

(No Model.)

2 Sheets—Sheet 1.

H. B. ROBISCHUNG.
CLAMP FOR BRAKE BEAMS.

No. 430,755.

Patented June 24, 1890.

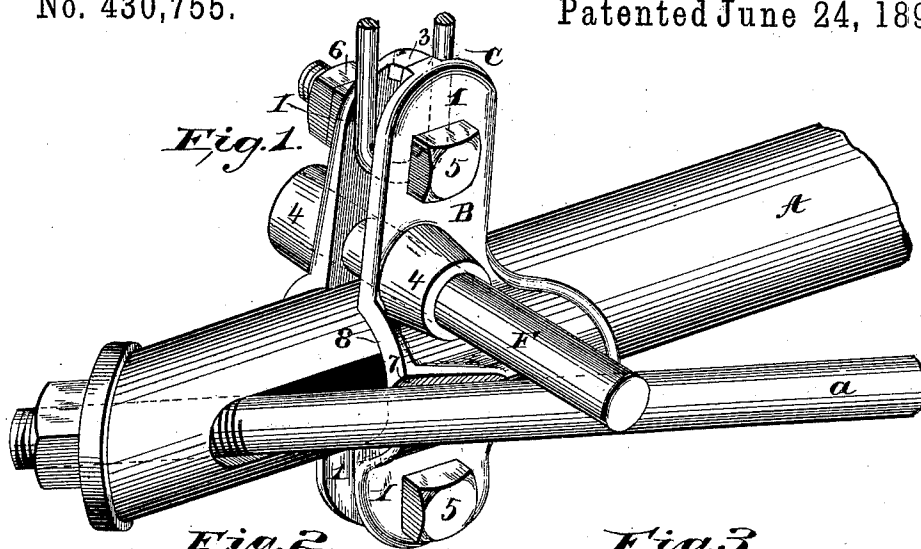


Fig. 2.

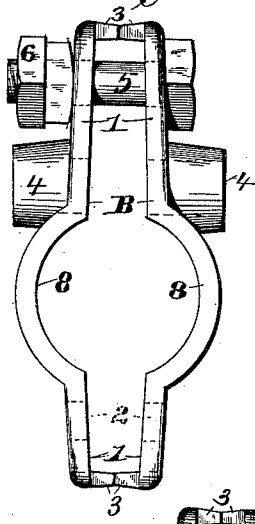


Fig. 3.

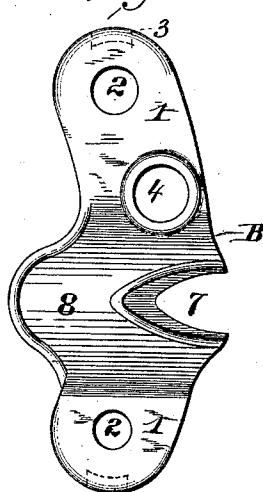


Fig. 4.

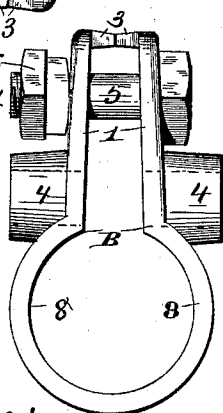
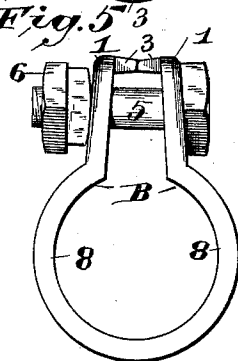


Fig. 5.



Witnesses

E. J. Walker
J. R. Cornwall

Inventor

Henry B Robischung
By *his* Attorney *J. W. Ritter*

(No Model.)

