(No Model.)

J. SUYDAM.

FENCE.

No. 342,765. Patented May 25, 1886.

Fig. 1

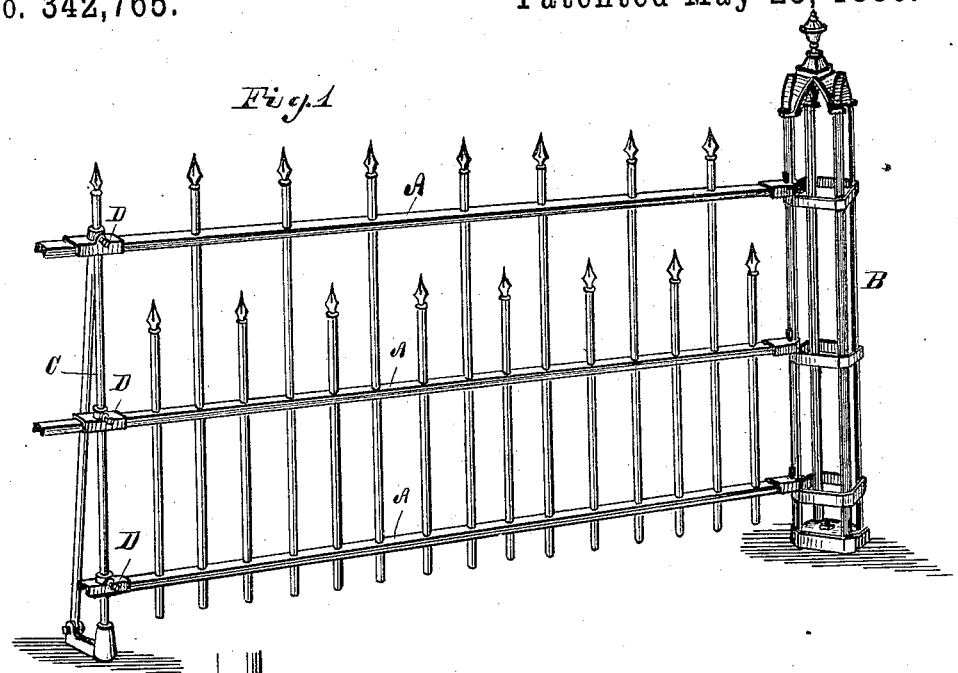


Fig. 3

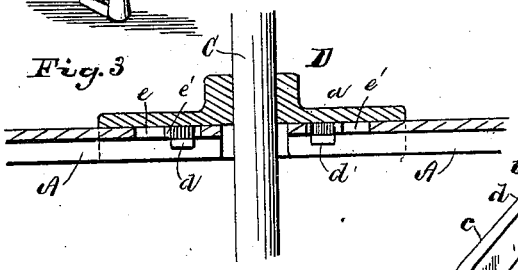


Fig. 2

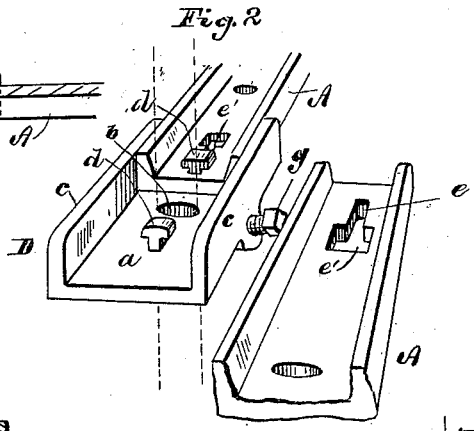


Fig. 6

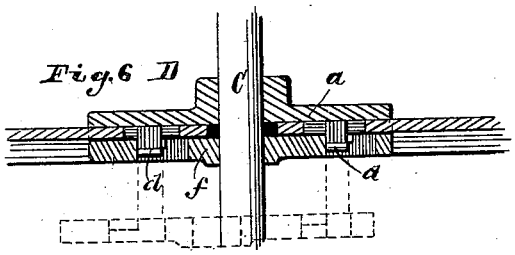


Fig. 4

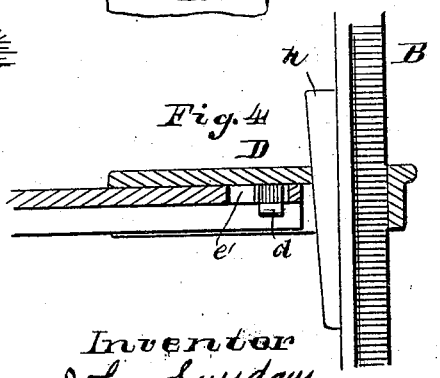
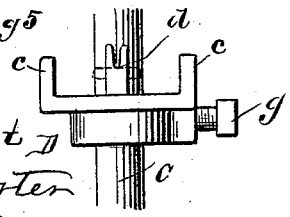


Fig. 5



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UNITED STATES PATENT OFFICE.

JOHN SUYDAM, OF SPRINGFIELD, OHIO, ASSIGNOR OF ONE-HALF TO B. F. PORTER, OF SAME PLACE.

FENCE.

SPECIFICATION forming part of Letters Patent No. 342,765, dated May 25, 1886.

Application filed March 17, 1885. Serial No. 159,235. (No model.)

To all whom it may concern:

Be it known that I, JOHN SUYDAM, a citizen of the United States, residing at Springfield, in the county of Clark and State of Ohio, have invented certain new and useful Improvements in Fences, of which the following is a specification.

