

No. 618,741.

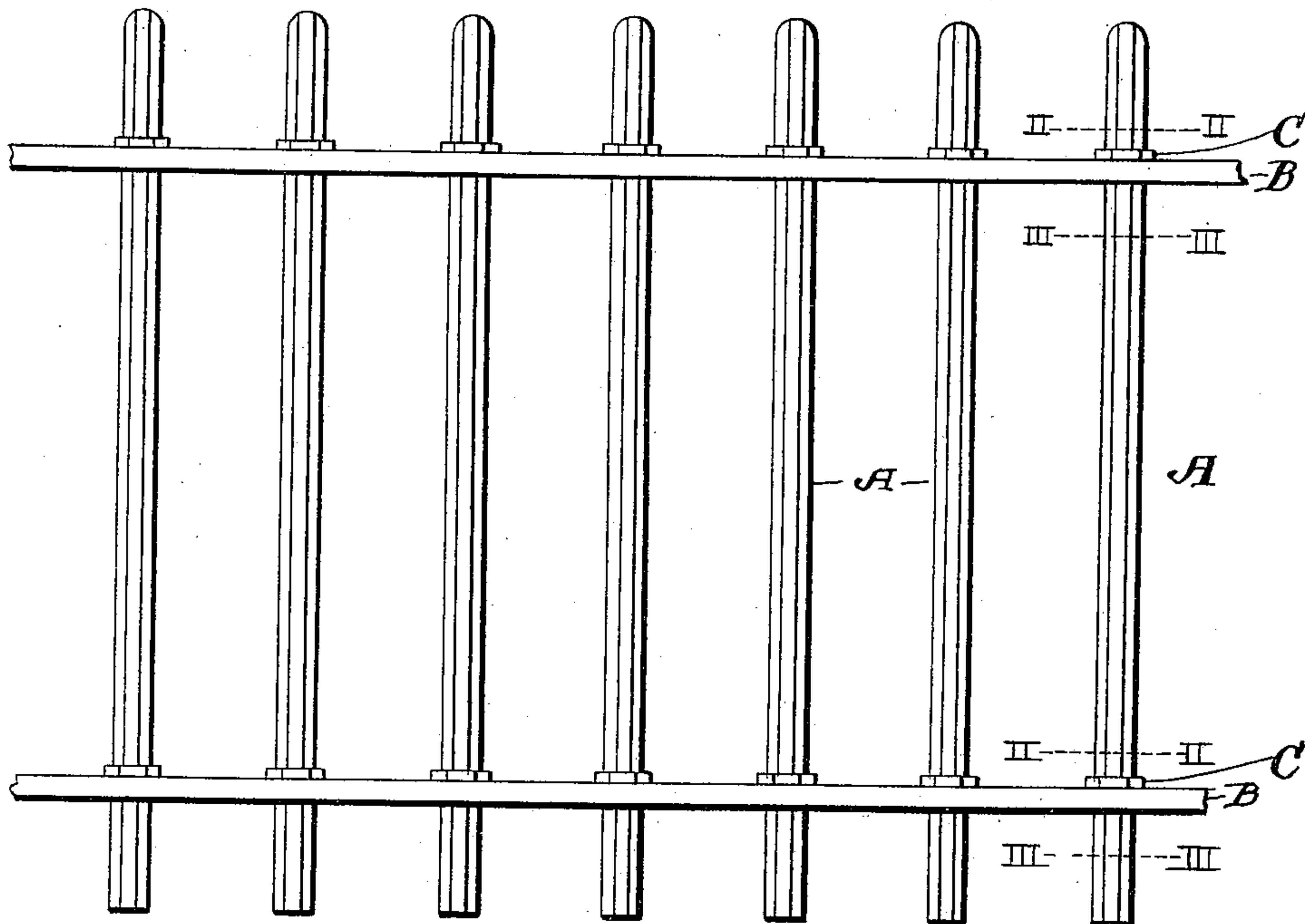
Patented Jan. 31, 1899.

