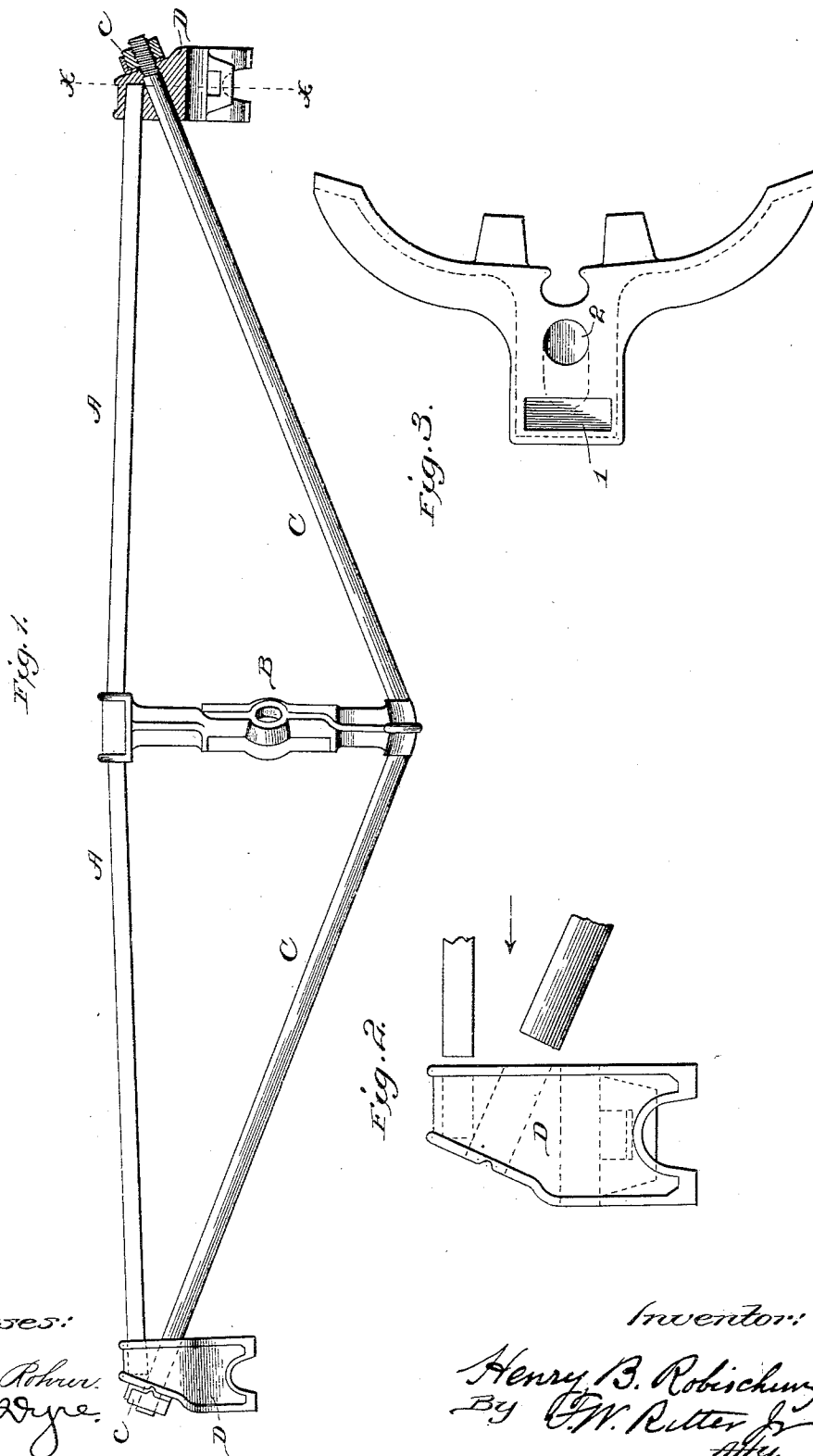


(No Model.)

H. B. ROBISCHUNG.
BRAKE BEAM.

No. 504,621.

