

(No Model.)

A. A. STROM.
TIE-BAR CLIP FOR SPLIT SWITCHES.

No. 403,897.

Patented May 21 1889.

Fig. 1.

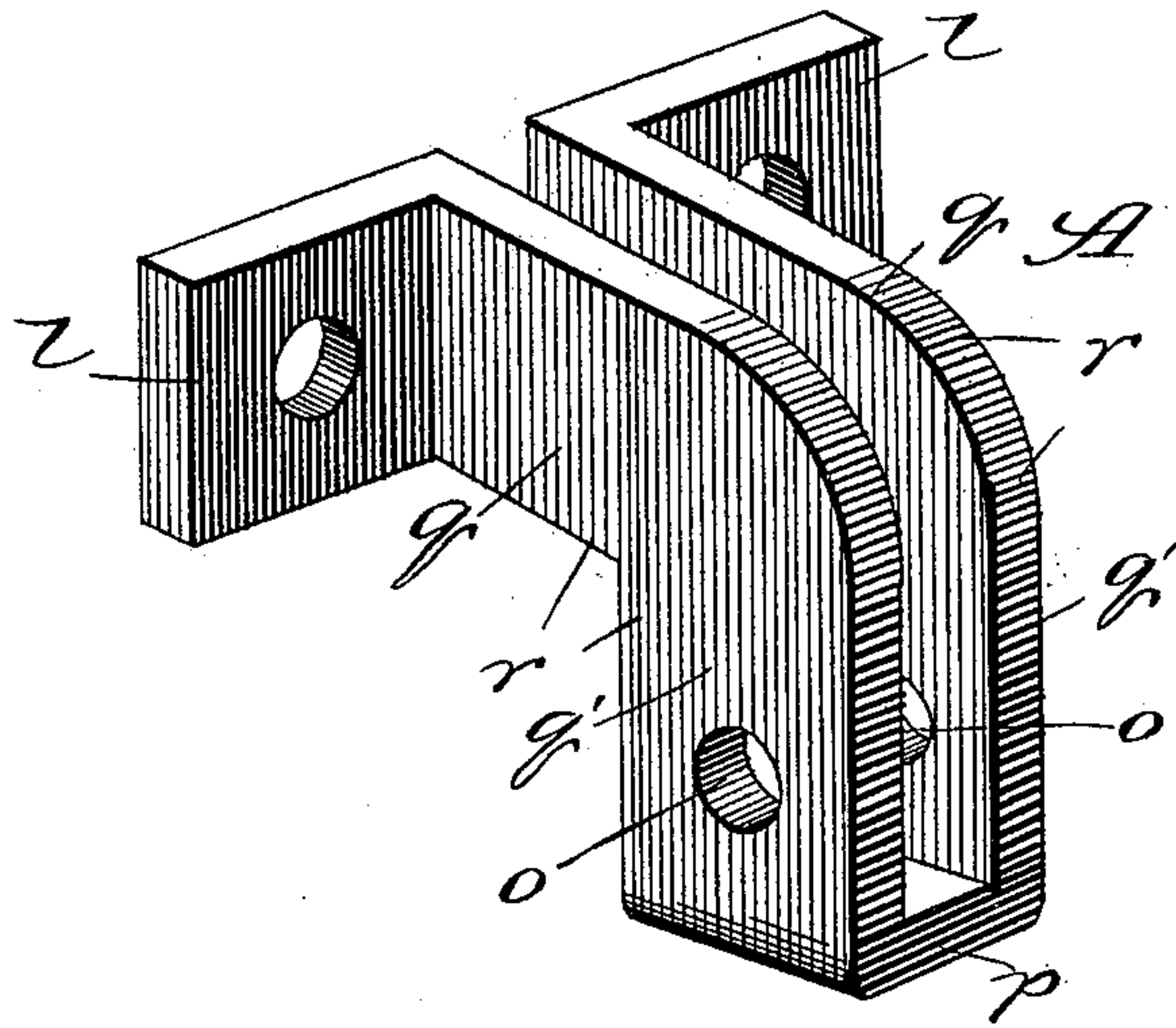
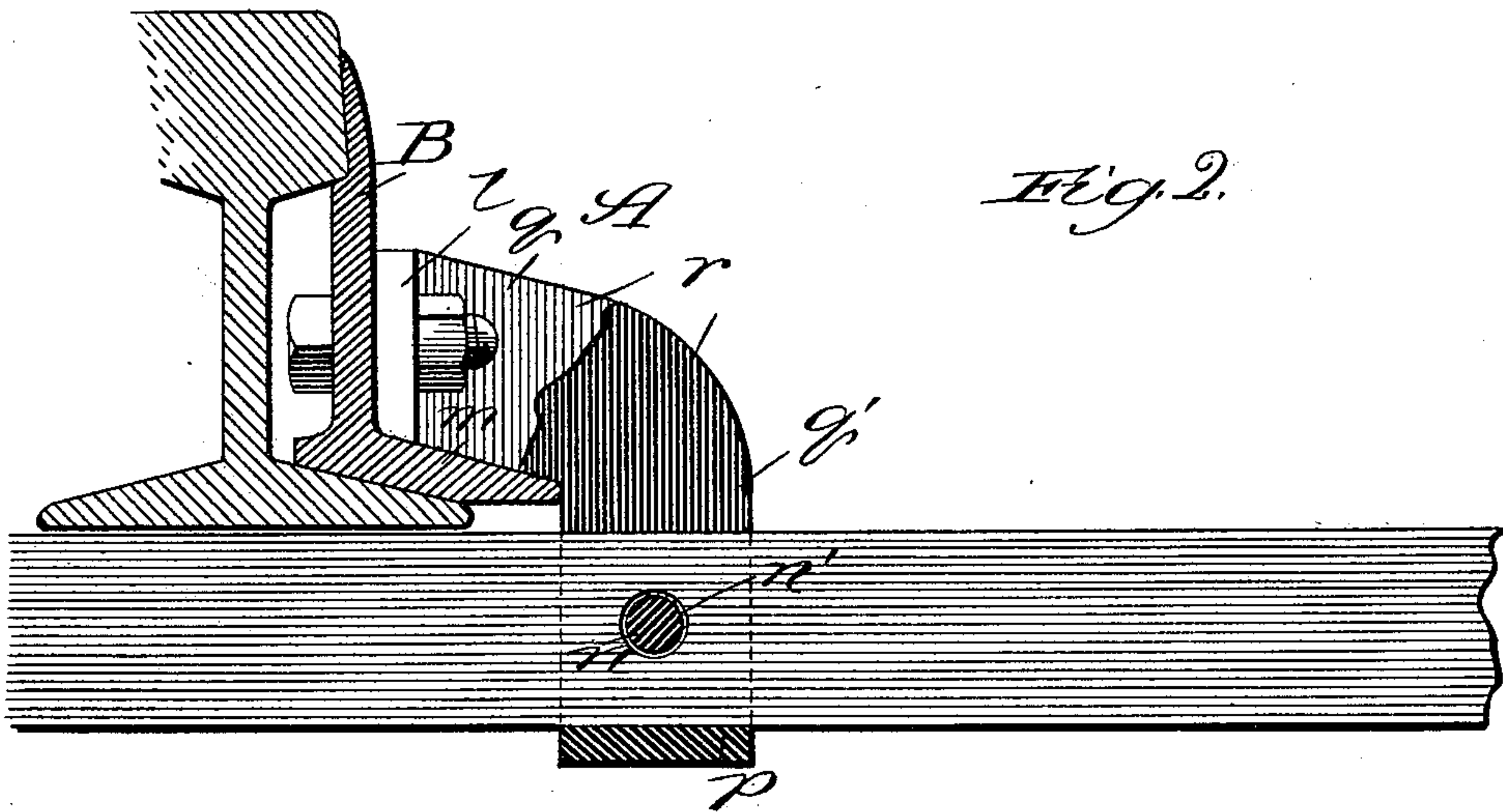


Fig. 2.