G. D. SHEER.  
IRON FENCE.

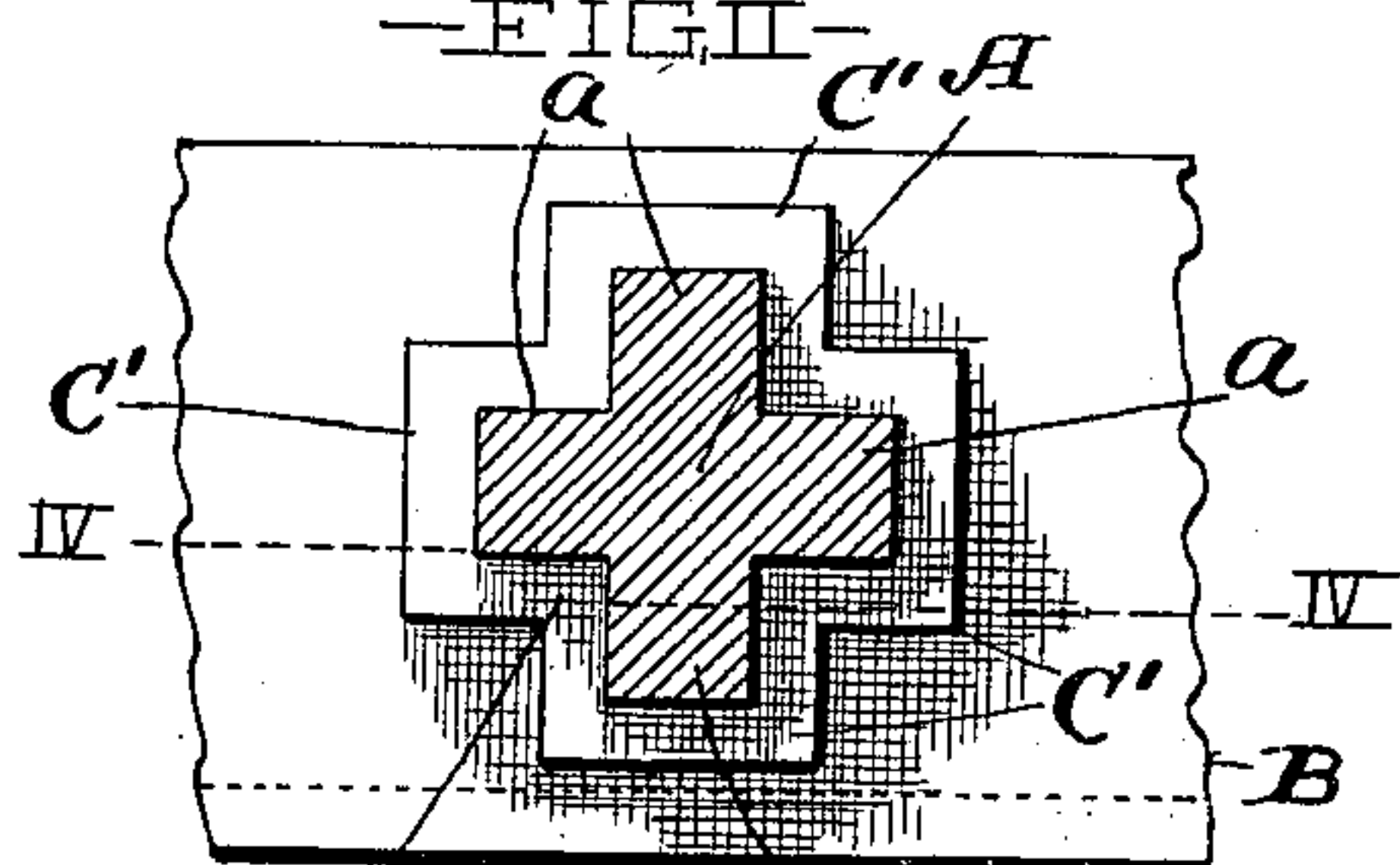
(Application filed Apr. 1, 1898.)

(No Model.)