My invention relates to improvements in fences; and the object of my invention is to provide a simple and effective device for connecting the different sections of a fence together in such a manner that the rails thereof will be capable of a slight longitudinal movement to compensate for the contraction or expansion of said rails.

My invention consists in the constructions and combinations of parts, as hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a perspective view of a fence embodying my invention. Fig. 2 is a perspective view of the connecting-piece in detail, said connecting-piece being shown in an inverted position to show the manner of connecting the ends of the rails thereto. Fig. 3 is a longitudinal sectional view of the connecting-piece, showing the line-post and the ends of the respective rail-sections therein. Fig. 4 is a view showing a modification of the device adapted to connect the end of the rail to the main posts. Figs. 5 and 6 are modifications, which will be referred to hereinafter.

Like parts are referred to by similar letters of reference throughout the several views.

In said drawings, A A A represent the respective rails of the fence; B, one of the main posts, and C one of the line-posts. The rails A are made in sections, which are adapted to be connected together at the respective line-posts by a connecting piece or clip, D. The connecting piece or clip D consists of a top plate, *a*, provided with an opening adapted to receive the line-post C, which slides through said plate. The plate *a* is provided on the lower side with parallel side pieces, *c c*, between which the ends of the rails A are adapted to fit, said rails being thus held against lateral movement in the connecting-clip.

To secure the rails firmly in place in the connecting-clip and at the same time provide for the expansion and contraction of the rails, I provide the connecting-clip with T-shaped depending lugs or studs *d d*, which depend from the top plate, *a*, on each side of the opening *b* and midway between the side pieces, *c c*. The ends of the rail-sections are each provided with a slotted opening, *e*, adapted to move longitudinally on the studs *d d*. These slotted openings *e* are preferably made of a width equal to the thickness of the neck or lower part of the studs *d*, and are each provided at one end with an enlarged portion, *e'*, adapted to slip over the heads of the studs *d*, so that the rails are securely attached to the connecting-clip when the studs are drawn into the narrow part of the slotted opening. The enlarged opening *e'* is so placed in each rail-section in relation to the end thereof that when the line post or rod C is slipped through the opening *b* the longitudinal movement of the rail is so limited that the enlarged part *e'* of the opening *e* cannot be brought opposite the head of the depending studs *d*, so that the rails cannot be detached therefrom until the rod or post C is removed.

In Fig. 6 I have shown a modified form of my device, in which an auxiliary or locking plate, *f*, is used to secure the rail-sections. In this case the rails are provided with slotted openings of an equal size throughout and large enough to pass over the studs *d d*. The studs are made long enough to project through the rail, and are engaged by slotted openings in the plate *f*, which are provided with enlarged parts. The plate *f* is also provided with an opening adapted to receive the rod C when the said plate is in a position to engage the studs *d d*. Means are provided for holding the rod or post C against longitudinal movement through the clip D, a set-screw, *g*, being preferably used for this purpose, as shown.

In securing the ends of the rails to the end or permanent posts I preferably use a construction such as shown in Fig. 4, in which a key, *h*, is used for limiting the longitudinal movement of the rail, so that it may not become detached, the said key being also adapted to secure the connecting-clip to the post.

The depending lugs may be cast solid with the connecting-clip D, or they may be made

separate and riveted thereon. If desired, the studs may be cast straight and in one piece with the plate *a*, and the heads afterward formed thereon by casting the studs with a slot therein and afterward bending down the respective sides of said slot to form the head, as indicated in Fig. 5. When thus constructed, the molding of the clips, which will be preferably cast of malleable iron, will be a simple matter. It will be seen that this connection may be used for connecting rail-sections of various shapes, the different sections being readily connected and securely held together thereby without the use of bolts or screws of any kind, and in such a manner as to compensate for the contraction or expansion of the rails.

Having thus described my invention, I claim—

1. The combination, with the rails of a fence made in sections, of a connecting clip or piece having an opening therein, and provided with T-shaped depending lugs adapted to project through slotted openings in the ends of the rails, and a line-post adapted to be inserted through the openings in the said connecting-clip and lock the ends of the rails therein, substantially as set forth.

2. The combination, with the rails of a sectional fence, of a connecting-clip having depending T-shaped lugs thereon, said rails being provided with slotted openings of an unequal width adapted to slip over said lugs and be drawn under the head thereof, and means for limiting the longitudinal movement of the said rails, substantially as specified.

3. The combination, with the rails of a sectional fence, of a connecting-clip provided with depending T-shaped lugs, slotted openings in the ends of said rails provided with an enlargement therein to slip over the heads of said lugs, and a rod or post adapted to be inserted transversely through said connecting-clip and limit the longitudinal movement of the said rails, substantially as set forth.

4. The combination, with the connecting-clip provided with depending T-shaped lugs, of the rail-sections, each provided with slotted openings having an enlargement therein to slip over said studs, a rod or post adapted to be inserted transversely through said clip and limit the longitudinal movement of the said rails, and means for securing the said post against longitudinal movement through the clip, substantially as specified.

5. The combination, with the connecting-clip D, having top plate, *a*, side pieces, *c c*, opening *b*, and depending lugs *d d*, of the rails A, provided with slotted openings *e* with enlargement *e'*, and the rod or post C.

In testimony whereof I have hereunto set my hand this 12th day of March, A. D. 1885.

JOHN SUYDAM.

Witnesses:
B. F. PORTER,
CHASE STEWART.