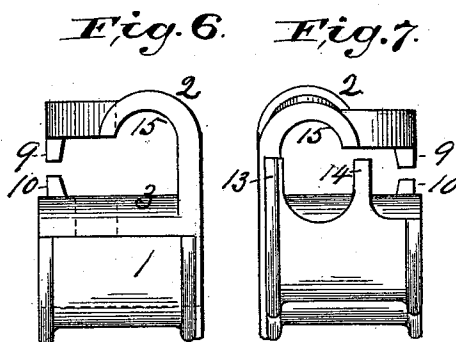
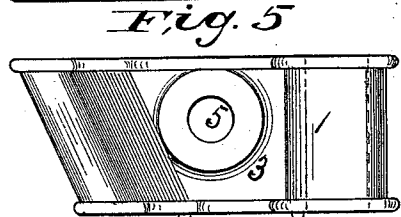
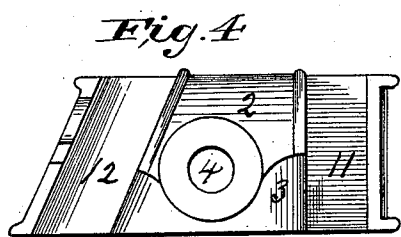
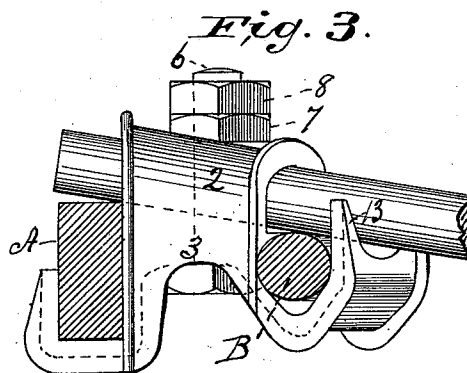
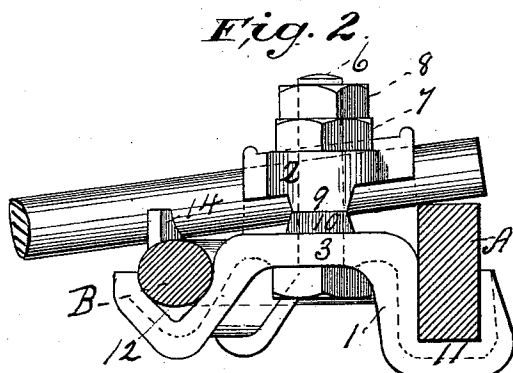
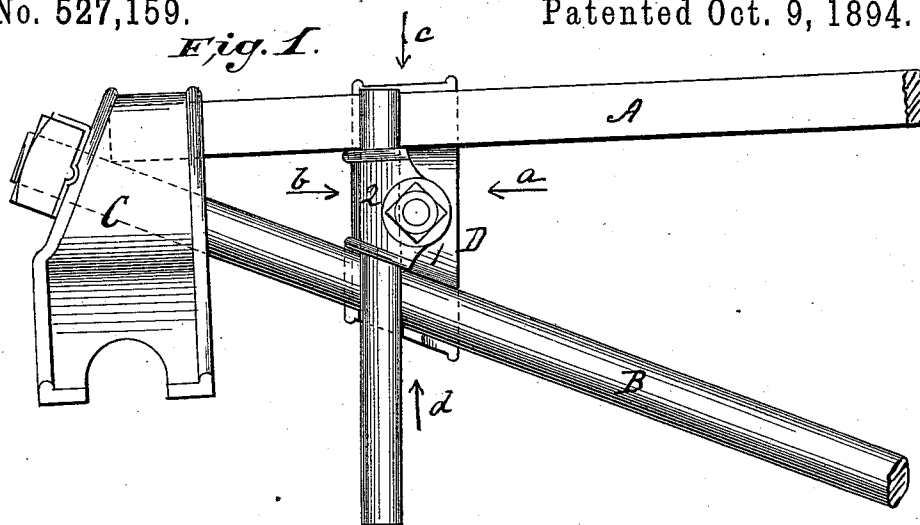


(No Model.)

H. B. ROBISCHUNG.
FINGER GUARD CLAMP FOR BRAKE BEAMS.

No. 527,159.

Patented Oct. 9, 1894.



Witnesses:

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H. M. Stearns

Inventor.

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UNITED STATES PATENT OFFICE.

HENRY B. ROBISCHUNG, OF KALAMAZOO, MICHIGAN, ASSIGNOR TO THE CHICAGO RAILWAY EQUIPMENT COMPANY, OF CHICAGO, ILLINOIS.

FINGER-GUARD CLAMP FOR BRAKE-BEAMS.

SPECIFICATION forming part of Letters Patent No. 527,159, dated October 9, 1894.

Application filed February 7, 1894. Serial No. 499,407. (No model.)