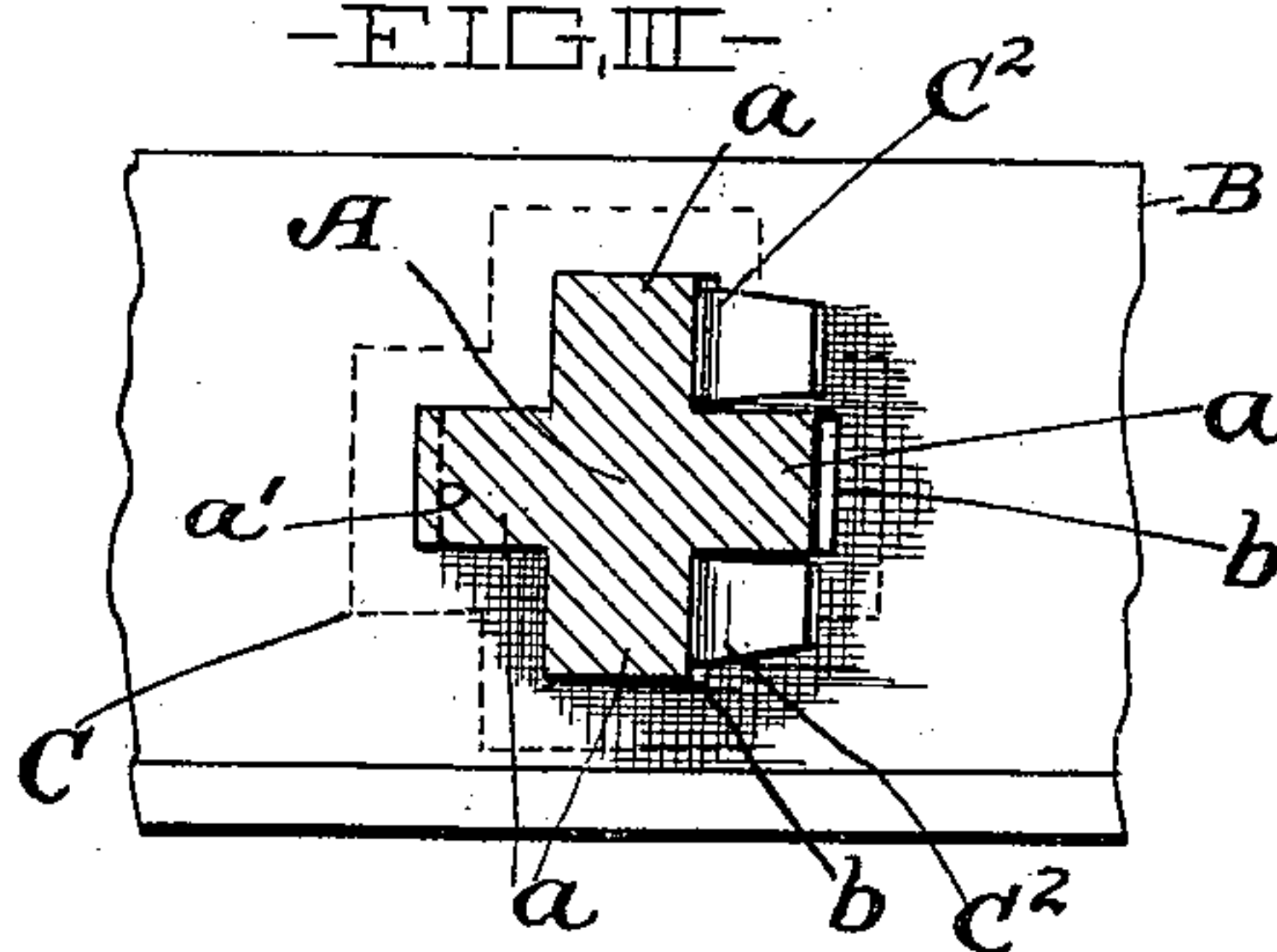
-FIG. I-



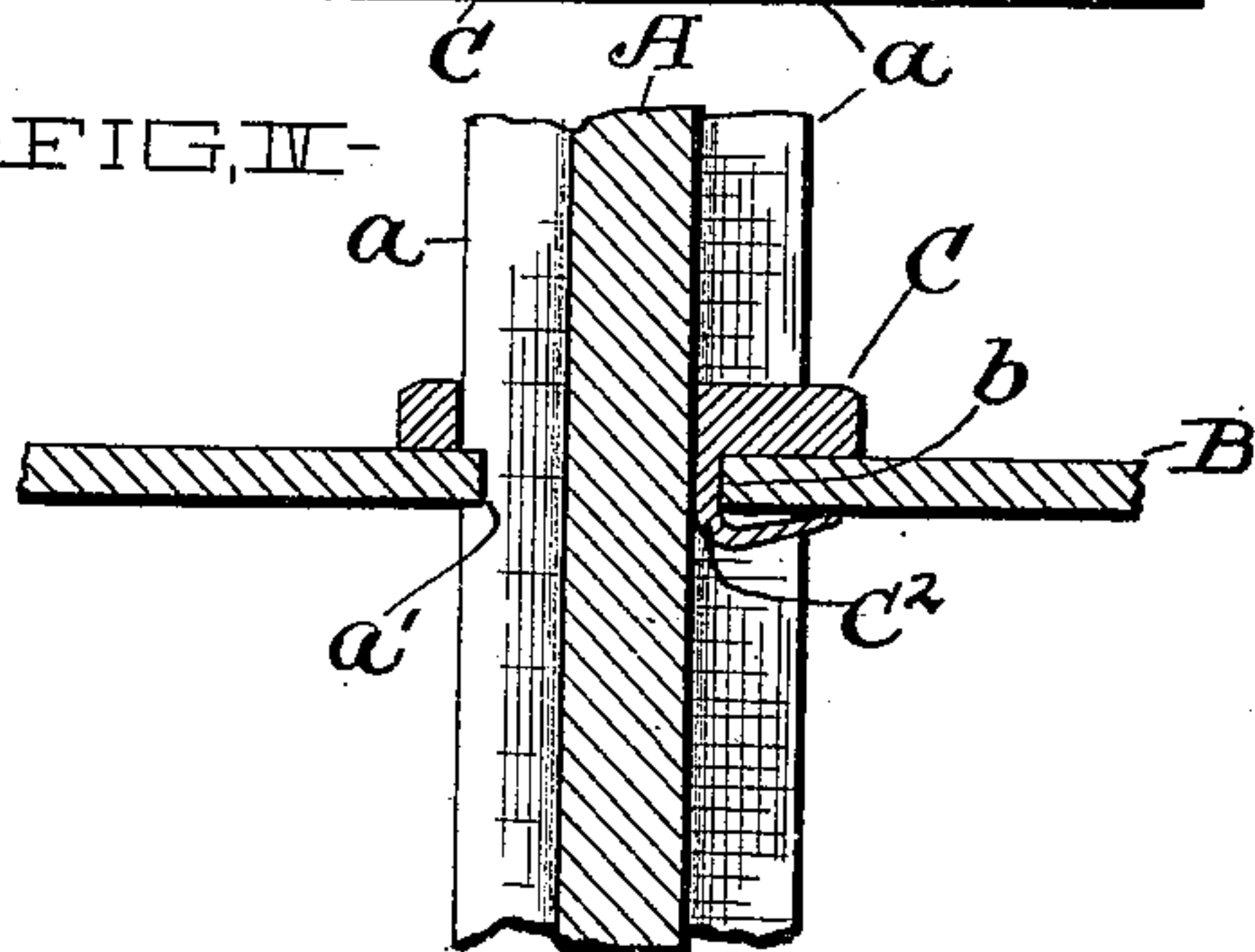
-FIG. II-



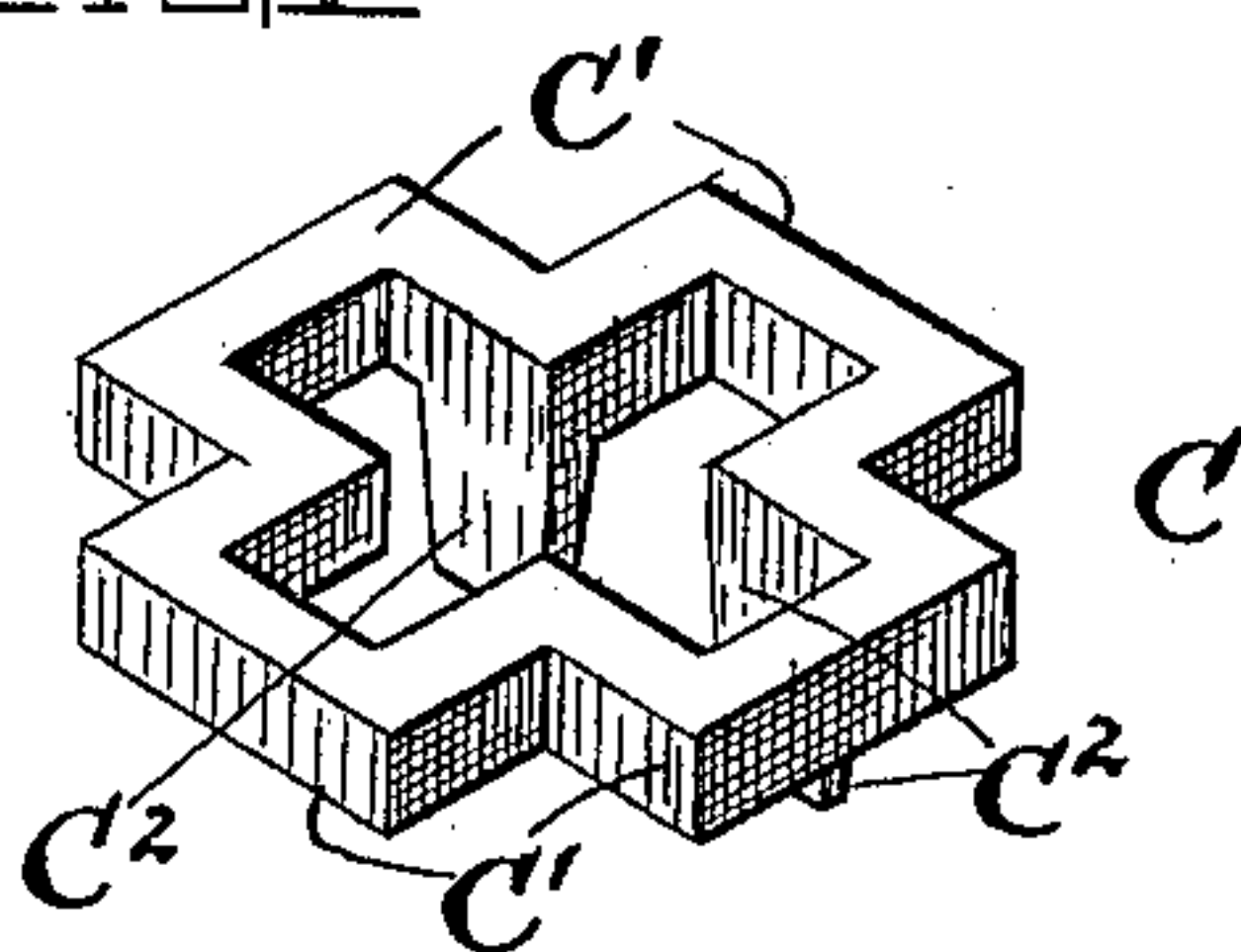
-FIG. III-



-FIG. IV-



-FIG. V-



WITNESSES:

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# UNITED STATES PATENT OFFICE.

GEORGE D. SHEER, OF CLEVELAND, OHIO.

## IRON FENCE.

SPECIFICATION forming part of Letters Patent No. 618,741, dated January 31, 1899.

Application filed April 1, 1898. Serial No. 676,150. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE D. SHEER, of Cleveland, Cuyahoga county, State of Ohio, have invented certain new and useful Improvements in Iron Fences; and I do hereby 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 pertains to make and use the same.

My invention relates to improvements in iron fences; and it consists not only in a novel and meritorious construction of picket, but also in a comparatively simple and efficient means for locking the picket to the rails of the fence without weakening the picket and without interfering with the reduction of the picket to a minimum in cross-section.

In the accompanying drawings, Figure I is a side elevation of a panel of a fence embodying my invention. Fig. II is a top plan in section on lines II II, Fig. I. Fig. III is a bottom plan in section on lines III III, Fig. I. Fig. IV is a vertical section on line IV IV, Fig. II. Fig. V is a perspective view of one of the collars employed in locking a picket to a rail of the fence.