Witnesses:
E. S. Gaylord,
J. H. Dyrenforth.

Inventor:
Axel A. Strom,
By Dyrenforth & Dyrenforth
Attys.

UNITED STATES PATENT OFFICE.

AXEL A. STROM, OF AUSTIN, ASSIGNOR TO THE STROM MANUFACTURING COMPANY, OF CHICAGO, ILLINOIS.

TIE-BAR CLIP FOR SPLIT SWITCHES.

SPECIFICATION forming part of Letters Patent No. 403,897, dated May 21, 1889.

Application filed February 19, 1889. Serial No. 300,398. (No model.)

To all whom it may concern:

Be it known that I, AXEL A. STROM, a citizen of the United States, residing at Austin, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Tie-Bar Clips for Split Switches, of which the following is a specification.

The object of my invention is to provide a simple and yet adequately strong form of the device known technically as a "clip," and commonly employed by fastening them to the movable rails of railroad-switches as a means for pivotally connecting to the rails the bars employed to tie them together.

In the accompanying drawings, which illustrate my improvement, Figure 1 is a perspective view of the clip, and Fig. 2 shows it in a broken sectional view applied to a movable rail of a split switch and pivotally supporting one end of a tie-bar.

A is the clip of metal and of general U shape, bent to cause parts *q* of the arms *r* forming it to extend, at least at their lower edges, when the device is secured in operative position, in conformity to the bevel of the flange *m* of the switch-rail, and the remaining portions, *q'*, of the arms to extend downward beyond and below the rail-flange, and the arms *r* are joined at their ends, and thus near the part of the clip where it has to stand the greatest strain, and should therefore be strongest by a base, *p*, which preferably forms an integral part of the arms it connects and braces. If desired, the arms may be further braced by metal filling between them above the base.

Openings *o* are formed in line with each other through the parts *q'* of the arms *r* to receive a pin, *n*, which passes through a hole, *n'*, provided in the tie-bar C, which is adjusted in the clip by inserting it therein toward its end—preferably edgewise, as shown—and, when the hole *n'* is brought coincident

with the openings *o*, passing the pin *n* through and securing it. Thus the tie-bar is held in place and has a limited movement at its opposite ends, (the end of the bar not shown being equipped similarly to the end illustrated,) for the usual well-known purpose.

The clip may be secured to the switch-rail B, either before or after adjusting the tie-rod, by providing it with perforated ears *l*, extending laterally from the ends of the parts *q* of the arms *r*, and bolting it through the ears to the web of the rail, as shown. It is, however, within the spirit of my improvement, though the construction illustrated is preferred, to secure the clip to the rail otherwise than through ears, and I do not limit myself to securing it to the web of the rail, as it may also be readily formed to be secured to the rail-flange.

What I claim as new, and desire to secure by Letters Patent, is—

1. A clip, A, for pivotally connecting a tie-bar with a switch-rail, of general U shape, substantially in the bent form described, and having a base, *p*, and lateral openings *o* above the base to admit the pin for pivotally connecting a tie-bar with it, substantially as described.

2. A clip, A, for pivotally connecting a tie-bar with a switch-rail, comprising arms *r* in the bent form described, affording the parts *q* and *q'*, a base, *p*, joining the parts *q'* at their ends, lateral openings *o* in the arms above the base to admit the pin for pivotally connecting the tie-bar with the clip, and perforated ears *l*, extending laterally from the ends of the parts *q* of the arms, substantially as described.

AXEL A. STROM.

In presence of—
M. J. BOWERS,
J. W. DYRENFORTH.