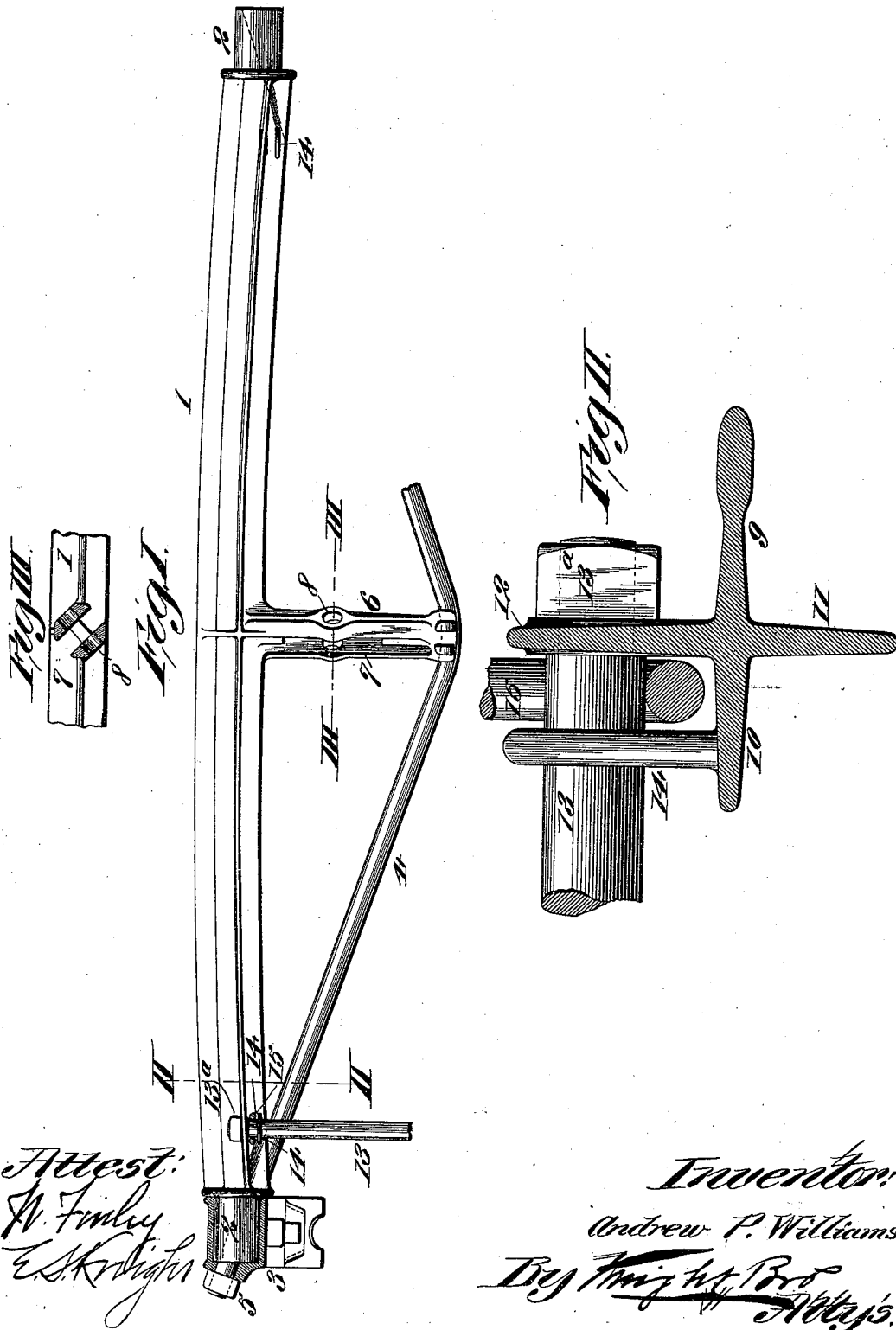


(No Model.)

A. P. WILLIAMS.
BRAKE BEAM.

No. 560,558.

Patented May 19, 1896.



Attest:
W. Finley
E. S. Knight

Inventor:
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By Thos. H. Prosser
Att'y.

UNITED STATES PATENT OFFICE

ANDREW P. WILLIAMS, OF ST. LOUIS, MISSOURI.

BRAKE-BEAM.

SPECIFICATION forming part of Letters Patent No. 560,558, dated May 19, 1896.

Application filed February 6, 1896. Serial No. 578,219. (No model.)

To all whom it may concern:

Be it known that I, ANDREW P. WILLIAMS, a citizen of the United States, and a resident of the city of St. Louis, in the State of Missouri, have invented a certain new and useful Improvement in Brake-Beams, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

My invention relates to an improved brake-beam for railway-cars, the object of my invention being, primarily, to make a beam which will have the requisite strength, while the cost is materially less than that of beams now on the market.

My invention consists in features of novelty hereinafter fully described, and pointed out in the claims.

Figure I is a top or plan view of my improved beam, part in section. Fig. II is an enlarged transverse section taken on line II II, Fig. I. Fig. III is a transverse section taken on line III III, Fig. I.

Referring to the drawings, 1 represents the body of the beam, having necks 2 at its ends to receive the heads 3.

4 represents the truss-rod of the beam, the ends of which pass through the necks of the beam, as shown in Fig. I, and to the outer ends of the truss are applied nuts 5 for holding the brake-heads in place and for tightening the truss.

6 represents the strut of the beam, the end of which is notched to receive the truss-rod. The strut has the usual opening 7 to receive the brake lever or bar and a perforation 8 to

receive a pin that holds the brake-lever in place. The body 1 of the beam, the necks 2, and the truss 6 are all cast integral, and I prefer to make the beam of malleable iron, as this affords the requisite strength, while the cost is less than other suitable metals. The beam is made in the form of a cross in transverse section, as represented in Fig. II, thereby forming a front compression member 9, a rear tensile member 10, a depending strengthening member 11, and an upright member or web 12, that serves to add strength to the beam and at the same time provides for the attachment of the guide pins or posts 13.

14 represents loops cast on the member 10 of the beam and through which the guide-pins 13 pass and which serve to assist in connecting the guide-posts to the beam. The inner ends of the guide-pins fit in perforations in the web 12 and are provided with nuts 13^a, by which they are held to the beam.

15 represents part of the chain ordinarily used in connecting the brake-beam to the car-body, this chain fitting the guide-pins 13 between the web 12 and the loops 14.

I claim as my invention—

1. A brake-beam having a strut 6 and loops 14 located near the ends of the beam and cast integral, substantially as set forth.

2. A brake-beam consisting of body 1, necks 2, strut 6, and loops 14 located near the ends of the beam and all cast integral, substantially as set forth.

ANDREW P. WILLIAMS.

In presence of—

N. FINLEY,
E. S. KNIGHT.