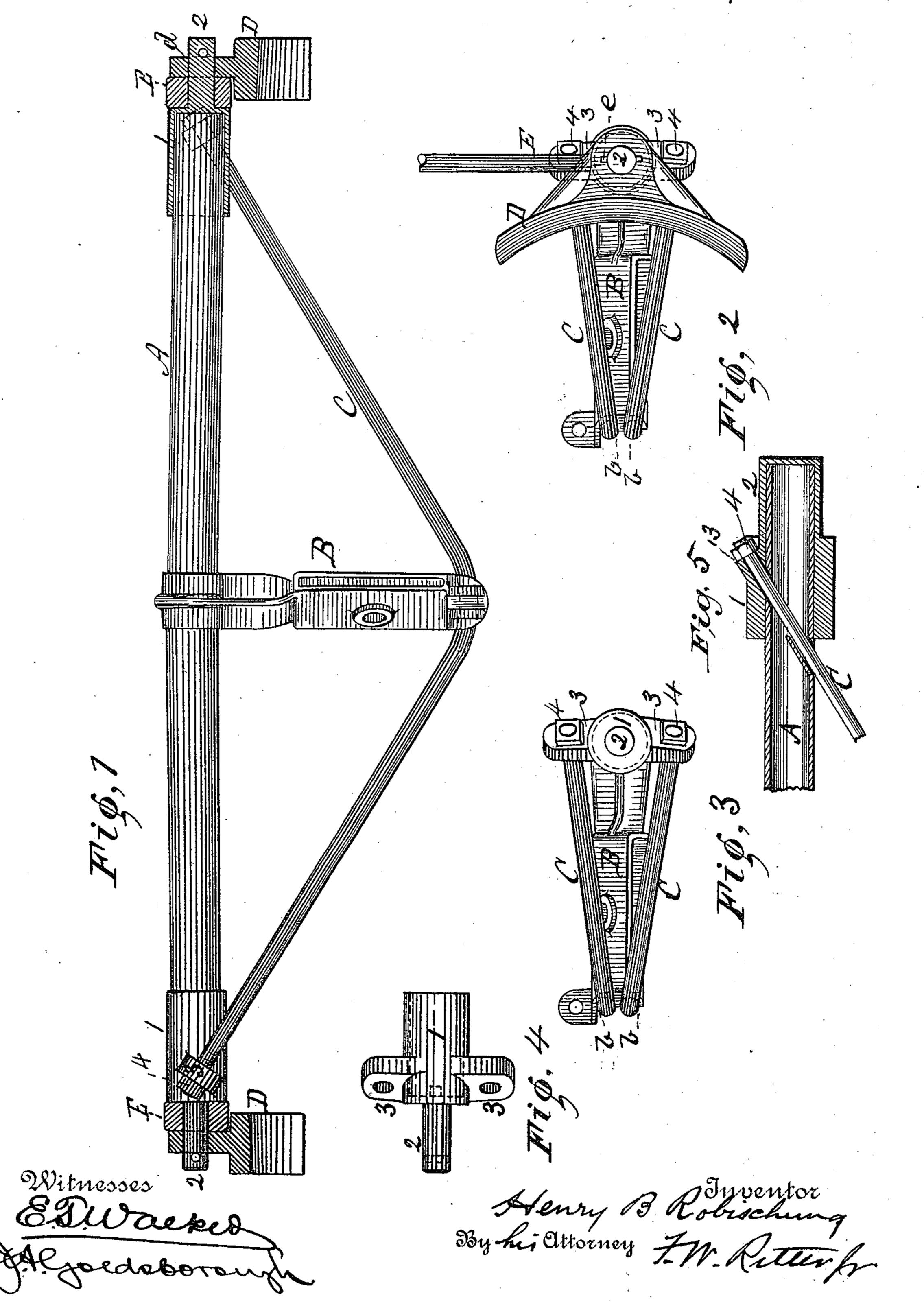
(No Model.)

H. B. ROBISCHUNG.

BRAKE BEAM.

No. 440,761.

Patented Nov. 18, 1890.



## United States Patent Office.

HENRY B. ROBISCHUNG, OF KALAMAZOO, MICHIGAN, ASSIGNOR TO THE NATIONAL HOLLOW BRAKE BEAM COMPANY, OF CHICAGO, ILLINOIS.