Patented Sept. 5, 1893.



Witnesses:

Harry B. Robison.
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UNITED STATES PATENT OFFICE.

HENRY B. ROBISCHUNG, OF KALAMAZOO, MICHIGAN, ASSIGNOR TO THE
CHICAGO RAILWAY EQUIPMENT COMPANY, OF CHICAGO, ILLINOIS.

BRAKE-BEAM.

SPECIFICATION forming part of Letters Patent No. 504,621, dated September 5, 1893.

Application filed May 1, 1893. Serial No. 472,552. (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, in the county of Kalamazoo, State of Michigan, have invented certain new and useful Improvements in Brake-Beams; and I hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, in which—

Figure 1 is a plan view partly in section, of a trussed metal brake beam embodying my invention. Fig. 2 is a detached, enlarged, top view of the brake-head with portions of the tension and compression members, to show their relation to the brake head which forms part of the structure. Fig. 3 is an inner face or side view of the brake head looking in the direction of the arrow, Fig. 2.

Like symbols refer to like parts wherever they occur.

My invention relates to trussed metal brake-beams, and has for its object to simplify and strengthen the connection between the brake-head which forms part of the structure and the tension and compression members thereof. To this end I form the brake-head with a compression member socket, and a tension rod orifice, on intersecting planes, whereby the head becomes in itself the end cap and part of the trussed structure, and said construction or its equivalent embodies the main feature of my invention.

There are other, minor features of invention, all as will hereinafter more fully appear.

I will now proceed to describe my invention more fully, so that others skilled in the art to which it appertains, may apply the same.

In the drawings A, indicates the compression member, B the strut, C the tension member, and D D brake-heads, the latter constituting parts of the structure and the end caps thereof. In the present instance, the compression member A, is solid and rectangular, and the tension member is round in cross section, and I therefore form the head D with a compression member socket 1, of substantially a form to correspond with the cross section of the compression member, whereby the torsion of the end of the compression member is restrained, and with a rod bore 2, which cor-

responds with the cross section of the tension rod, the plane of the bore 2 being arranged to intersect that of the socket 1, the point of intersection preferably being on the central line of the brake-head (on the line of applied power) as indicated by dotted line $x-x$ on the right hand of Fig. 1, and such point is also by preference, the bottom of the socket 1 for the compression member. The seat of the nut c of the tension rod is also, preferably, in a plane at right angles to the plane of the bore 2.

The parts being assembled as indicated in Fig. 1, the head will in itself constitute an element of the trussed structure and the power will be applied through the brake-head in the line of the intersection of the tension and compression members. The formation and arrangement of the socket and tension rod will prevent the torsion of the end of the compression member, obviate any tendency of the canting or wrapping of the same about the tension member, and possible buckling incident thereto; and furthermore the termination of the socket 1 on the line of intersection of the tension member therewith causes the structure to more nearly approach a true truss with all the advantages thereof.

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

1. In a trussed metal brake beam, the combination with a compression member and a tension member, of a brake-head having a socket for the end of the compression member and a bore for the passage of the tension member, which bore and socket are in intersecting planes and substantially independent, whereby the torsion of the end of the compression member is restrained, substantially as and for the purposes specified.

2. In a trussed metal brake-beam, the combination with a compression member and a tension member, of a brake-head having a socket for the end of the compression member and a bore for the passage of the tension member, which bore and socket are in planes which intersect on substantially the median line of the brake-head; substantially as and for the purposes specified.

3. In a trussed metal brake-beam, the com-

5 bination with a compression member and a tension member, of a brake-head having a socket for the end of the compression member and a bore for the passage of the tension member, which bore and socket are in planes which intersect on substantially the median line of the brake-head, the bottom of the compression member socket being at or near the point of intersection of the tension member

bore with said socket; substantially as and for the purposes specified.

In testimony whereof I affix my signature, in presence of two witnesses, this 27th day of April, 1893.

HENRY B. ROBISCHUNG.

Witnesses:

E. B. LEIGH,

E. T. WALKER.