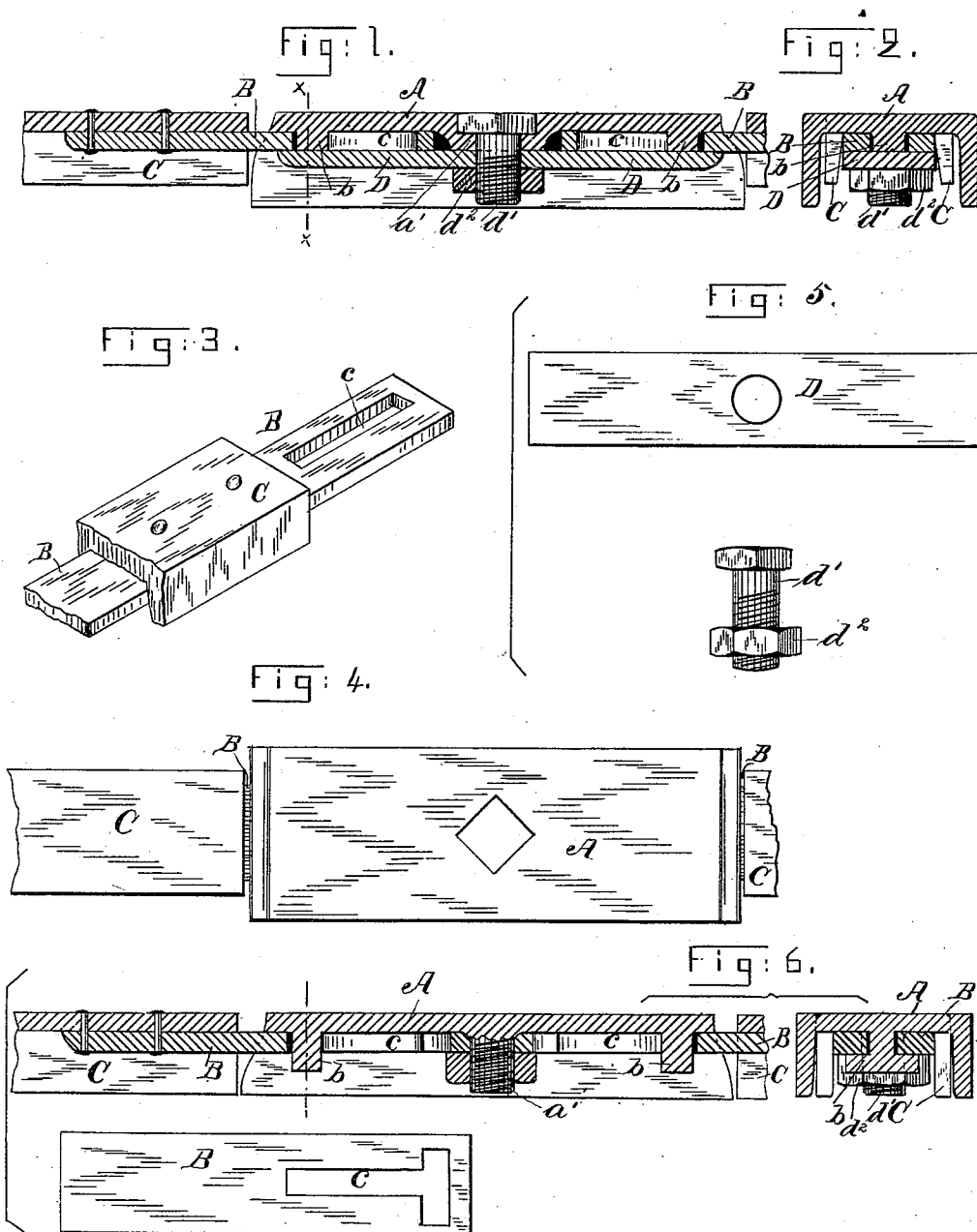
(No Model.)

C. HANIKA.

CONNECTION FOR METALLIC FENCING.

No. 330,584.

Patented Nov. 17, 1885.



Witnesses:

R. A. Brandon.
Atty. Atty.

Inventor.

Christian Hanika
By N. C. Whitney
Atty.

UNITED STATES PATENT OFFICE.

CHRISTIAN HANIKA, OF SPRINGFIELD, OHIO.

CONNECTION FOR METALLIC FENCING.

SPECIFICATION forming part of Letters Patent No. 330,584, dated November 17, 1885.

Application filed June 5, 1885. Serial No. 167,753. (No model.)

To all whom it may concern:

Be it known that I, CHRISTIAN HANIKA, of the city of Springfield, county of Clark, and State of Ohio, have invented certain new and useful Improvements in Connections for Metallic Fencing, of which the following is a specification.