## BRAKE-BEAM.

SPECIFICATION forming part of Letters Patent No. 440,761, dated November 18, 1890.

Application filed September 5, 1890. Serial No. 364,037. (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 and State 5 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 10 which—

Figure 1 is a plan view of a brake-beam, its end sockets having journals and solid shoes with journal-bearings, some of the parts being in section. Fig. 2 is an end view of the 15 same with brake-shoe and hanger in position. Fig. 3 is a view similar to Fig. 2, the brakeshoe and hanger removed. Fig. 4 is a detached view of the end socket having the shoe-journal. Fig. 5 is a longitudinal sec-20 tional view of a modified form of a socket and journal adapted for use with a trussed beam having a single tension-rod or truss-rod.

Like symbols refer to like parts wherever they occur.

25 My invention relates to the construction of that class of brake-beams which are intended for use with solid brake-shoes or with brakeheads which have a journal-bearing adapted to fit a journal on the end of the brake-beam.

30 So far as I am aware, the only available beam of the class having journaled brakeshoes or brake-heads has been a trussed metal beam having its members united by welding and its journals formed by forging, 35 the method of manufacture being tedious, expensive, and not always productive of the

best results.

The object I have in view is to increase the efficiency and strength of journal-ended 40 brake-beams and to simplify and reduce the labor and expense of their production; and to this end my invention may be generally stated to consist in an end socket for brakebeams, said socket having a journal formed 45 thereon and provided with seats for the nuts of the tension-rod which holds the end socket to the brake-beams, as will hereinafter more

fully appear. I will now proceed to describe my inven-50 tion more specifically, so that others skilled l

in the art to which it appertains may apply the same.

In the drawings, A indicates a brake-beam; B, a strut or post therefor, and C C tensionrods or truss-rods, the whole constituting a 55 trussed brake-beam.

1 1 indicate end sockets for the brake-beam, said sockets of the general interior form and proportions required for the brake-beam with which they are to be used and externally- 60 shaped, as at 2, to form a journal for the journal-bearing d of the brake-shoe or brakehead D.

On the exterior surface of the end socket 1 is formed an inclined bearing or seat 3 for 65 the nut which confines the end of the tensionrod C, which bearing or seat 3 is perforated for the passage of the tension-rod. In case of a hollow beam (see Fig. 5) or where a single tension-rod is employed, the perforation 7° through the seat 3 passes through the walls of the end socket on a line which clears the open end of the socket; but in case of a solid beam or where two tension-rods C C are used by preference the seat 3 is duplicated or formed 75 on perforated inclined lugs oppositely placed on the exterior of the socket 1, substantially as shown in Fig. 4 of the drawings, and in such case the outer end of the strut or post B is formed with two parallel curved seats b b 80 for the two tension-rods C C.

In setting up the beam the end sockets 11 are first fitted on the beam ends, the tensionrods or truss-rods passed through or over the strut or post B and the perforations of seats 85 33, and the nuts 44 turned down on the inclined seats 3 3, after which the journals 2 2 are passed through the hangers E and then through the journal-bearings d of the brakeheads or solid brake-shoes D, and the brake- 90 shoes finally secured by pins e or in any other suitable manner.

By means of the construction hereinbefore described a very strong and effective trussed metallic brake-beam having journal ends for 95 use with break-heads or solid brake-shoes having journal-bearings can be readily made at reasonable cost, and such beam can be given any required camber, a feature recognized as desirable in metal beams.

100

Where the beam with which the socket is used is not itself a trussed beam with suitable camber it will be found desirable to slightly incline the journal 2 forward at its outer end, so as to properly present the shoe to the wheel.

Having thus described my invention, what I claim, and desire to secure by Letters Pat-

ent, is—

10 1. The combination, in a trussed brake-beam, of a beam, end sockets therefor, said sockets having journals and seats for the nuts which hold the tension-rod, and one or more tension or truss rods, substantially as and for the purposes specified.

2. An end socket for brake-beams, said

socket having an axial journal and one or more perforated lugs or seats on its exterior, substantially as and for the purposes specified.

3. An end socket for brake-beams, said socket having an axial journal and inclined perforated lugs at opposite points on its exterior, substantially as and for the purposes specified.

In testimony whereof I affix my signature, in presence of two witnesses, this 30th day of

August, 1890.

HENRY B. ROBISCHUNG.

Witnesses:

E. B. LEIGH, GEORGE W. RUSSELL. 25