Referring to the drawings, A designates pickets of the fence, and an important feature of my invention consists in the externally-ribbed picket, in combination with a correspondingly-shaped collar that embraces the external ribs of the picket and has lugs or flanges instrumental in locking a recessed rib of the picket in an engagement with a rail of the fence. In the case illustrated the picket has four ribs *a*, that are formed upon the four different sides, respectively, of the picket and extend longitudinally and from end to end of the picket. The fence is provided with any suitable number of picket-connecting horizontally-arranged rails B, placed a suitable distance apart at different elevations, respectively. Each picket above each rail is embraced by a collar C, that is shaped to correspond to the cross-sectional form of the embraced picket, and that consequently in the case illustrated has four wings C', that embrace or straddle the different ribs, respectively, of the picket, that of course extends vertically through corresponding holes *b*, formed in the rails B. One rib of each picket, and preferably one of the ribs that project in

the line of fence, has a recess *a'*, (see Fig. IV,) engaged by a rail B, and one or more of the ribs of each picket upon a surface or surfaces that face in the direction opposite to the direction in which the recessed surface of the recessed rib faces are engaged by lugs C<sup>2</sup>, formed upon the under side of a picket-embracing collar and extending into the picket-engaged hole of the rail, which hole is large enough to receive the picket and the collar's lugs, and which lugs in the assemblage of the parts of the fence are instrumental in effecting the engagement with the rail of the recessed portion of the recessed rib of the picket and thereby locking the picket to the rail, and the said lugs when the parts are assembled are clenched against the under side of the respective rail. In the case illustrated, as already indicated, one of the picket's ribs that project in the line of fence is provided with the rail-engaging recess upon its surface that faces in the direction of the said line, and its two ribs that project transversely of the fence are engaged upon their surfaces that face in the direction opposite to the recessed surface of the recessed rib by the lugs formed upon the under side of the picket-embracing collar.

I am aware that square, ovular, and round pickets have heretofore been notched or recessed upon one or more sides, with the notched portion of the recessed surfaces held in engagement with a rail by lugs or flanges formed upon picket-embracing collars and extending through the picket-engaging holes of the rails, and I would have it understood that my invention does not involve, broadly, such well-known construction.

My invention is essentially limited to the novel and meritorious externally-ribbed picket and correspondingly-shaped locking-collar, and by my invention, it will be observed, are attained the following advantages: First, the picket does not require an excessive amount of material in its construction, because its rail-engaged recess is formed in a rib of the picket, and is consequently reduced in size to a minimum and does not materially interfere with the strength or durability of the picket, and, secondly, the ribbed form of the picket does not only require less material in its construction than a square, ovular, or



round picket in order to possess the required strength, but is stronger in its recessed condition than an unrecessed round, ovular, or square picket.

5 What I claim is—

1. In an iron fence, the combination of a fence-rail, a picket extending through the rail and provided with external ribs, whereof one is provided in its outer face with a recess that  
10 engages the rail, and a collar embracing the picket and having a lug or lugs extending into the picket-engaged hole of the rail and engaging a surface or surfaces of the picket that  
15 face in the direction opposite to the direction in which the recessed surface of the recessed rib faces, substantially as and for the purpose set forth.

2. In an iron fence, the combination of a fence-rail B; a picket A extending through  
20 the rail, and having four external ribs *a* formed upon the different sides, respectively, of the picket and extending longitudinally of the picket, and having one of the said ribs provided with a recess *a'* engaged by the rail,  
25 and a collar C embracing the ribs and having a lug or lugs *C*<sup>2</sup> extending into the picket-engaged hole of the rail and engaging a surface

or surfaces of the picket that face in a direction opposite to the direction in which the recessed surface of the picket's recessed rib  
30 faces, substantially as set forth.

3. In an iron fence, the combination of a fence-rail B; a picket A extending through the rail and having the four external ribs *a*,  
35 two whereof project in the line of fence, and the remaining two whereof project transversely of the said line, and one of the ribs, that project in the line of fence, having a recess *a'* engaged by the rail; and a collar C  
40 having wings *C'* embracing or straddling the ribs of the picket and provided with lugs *C*<sup>2</sup> that extend into the picket-engaged hole of the rail, and are arranged to engage or bear  
45 against those surfaces of the transversely-projecting ribs that face in the direction opposite to the direction in which the recessed surface of the recessed rib faces, substantially as shown, and for the purposes specified.

Signed by me, at Cleveland, Ohio, this 16th day of March, 1898.

GEORGE D. SIEER.

Witnesses:

C. H. DORER,

ANNA H. PARRATT.