This invention relates to improvements in connections for metallic rails, the object of the invention being to provide a cheap device to connect the ends of rails such as are used with erecting metallic fences, bridges, &c., and to hold them in such manner as to permit longitudinal expansion and contraction, and yet prevent detachment thereof. This connection is applicable to many things—as, for instance, it might be used to connect rails or stringers of bridges, or to connect the rails of metallic fences, either at their line-posts or immediately between posts—this latter purpose being a purpose to which my improved connection is especially adapted, and for which it is especially intended.

My invention consists in the combination, with the ends of metallic rails and an intermediate boxing provided with a central opening and projecting lugs, of connecting-links secured to the rails and provided with elongated openings adapted to engage the lugs, and a bolt and washer or equivalent to adjustably secure the links to the boxing to permit longitudinal expansion and contraction, substantially as hereinafter described.

It also consists in certain details of construction hereinafter set forth.

Figure 1 of the drawings represents in vertical longitudinal section a metallic connection as constructed in accordance with my invention, the said connection being shown as connecting two channel-rails; Fig. 2, a vertical cross-section on line *xx*, Fig. 1; Fig. 3, a perspective view of a portion of the rail and connecting-link, showing the manner of attaching it to the rail; Fig. 4, a plan view of Fig. 1; Fig. 5, details of the bolt and washer; Fig. 6, a modified form of boxing and connecting-link in longitudinal and vertical cross-section, and a plan view of the connecting-link.

The main portion of the connection A or boxing is provided with a central depending collar, *a'*, having a central opening, the

purpose of which will be hereinafter described, and two depending lugs, *b*, at or near the extreme ends of the boxing, which lugs enter elongated openings *c* in the ends of the connecting-links B, which connecting-links are preferably of flat metal, and are secured to the channel-rails C at their ends, preferably by rivets, as shown in Fig. 1. The collar *a'* and lugs *b* will in practice be about the same length, and will depend from the web or upper plate of the boxing A, as shown in the drawing Fig. 1. The slotted connecting-links B will be adjustably secured to the boxing A by means of the long washer D, which is pressed closely against the links and collar *a'* by means of the bolt *d'*, the head of which is countersunk into the boxing, and which is provided with a nut, *d''*, the said bolt passing through the collar, as illustrated in the drawings. There are many ways of securing the parts adjustably together—as, for instance, the collar *a'* might be externally screw-threaded and a threaded washer or nut screwed thereon, as illustrated in Fig. 6, in which case the lugs *b* would preferably be T-shaped, and the openings in the connecting-links be of corresponding shape, the lugs in this instance having a bearing against the underside of the links. The openings of the links B will be of sufficient length to permit longitudinal expansion or contraction of the rails: The parts are secured together as follows, the device illustrated in Fig. 1 being used. The two rails to be connected together are provided with the slotted connecting-links, (the free ends of which project considerably beyond the ends of the rails, which free ends are slotted, as described.) The boxing A is placed over the links, the lugs *b* of the boxing being projected into the openings in the links, and the two rails drawn toward one another, as desired, after which the bolt *d'* is inserted in the collar *a'* and the washer placed thereon from the under side, which washer is drawn closely against the slotted ends of the connecting-links by means of the nut *d''*, which is screwed on the bolt *d'*, as shown in the drawings, which secures the links and boxing firmly but adjustably together, and permits longitudinal expansion or contraction of the rails without loosening the connection.

The boxing will preferably be of channel

shape, it consisting of a top plate and two depending side plates. Other forms might, however, be used.

I am aware that a connection for metallic fences has been made which consisted of a boxing with a downwardly-projecting lug to enter a slot in the rail and having a bridge to support the rail, as seen in Patent No. 303,729, dated August 19, 1884, heretofore granted to me; but such construction I do not desire to claim herein. One special advantage of this present connection over any that have come under my observation is that the rails may be connected together through the medium of the boxing without inclining the said rails to connect them.

I claim—

1. The combination, with a boxing having projecting lugs, as described, and a metallic rail, of a connecting-link secured at one end to the rail, and having a slotted free end adapt-

ed to engage a lug of the boxing, and means to secure the link and boxing adjustably together to permit expansion and contraction, substantially as described.

2. A connection for metallic rails, consisting of the channel-shaped boxing A, provided with the downwardly-projecting lugs *b*, of any desired shape, and collar *a'*, the links B, to engage the rails, as described, and having elongated openings to engage the lugs of the boxing, and the washer D and bolt *d'*, to hold the parts in place, all constructed and arranged substantially as shown and described.

In witness whereof I have hereunto set my hand and seal, at Springfield, Ohio, this 26th day of May, A. D. 1885.

CHRISTIAN HANIKA. [L. s.]

In presence of—

PETER WILSON,
P. J. CLEVENGER.