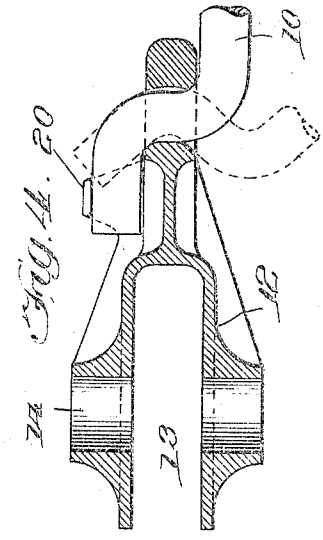
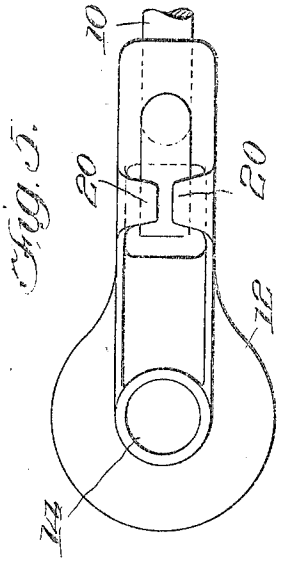
No. 793,758. PATENTED JULY 4, 1905.

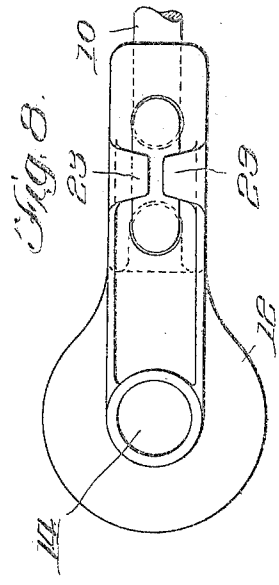
G. A. WOODMAN.

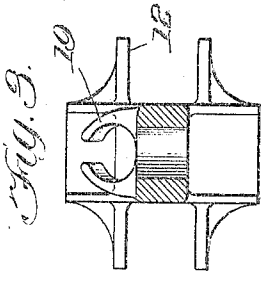
BRAKE ROD CONNECTION.

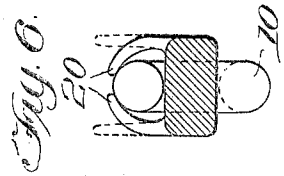
APPLICATION FILED AUG. 15, 1904.

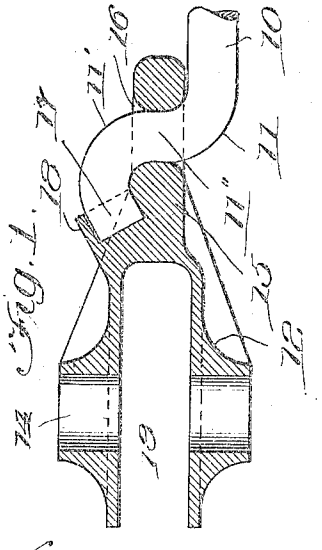


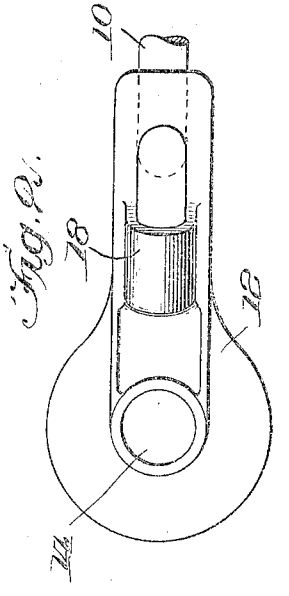


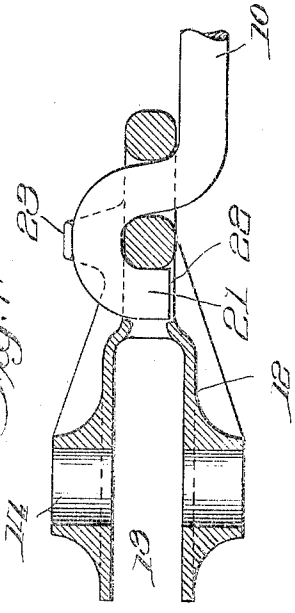












Witnesses:
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Inventor:
George A. Woodman
by Wm. F. Belt
atty

No. 793,758. Patented July 4, 1905.

UNITED STATES PATENT OFFICE.

GEORGE A. WOODMAN, OF CHICAGO, ILLINOIS.

BRAKE-ROD CONNECTION.

SPECIFICATION forming part of Letters Patent No. 793,758, dated July 4, 1905.

Application filed Aug. 15, 1904. Serial No. 220,716.

To all whom it may concern:

Be it known that I, GEORGE A. WOODMAN, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented new and useful Improvements in Brake-Rod Connections, of which the following is a specification.

