

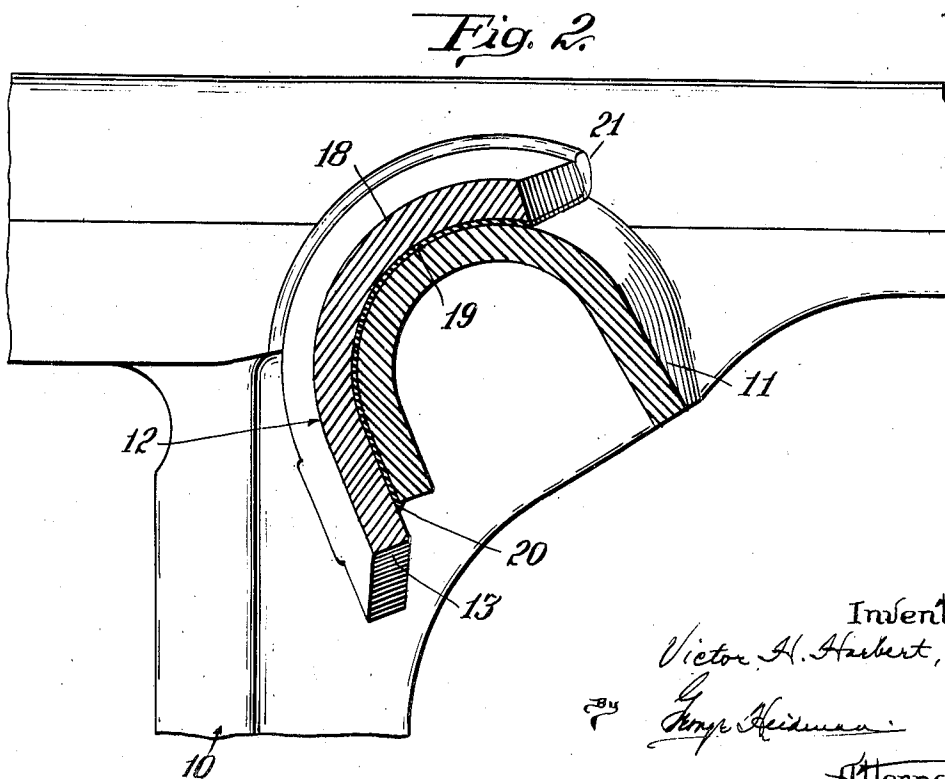
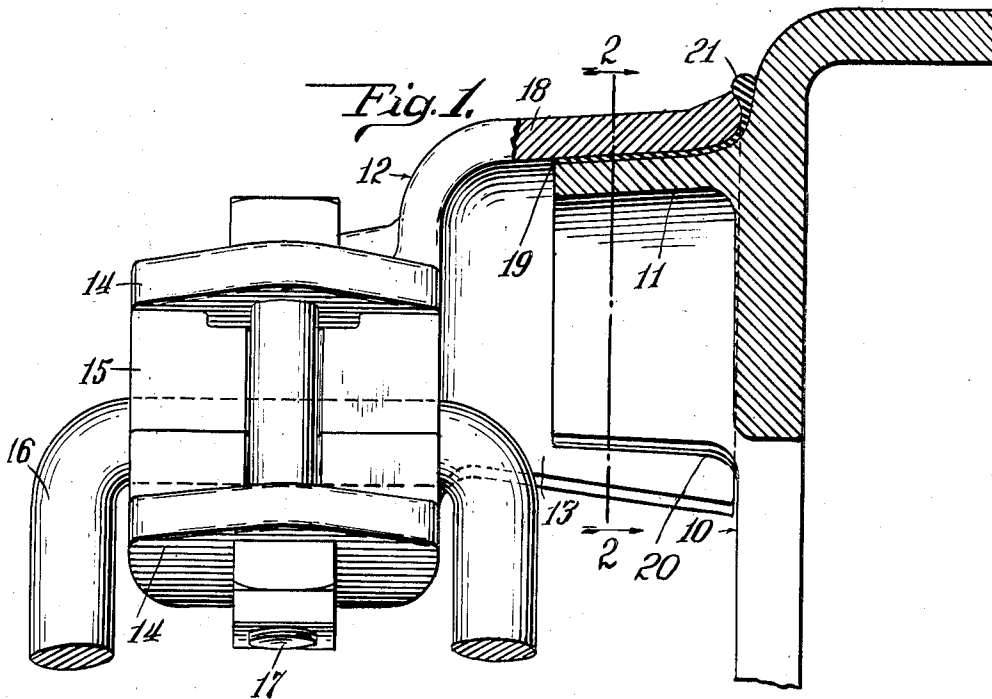
March 12, 1940.