H. B. ROBISCHUNG.

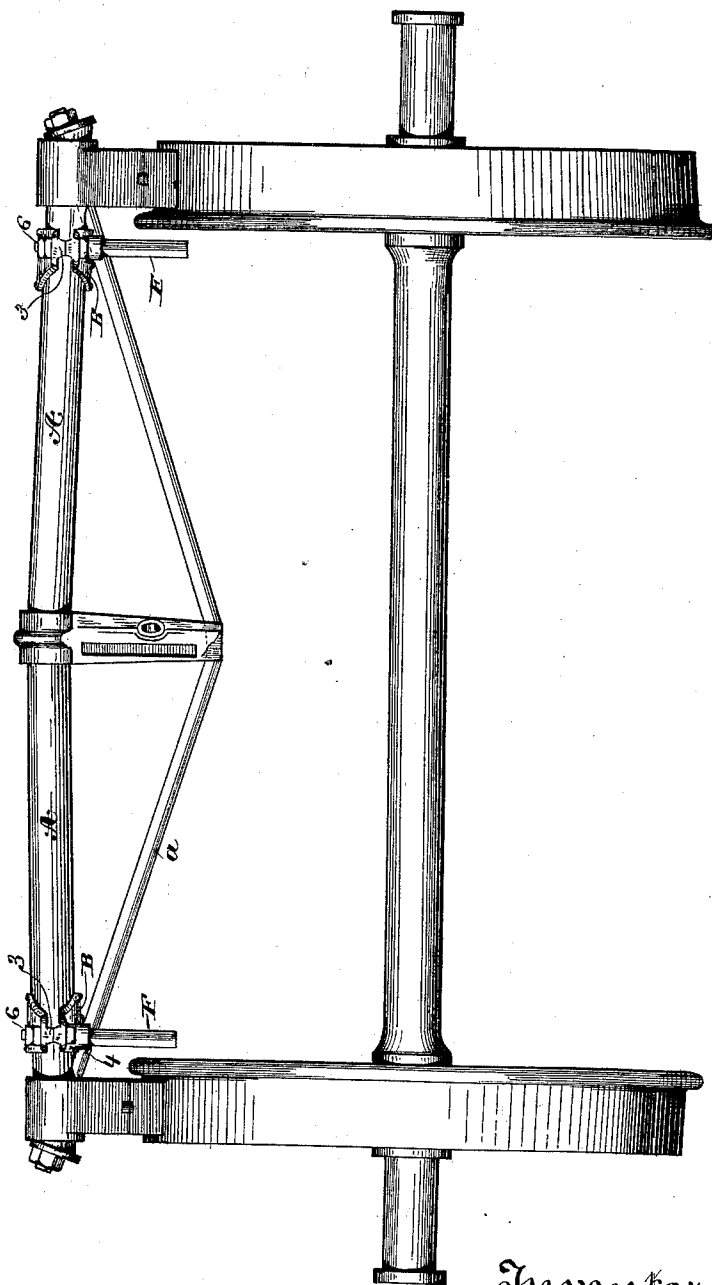
2 Sheets—Sheet 2.

CLAMP FOR BRAKE BEAMS.

No. 430,755.

Patented June 24, 1890.

Fig. 6.



Witnesses:

E. M. Walker

E. B. Leigh

Inventor.

Henry B. Robischung
by *J. M. Ritter*
Attorney

UNITED STATES PATENT OFFICE.

HENRY B. ROBISCHUNG, OF KALAMAZOO, MICHIGAN, ASSIGNOR TO THE
NATIONAL HOLLOW BRAKE BEAM COMPANY, OF CHICAGO, ILLINOIS.

CLAMP FOR BRAKE-BEAMS.

SPECIFICATION forming part of Letters Patent No. 430,755, dated June 24, 1890.

Application filed November 25, 1889. Serial No. 331,535. (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, county of Kalamazoo, State of Michigan, have invented certain new and useful Improvements in Clamps for Safety-Chains and Finger-Guards of Brake-Beams and for Analogous Purposes; and I hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, wherein—

Figure 1 is a perspective view of one end of a trussed brake-beam having applied thereto devices embodying my invention in its entirety. Fig. 2 is a detached end or side view of the devices shown in Fig. 1. Fig. 3 is a plan or face view of one portion thereof. Figs. 4 and 5 are modifications. Fig. 6 is a plan view of a brake-beam and guard-fingers, showing the position of the parts when in use as suspended from the body of a car.

This invention relates more especially to clamps intended for the attachment of guard-fingers and safety-chains to brake-beams, and has been particularly devised or invented with reference to overcoming the difficulties attendant on securing safety-chains and finger-guards to trussed beams after the beams have been otherwise completed.

While it is the common practice to employ safety-chains with all brake-beams, on the contrary finger-guards are only used on certain beams—as, for instance, those suspended from the body of the car or liable to lateral vibration—and for these reasons it is not desirable to apply the safety-chain clamp to the beam until after the beam is otherwise finished and it is ascertained how the beam is to be located or suspended. As at present constructed the safety-chain and finger-guard clamps cannot be conveniently applied to trussed beams.

My invention in its entirety has therefore been devised to meet especially such needs of the manufacturer. There are, however, certain objections to the safety-chain and finger-guard clamps now in use, broadly considered, when applied to any kind of brake-beam—for instance, where the usual clamp and bolt are used to connect the safety-chain with the beam, the tendency of the bolt is

to cause the clamp to bind on or rigidly hold the safety-chain, and the tendency of the chain is to loosen the bolt. Also, in the case of finger-guards, which are rapidly worn out or broken and require frequent repair when out of the shop or on the road, so much difficulty is often experienced in removing the old or broken finger-guard from the beam and obtaining a proper substitute that the matter is not attended to until the car can be sent to the shop.

My invention has also been devised to overcome these general troubles, and therefore is to be understood as having a much broader and more general scope than the limited construction or application of the principle which has been selected for purposes of illustration.

