B. HASKELL.

BRAKE BEAM.

APPLICATION FILED JULY 13, 1910

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UNITED STATES PATENT OFFICE.

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To all whom it may concern:

Be it known that I, Broderick Haskell, a citizen of the United States, residing at Franklin, in the county of Venango and State of Pennsylvania, have invented certain new and useful Improvements in Brake-Beams, of which the following is a specification.

The present invention relates to brake beams of the metallic truss type and has for its objects, to provide a strong and rigid structure which at the same time is of very few parts, inexpensive and easy of manufacture; and which will permit the removal or renewal of the brake heads without disturbing the connected or rigid relation of the compression or tension members and strut.

The matter of novelty will be better un-20 derstood from the following detailed description taken in connection with the accompanying drawings, and the distinctive features will thereafter be pointed out in

the appended claims.

Referring to the drawings, in which similar reference characters denote the same parts in the several figures: Figure 1, is a front elevation of a brake beam constructed in accordance with my invention; Fig. 2, is 30 an enlarged and longitudinal sectional view of one end of the brake beam shown in Fig. 1; Fig. 3, is a section on line III—III of Fig. 2; Fig. 4, is a similar view as Fig. 2, showing the compression member as being 35 square in section; Fig. 5, is a section on line V—V of Fig. 4; Fig. 6, is a similar view as Fig. 2, showing a further modification in which a channel bar is used for the compression member; and Fig. 7, is a section on line 40 VII-VII of Fig. 6.

The improved brake beam is formed of compression and tension members, the former being centrally cambered as shown, and the latter bent to form the complement of the usual truss construction, there being the ordinary central strut 8. The brake heads 3, have no features of peculiarity, except as they are fitted and firmly secured over the improved construction now to be described.

of a plate bent or rolled into a U section as shown at 1, in Figs. 1, 2, and 3, or it may be a solid bar, round, or square in section, as shown at 5 in Figs. 4 and 5, or channel in section, as indicated by 7, in Figs. 6 and 7, the particular cross section of said member

not being material in the broader aspects of the invention.

The tension member 2 while preferably a rod circular in cross section as shown, may 60 be of any suitable and modified form. In case a solid bar 5, is employed as the compression member, the ends thereof are recessed as shown at 6 in Fig. 4. In the practice of my invention, the ends of the tension 65 members 2, are provided with threads 9, which engage a nut 10 preferably of the shape shown and which is adapted to loosely fit within and abut against the end of the compression member, and while I prefer and 70 have shown the abutting surface of the nut 10, and compression member, normal to the tension rod 2, this is not essential to the invention, as this angle may be varied if so desired without departing from the inven- 75 tion. The brake head 3, is slipped over the end of the compression member, nut 10, and end of the tension member 2, and after these members are properly adjusted, said brake head is securely held in position on the end 80 of the compression member by a nut 11, or any other fastening means. The parts being assembled and secured in this manner, it will be readily seen that should it be desired at any time to remove or renew the 85 brake heads, all that is necessary is to unscrew nut 11, and slip off the brake head 3 without disturbing any of the other parts of the brake beam, as the nuts 10 firmly engage the tension rod 2 and rigidly preserve the 90 truss relation of the compression and tension members.

It will thus be seen that I provide a very simple, strong and inexpensive brake beam with a minimum number of parts and which 95 can be readily taken apart or the brake heads removed without in any way disturbing the adjusted or fixed relation of the other parts.

Having now fully described my invention, 100 what I claim as new and desire to secure by Letters Patent is as follows:—

1. A brake beam comprising a compression member, a tension member having means rigidly engaging each of its ends for firmly 105 abutting against the ends of the compression member, brake heads removably secured over the ends of the compression and tension members, and removable means engaging the ends of the tension member for securing 110 the break heads to the compression member.

2. A brake beam comprising a compression

member, a tension member having screw threads at its ends, a sustaining nut at each end engaging the threads of the tension member and abutting against the ends of the compression member, a brake head at each end of the compression member and surrounding the same and sustaining nut, and a retaining nut engaging each of the free ends of the tension rod, and securing the break heads to the compression member.

3. A brake beam comprising a compression member, a tension member having screw threads at its ends, a sustaining nut at each end seated in and abutting against the ends

of the compression member and engaging 15 the threads of the tension member, a brake head at each end of the compression member, and surrounding the same and the sustaining nut, and a retaining nut engaging each of the free ends of the tension rod and 20 securing the brake heads to the compression member.

In testimony whereof I affix my signature in presence of two witnesses.

BRODERICK HASKELL.

Witnesses:

J. Flood,

B. A. Krenz.