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2,193,592

METHOD OF HANGER BRACKET REPLACEMENT

Filed March 12, 1938



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UNITED STATES PATENT OFFICE

2,193,592

METHOD OF HANGER BRACKET
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Application March 12, 1938, Serial No. 195,526

2 Claims. (Cl. 29—164)

My invention relates to a method of rehabilitating railroad trucks, the side frames whereof are provided with the old types of brackets heretofore in use, before the present day type of brake hangers were known, namely closed brackets cast integral with the side frames, which require such truck side frames to be discarded as soon as the integral brackets become worn beyond the point of safety.

The brake hanger brackets on truck side frames previously employed were generally of what is known as the closed barrel type consisting of apertured lugs cast integral with the inner side of the frame. This apertured lug or barrel type merely would permit the use of the old U-type of brake hanger held in place by a suitable pin; whereas the later and now more generally used continuous link hangers cannot be employed with such brackets.

One of the reasons for abandoning the closed barrel type of bracket is the fact that it does not lend itself to the use of wear take-up means which are generally employed with what may be called the open jaw type of bracket, namely a bracket consisting of a pair of vertically spaced jaws united at the rear to provide a socket which permits use of either type of hanger.

Truck side frames of present day construction are now constructed with the open jaw type of brackets which also permit the use of keeper elements between which the upper end of the hanger or hanger pin is disposed; these keeper elements relieving the bracket of wear resulting from the constant vibration and swinging movement of the hanger.

With the closed barrel type of bracket, the more or less constant vibratory movement during operation of the car, soon wore the bracket so its further use was not only unsafe but was also prohibited; the wearing thin of the bracket (made of softer metal than the hanger supporting pin) often permitting the brake beams to drop down onto the track rail, causing derailment. Although the truck in general was still useful, the worn barrel or closed type of integral brackets necessitated the discarding of the truck, entailing considerable expense as well as loss in service of the car.

The purpose of my invention is to provide these used truck side frames with open type brackets of the type heretofore mentioned thus rehabilitating the trucks for further service and enabling the use of the continuous type of link or brake hanger, as well as the use of suitable keeper elements adapted to resist the wear, namely ele-

ments which consist of greater wear resisting metal than that employed in the truck side frames and their integral brackets; elements which may be readily adjusted or replaced when they become worn to an extent where the brake-beams drop below the required position for proper brake application.

My invention contemplates the removal, by suitable cutting torch, of the outer or apertured barrel portion of the lug so as to leave a sufficient portion of the integral lug whereby to provide an anchoring portion for the intimate attachment, by welding, of the open jaw type of hanger bracket whose inner end is formed to lap and also provide abutting surfaces whereby it may be completely welded to the truck frame.

The method and resulting structure will be fully comprehended from the detailed description of the accompanying drawing, wherein:

Figure 1 is an elevation of a portion of a truck side frame with the open jaw type of bracket and showing the upper end of a closed link hanger; while portions of the truck side frame and inner end of the bracket are shown in section to disclose method of application.

Figure 2 is a vertical sectional view taken on the line 2—2 of Figure 1 and looking in the direction of the arrows.

The drawing shows the part of the truck side frame with the outer apertured and worn end of the bracket burned off or cut away so as to leave the laterally disposed lug portion 11 which is generally of the arcuate formation more clearly shown in Figure 2.