The first feature of my invention consists in a clamp having eyes or holes for the reception of a detachable guard-finger, whereby the guard-finger is held by the spring or bind of the clamp, and can be released by loosening the clamp and driving or drifting out the guard-finger. This construction enables a broken or worn finger to be removed and replaced by unskilled labor while the car is on the road and by means of any ordinary rod or bolt of suitable size, and this without displacing the clamp from the beam. A second feature consists in providing said clamp with lugs or projections, which are so placed as to limit or restrict the closing of the clamp to prevent its binding on the safety-chain, and at the same time to increase the grip of the clamp on the beam. A third feature consists in a divisible or sectional clamp, which may be applied to trussed or other other beams at any time after the beam is otherwise complete. There are other minor features of invention, all as will hereinafter more fully appear.

I will now proceed to specifically describe the devices chosen for purposes of illustration and embracing the preferred application of the invention, so that others skilled in the art may apply or modify the same as circumstances may require,

In the drawings, A indicates a brake-beam; a, a tie or truss rod; B, a clamp embodying my invention; C, portions of a safety-chain, and F a guard-finger. This clamp B may be

a single yoke or continuous band with bolt-flanges 1 on its opposite ends, said flanges provided at or near their extremities (outside the bolt-holes 2) with lugs or projections 3, and either with or without the guard-finger holes 4, accordingly as the clamp is to be used either for a safety-chain only or for both safety-chain and guard-finger, all as substantially shown in Figs. 4 and 5; or, what is preferable, especially for trussed beams, the clamp may be a divided band, so that the sections can be bolted together after being put in place, as particularly shown in Figs. 1, 2, and 3. In either case the clamp will be of a character to spring when forced together by suitable devices, such as a bolt or bolts 5, which may be provided with a jamb-nut 6.

In case of a sectional clamp adapted to be used with a trussed beam, it is desirable to curve the clamp-sections and recess it, as indicated at 7, so that in case a guard-finger is used the finger may be brought close up to the shoe and wheel.

Where the clamp is to be used for a finger-guard only, the lugs 3 may be omitted, if desired, and where the clamp is to be used for a safety-chain only the guard-finger holes 4 may be omitted; but as a means for applying both or either at will and as a construction to apply both at once, as always required under certain circumstances, the construction shown in Figs. 1, 2, and 3 is to be preferred.

The sections of the divisible clamp are duplicates in form—that is to say, each will have a concave or seat portion 8, adapted to receive the beam, from which will project the bolt-flanges 1, having at or near their extremities and on their inner surfaces at corresponding points lugs or projections 3, and at some point between said lugs and the seat 8 they will have the bolt-holes 2 and the guard-finger holes 4. In each section the bolt-flange 1, through which the guard-finger holes 4 is to pass, should be longer than its opposite flange 1, to accommodate the guard-finger. Though alike in other respects, the sections are right and left hand sections, so as to fit the clamp for use at either end of a beam.

The clamp is applied to a beam substantially as shown in Fig. 1, and it will be noted that when the nuts of the clamp-bolts are tightened beyond the point where the lugs

or projections 3 are brought together the result will be to cause the yoke (or parts 8) to clamp the beam with increased force, and this without binding the safety-chain A. It will also be noted that as the flanges 1 are drawn together by the clamp-bolts they cramp or bind on the guard-finger F so as to hold it securely, yet in a manner to permit of its ready removal as soon as the clamp-bolts are loosened.

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

1. A clamp or yoke provided with guard-finger holes and adapted to grasp a guard-finger inserted in said holes, substantially as and for the purposes specified.

2. A clamp or yoke having flanges provided at or near their extremities with inwardly-projecting lugs which limit the closing of the flanges, substantially as and for the purposes specified.

3. A clamp or yoke having flanges provided at or near their extremities with inwardly-projecting lugs, said flanges having guard-finger holes adapted to grasp a guard-finger inserted in said holes, substantially as and for the purposes specified.

4. A separable clamp or yoke composed of two sections, each provided with a lug at or near its extremity, and bolts for securing the sections, substantially as and for the purposes specified.

5. A separable clamp or yoke composed of two sections, each section having a lug at or near its extremity and a hole for the reception of a guard-finger, and bolts for securing the sections, substantially as and for the purposes specified.

6. A separable clamp-yoke composed of two sections, each section having a flange 1, with inwardly-projecting lug 3 and finger-hole 4, one of said sections having a recess 7, and bolts for securing the clamp-sections, substantially as and for the purposes specified.

In testimony whereof I affix my signature, in presence of two witnesses, this 14th day of November, 1889.

HENRY B. ROBISCHUNG.

Witnesses:

ARTHUR CRANDALL,
E. B. LEIGH.