To all whom it may concern:

Be it known that I, HENRY B. ROBISCHUNG, a citizen of the United States, residing at Kalamazoo, in the county of Kalamazoo, State of Michigan, have invented certain new and useful Improvements in Finger-Guard Clamps for Brake-Beams; and I hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, in which—

Figure 1, is a plan view of one end of a trussed brake beam, with brake head, and having attached a finger guard, held by a finger guard clamp—embodying my invention. Fig. 2, is an elevation of the clamp looking in direction of the arrow *a*—Fig. 1, the compression and tension members of the beam being in section, and the end of the finger guard broken off. Fig. 3, is a similar view to Fig. 2, looking in direction of arrow *b* Fig. 1. Fig. 4, is a top plan view of the finger guard clamp detached. Fig. 5, is a bottom plan view of the clamp. Fig. 6, is a rear end view of the clamp looking in the direction of arrow *c* Fig. 1, and Fig. 7, is a front view of the clamp looking in the direction of the arrow *d* Fig. 1.

Like symbols refer to like parts wherever they occur.

My invention relates to the construction of clamps for holding the finger guards of brake beams, and has for its object a simple and effective means of binding the finger guards to the beam, maintaining their relation to the brake-heads and enabling them to be readily removed and replaced when bent or broken.

To this end the main feature of my invention embraces a clamp having a base plate which binds on the compression and tension members of the beam, and a spring ear extending over and parallel with the base plate, and adapted to hold the finger guard at right angles to the compression member of the beam and parallel with the brake head.

There are other minor features of invention relating to the preferred form of construction, all as will hereinafter more fully appear.

I will now proceed to describe my invention more specifically so that others skilled in the art to which it appertains may apply it either in the form chosen for illustration, or modified, as circumstances may dictate.

In the drawings A indicates the compression member, and B the tension member—or truss rods—of a trussed brake beam, and C a brake-head, all of which, being simply chosen for illustration, may be of any desired pattern.

D indicates a clamp embodying my invention, the essential features of which are a base plate 1 adapted to bind on both the compression and tension members (A B) and a fold or spring ear 2 adapted to hold the finger guard at right angles to the compression member (A) to be used in conjunction with means for clamping the parts to confine the finger guard—as for instance a bolt and nut.

The base plate 1 I preferably form with a raised center 3 from which at one side springs the fold or ear 2, both ear and plate having aligned bolt holes 4, 5 for the passage of a clamping bolt 6 provided with suitable nuts 7, 8; and in order to more effectually hold the finger guard by the fold or spring ear I may employ the limit lugs (or fulcrum lugs) 9 and 10 as clearly shown in Figs. 2, 6, and 7.

One advantage of constructing the base plate 1 with raised center 3, is that I insure depressed seats 11 and 12 for the tension and compression members A. B. The seat 11 for the compression member will of course correspond in cross section to the cross section of the compression member—in the present instance it is rectangular—and the seat 12 for the tension member may also conform in cross section to the cross section of the tension member, but as the tension member (or truss rod) is commonly round it is in my opinion more desirable that seat 12 should be V-shaped in cross section as better adapted to pinch and closely confine the tension member B.

In order to insure against any lateral movement of the finger guard the base plate may at its front be provided with vertical lugs or projections 13 and 14 which form a seat for the finger guard, said seat being at right angles to the seat of the compression member A. It will be noted that in the preferred form of construction shown in the drawings the concave seats 11 and 12 are formed on converging lines, and the under surface of the spring ear 2 is concave as at 15, the result of which is that the clamp and finger guard, when se-

surely fastened to the compression and tension members, form an effective tie or cross brace for the structure, and a further advantage resulting from the general construction is that if desired, a single clamp or clamping bolt can be used to confine and bind all the parts together.

Any suitable material may be used for the clamp but preferably it will be malleableized iron casting.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A finger guard clamp having a base plate and a clamp fold or ear adapted to hold a guard pin or finger; substantially as and for the purposes specified.

2. A finger guard clamp having a base plate provided with converging seats for the tension and compression members of a brake beam, and a fold or ear parallel to the base plate for holding a guard finger; substantially as and for the purposes specified.

3. A guard finger clamp having a base plate with raised center and converging seats for the compression and tension members of a brake beam, and a spring fold or ear parallel with the raised center of the base plate, the said fold or ear and raised center of the base plate having aligned bolt holes; substantially as and for the purposes specified.

4. A guard finger clamp having a base plate provided with guard finger lugs, and a parallel fold or ear, substantially as and for the purposes specified.

5. A guard finger clamp having a base plate with converging seats, guard finger lugs, and a parallel fold or ear, substantially as and for the purposes specified.

In testimony whereof I affix my signature, in presence of two witnesses, this 29th day of January, 1894.

HENRY B. ROBISCHUNG.

Witnesses:

E. B. LEIGH,

E. T. WALKER.