After the old bracket has been burned off or cut away to the extent shown, I provide a modern bracket 12, which consists of an arm portion 13, whose inner end is made to conform, more or less, with the cross-sectional configuration of the lug 11 which is integral with the side frame. The outer end of the arm terminates in two vertically spaced apart jaw portions 14, 14, extending laterally toward one side of the arm portion, thus providing a socket or pocket, closed at the rear, adapted to receive suitable wear resisting elements or keeper means, as at 15, which are formed to swingingly support the hanger 16 out of contact with the jaw portion of the bracket 12. The keeper or wear resisting means 15 are removably secured in the pocket or socket formed between the jaw portions 14, 14 by any suitable mechanism, as for example by the bolt 17 which extends through registering holes in the two jaws 14, 14.

The vertical wall portion of the bracket arm 13 at the outer end has a pair of jaws 14, 14 extend-

ing laterally therefrom; this vertical wall of the arm 13 provides a closure for the inner end of the keeper and hanger receiving pocket or socket. This vertical wall at the top is made somewhat arcuate as shown at 18 to match the arcuate upper surface of the lug 11; and this arcuate portion 18 of the bracket arm 13 is arranged in overlapping relation with the upper surface of the lug 11 of the truck side frame, with the immediate end of the arm 13 shown arranged in close proximity to the body of the frame.

With the rehabilitating hanger bracket formed as shown and the old bracket lug cut away to leave the laterally extending lug 11, access to all points of juncture or contacts between the new bracket 12 and the partially cut away old bracket and the side of the frame is made possible.

I propose to intimately unite the hanger bracket 12 with the side frame by welding the outer end of the lug 11 to the overlapping arm 13 along the arcuate and vertical perimeters of the lug 11, as at 19; also along the respective edges of the arm 13 and lug 11, as shown at 20; while the immediate end of the arm 13 of the new bracket is also intimately united to the wall of the truck side frame 10 by welding as shown at 21 in Figure 1. That is to say, all accessible contacting surfaces between the arm of the bracket and the truck frame and its integral lug 11 are welded together, with the result that a strong, integral construction is provided wherein the bracket also is supported by the projecting lug 11.

With my method of rehabilitation the discarded trucks or truck side frames not only enable the trucks to be again put into service, but also adapt the trucks to the more modern methods of suspending or supporting the brake hangers which involve hanger retaining means whereby the integral portion of the truck frame or bracket is not subjected to the vibratory wearing action of the hanger; namely retainer means which, in the event of wear, may be easily removed and replaced, thus greatly enhancing the

usefulness of the truck as the proper position of the brake head and shoe carrying beam can always be maintained in keeping with regulations of operation.

The particular manner of carrying out the method as herein suggested may be modified in certain respects without, however, departing from the spirit of my invention.

What I claim is:

1. The herein described method of railroad truck rehabilitation which consists in cutting off the outer ends of the worn integral hanger holding members so as to leave relatively large laterally disposed lugs on the truck side frame with substantially plain surfaces; providing brackets having laterally extending arms whose inner walls match the contour of the outer walls of the lugs and arranging said arms in overlapping relation with a side and the top of the lugs and the ends of the arms in juxtaposition with the side frame; and then integrally uniting the bracket arms to the truck side frame and to the tops and side walls of said lugs by welding the exposed contiguous surfaces.

2. The herein described method of railroad truck rehabilitation which consists in removing the worn outer apertured hanger receiving ends of the brake hanger holding arms of the hanger brackets which extend laterally from the truck side frames so as to leave laterally disposed portions of the arms, applying hanger holding brackets having vertically spaced jaws at their outer ends and laterally disposed arm portions, providing the arm portions extending from the truck side frames and the arm portions of the jawed brackets with substantially parallel surfaces, placing the ends of both arm portions in juxtaposition so as to dispose the hanger receiving jaws at the standard distance from the truck side frames and filling the juncture between the juxtaposed arm portions with weld metal and thereby integrally uniting said arm portions.

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