The object of this invention is to provide a simple, inexpensive, and durable connection for a brake-rod and jaw and enable these parts to be easily and quickly connected without requiring them to be welded in a blacksmith-shop.

The accompanying drawings illustrate the invention in several forms of embodiment, and, referring thereto, Figure 1 is a vertical longitudinal sectional view of a jaw, showing the brake-rod connected therewith. Fig. 2 is a top plan view of the connection illustrated in Fig. 1. Fig. 3 is a detail view. Figs. 4 and 5 are respectively sectional and plan views illustrating another form of construction. Fig. 6 is an end view of the construction shown in Figs. 4 and 5. Figs. 7 and 8 are respectively sectional and plan views of another form of construction.

The brake-rod 10 is usually made of wrought-iron, and I provide it near one end with a bend 11 and a bend 11′, so that a part of the rod beyond the bend 11′ will be offset and extend substantially in the same direction as, but out of axial alinement with, the main part of the rod. The jaw 12 is preferably a steel or malleable-iron casting provided with a longitudinal opening 13 to receive the brake-lever and a transverse opening 14 for the bolt which secures the brake-lever to the jaw, (neither the brake-lever nor the bolt being shown.) The jaw has an extension 15 at the end opposite to that which receives the brake-lever, and this extension is provided with a transverse opening 16 to receive that part 11″ of the brake-rod between the bends 11 11′ which extends through said opening at or about right angles to the length of the rod. The end 17 of the rod extends beyond the bend 11′ in substantially the direction of the main portion of the rod and is held in a keeper which may be made in the form of a socket 18, cast in the jaw, Figs. 1 and 2, or formed by lugs 19, cast with the jaw, Fig. 3, and adapted to be bent over upon the end of the rod after it has been inserted in place.

In Fig. 4 the keeper is formed by lugs 20, which are cast with the jaw and bent over upon the rod after it is arranged in place, Figs. 5 and 6.

In Figs. 7 and 8 the extreme end 21 of the rod is arranged in an opening 22 and lugs 23 are bent down upon the rod in the manner shown in Figs. 5 and 6. The lugs may be dispensed with here, as the opening 22 constitutes a keeper; but I prefer to use the lugs in conjunction with the opening in this construction to form a keeper.

The rod may be made with the offset ready to be connected with the jaw, and this connection can be easily effected by inserting the rod in the manner indicated by dotted lines in Fig. 4, or a straight rod may be heated and then bent in the opening 16 of the jaw, employed as a former to the proper shape, or the jaw can be employed to bend the rod at right angles while heated, and after the rod is inserted in the opening 16 the extreme end can be turned down into the keeper with a hammer or other tool. The lugs 20 23 may, if desired, be cast in the form of a keeper and the rod slipped therethrough instead of being bent down upon the rod. The pull of the jaw is against the part 11″ of the rod at all times and the keeper holds the rod and jaw in proper relation.

My improved connection is simple in construction, inexpensive to make, and reduces the blacksmith work to a minimum.

Without limiting myself to the exact construction and arrangement of parts herein shown and described, what I claim, and desire to secure by Letters Patent, is—

1. A brake-jaw for car brake-rods having a transverse opening to receive the rod and a keeper beyond said opening to secure the end of the rod.

2. A brake-jaw for car brake-rods having a transverse opening to receive the rod and a keeper adjacent to one end of said opening to secure the end of the rod.

3. A brake-jaw for car brake-rods having a transverse opening to receive the rod, and

a keeper beyond said opening and adjacent to one end thereof to secure the end of the rod.

4. The combination of a brake-rod, an offset part, and a brake-jaw having an opening to receive that part of the rod connecting the offset part to the main part.

5. The combination of a brake-rod provided with an offset part, a brake-jaw having an opening to receive that part of the rod connecting the offset part to the main part, and means for holding the rod and jaw in substantial alinement.

6. The combination of a brake-rod provided with an offset part, a brake-jaw having an opening to receive that part of the rod connecting the offset part to the main part, and a keeper to secure the end of the offset part of the rod.

7. The combination of a brake-rod provided with a part extending substantially in the same direction as the main part of the rod but out of axial alinement therewith, a jaw having an opening to receive the rod, and a keeper on the jaw beyond the opening to secure the end of the rod.

8. The combination of a brake-rod provided with an offset part, a brake-jaw having a transverse opening to receive that part of the rod connecting the offset part to the main part, and a keeper on the jaw beyond said opening and adjacent to one end thereof to secure the end of the rod.

9. The combination of a brake-jaw provided with a transverse opening, and a brake-rod bent twice between its ends and adapted to have its bent part arranged in said opening with the ends of the rod extending in different directions from the bent part.

GEORGE A. WOODMAN.

Witnesses:
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M. A. KIDDIE.