

(No Model.)

B. McINTIRE.
CLIP FOR WIRE ROPE WAYS.

No. 419,466.

Patented Jan. 14, 1890.

Fig. 1.

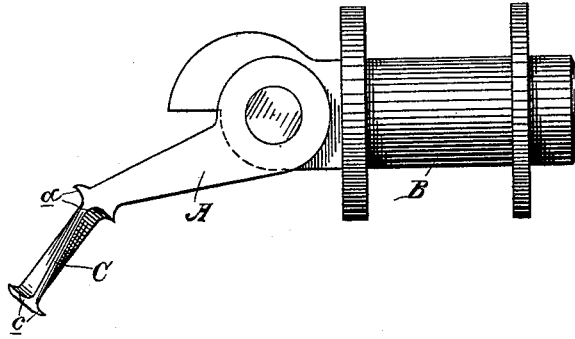


Fig. 2.

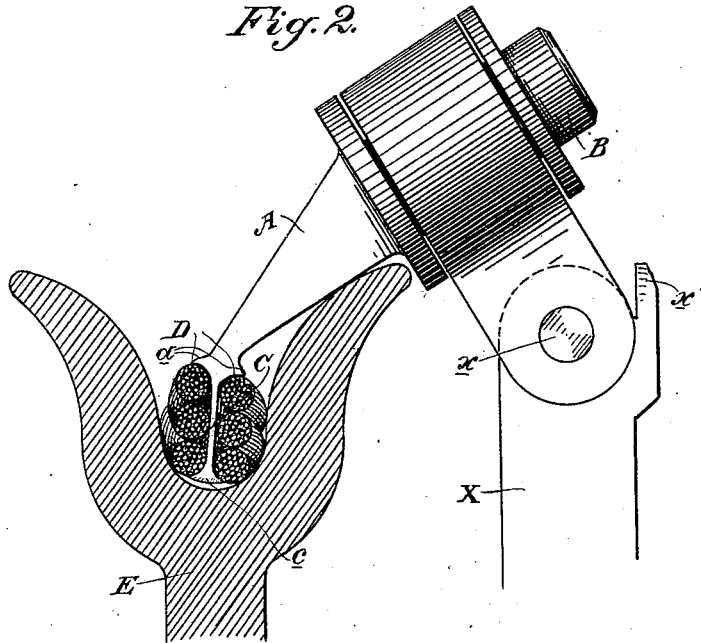
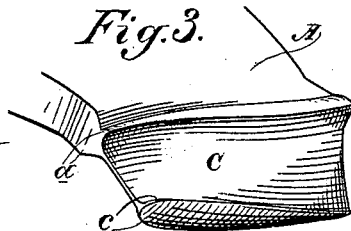


Fig. 3.



Witnesses,
J. H. House
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UNITED STATES PATENT OFFICE.

BARTLETT MCINTIRE, OF SAN FRANCISCO, CALIFORNIA, ASSIGNOR TO THE
VULCAN IRON WORKS, OF SAME PLACE.

CLIP FOR WIRE-ROPE WAYS.

SPECIFICATION forming part of Letters Patent No. 419,466, dated January 14, 1890.

Application filed November 27, 1889. Serial No. 331,792. (No model.)

To all whom it may concern:

Be it known that I, BARTLETT MCINTIRE, a citizen of the United States, residing in the city and county of San Francisco, State of California, have invented an Improvement in Clips for Wire-Rope Ways; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to the class of devices which are used for connecting a load with a traveling cable and known as "clips for wire-rope ways," forming part of a system of transmission of loads from one point to another.

My invention consists in the novel construction of the clamping end of the body portion of the clip, hereinafter fully described, and also in a peculiar joint in the hanger.

The object of my invention is to provide a clip having a simple and effective means of connection with the traveling cable.

Another object is to provide a joint or hinge which will enable the clip to ride over its supporting-sheaves.

Referring to the accompanying drawings for a more complete explanation of my invention, Figure 1 is a side elevation of my clip. Fig. 2 is a side elevation showing it riding over one of the cable-supporting sheaves, and also showing a rigid clip and the hinge or joint in the hanger. Fig. 3 is a perspective detail of the front of the clip.

A is the body of the clip, and B is its shaft portion, from which the usual hanger which carries the load is suspended. The connection of the shaft portion with the body portion may, as far as my present invention is concerned, be of any suitable character, either formed integral or rigidly connected, as in Fig. 2, or, as in Fig. 1, a hinge-joint, which latter connection forms the subject-matter of a contemporaneous application for a patent, Serial No. 331,791, filed November 27, 1889. The end C of the body portion is formed of a comparatively thin plate, and between it and the body, which it joins, are formed the abutting shoulders *a*, one on each side. The outer edge of the end C is formed with the holding-flanges *c*, one on each side, and where these flanges and the abutting shoulders join the

plate the material is preferably concaved to better fit the contour of the cable. This end C is moreover formed or shaped in a general spiral course or direction to conform to the lay of the strands in the cable.

D is the cable of the ropeway. The connection with the cable is formed by opening the strands thereof and passing end C directly through the cable, (its spiral direction causing it to fit perfectly therein,) so that the shoulders *a* abut against the cable on one side and its holding-flanges *c* abut against it on the other side. The clip is therefore firmly connected with the cable.

I am aware that clips have been connected with the cables of wire-rope ways by having the end of their body portion pass between the strands of the cable, said end being provided with a cylindrical cross-bar which fits in the heart of the cable, taking the place of the soft core thereof. I do not, therefore, herein claim an interior connection with the cable nor an exterior encircling connection by means of the lap or flexible leaf, for both are old.

In Fig. 2 I show in connection with a rigid clip body and shaft a peculiar joint or hinge as a specific form to effect the passage of the clip by its supporting-sheaves E. The hanger X is jointed or hinged at *x*, and this joint or hinge is controlled and limited properly by means of the stop or arm *x'*, which, while allowing the parts to bend in one direction, hold them rigidly in another direction, so as to carry the load.

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

1. In a clip for wire-rope ways, its body portion having its end formed to pass entirely through the cable and provided with a flange on its edge for bearing against the exterior surface of the opposite side of the cable, substantially as herein described.

2. In a clip for wire-rope ways, its body portion having its end adapted to pass entirely through the cable and formed in a spiral course to conform to the lay of the cable-strands, the edge of said end being formed or provided with a flange for bearing

against the exterior surface of the opposite side of the cable, substantially as herein described.

3. In a clip for wire-rope ways, its body
5 portion having an end adapted to pass entirely through the cable, said end having shoulders at its line of junction with the body portion for abutting against the exterior surface of the cable and flanges on its edge for
10 bearing against the exterior surface of the cable on its opposite side, substantially as herein described.

4. In a clip for wire-rope ways, the body
15 portion having the spirally-shaped end for passing through the cable and conforming to the lay of the cable-strands, said end being bounded on one side by shoulders for abutting against the exterior surface of the cable on one side and holding-flanges on its other
20 side for bearing against the cable on its opposite side, substantially as herein described.

5. In combination with a clip for wire-rope ways, having one end adapted to engage the cable and the other to support the hanger, the hanger X, having the joint or hinge x near
25 its top, whereby the clip is adapted to pass its supporting-sheaves, substantially as herein described.

6. In combination with a clip for wire-rope ways, having one end adapted to engage the
30 cable and the other to support the hanger, the hanger X, having the joint or hinge x near its top, and the arm or stop x' , for limiting said joint or hinge, substantially as herein
35 described.

In witness whereof I have hereunto set my hand.

BARTLETT MCINTIRE.

Witnesses:

S. H. NOURSE,
H. C. LEE.