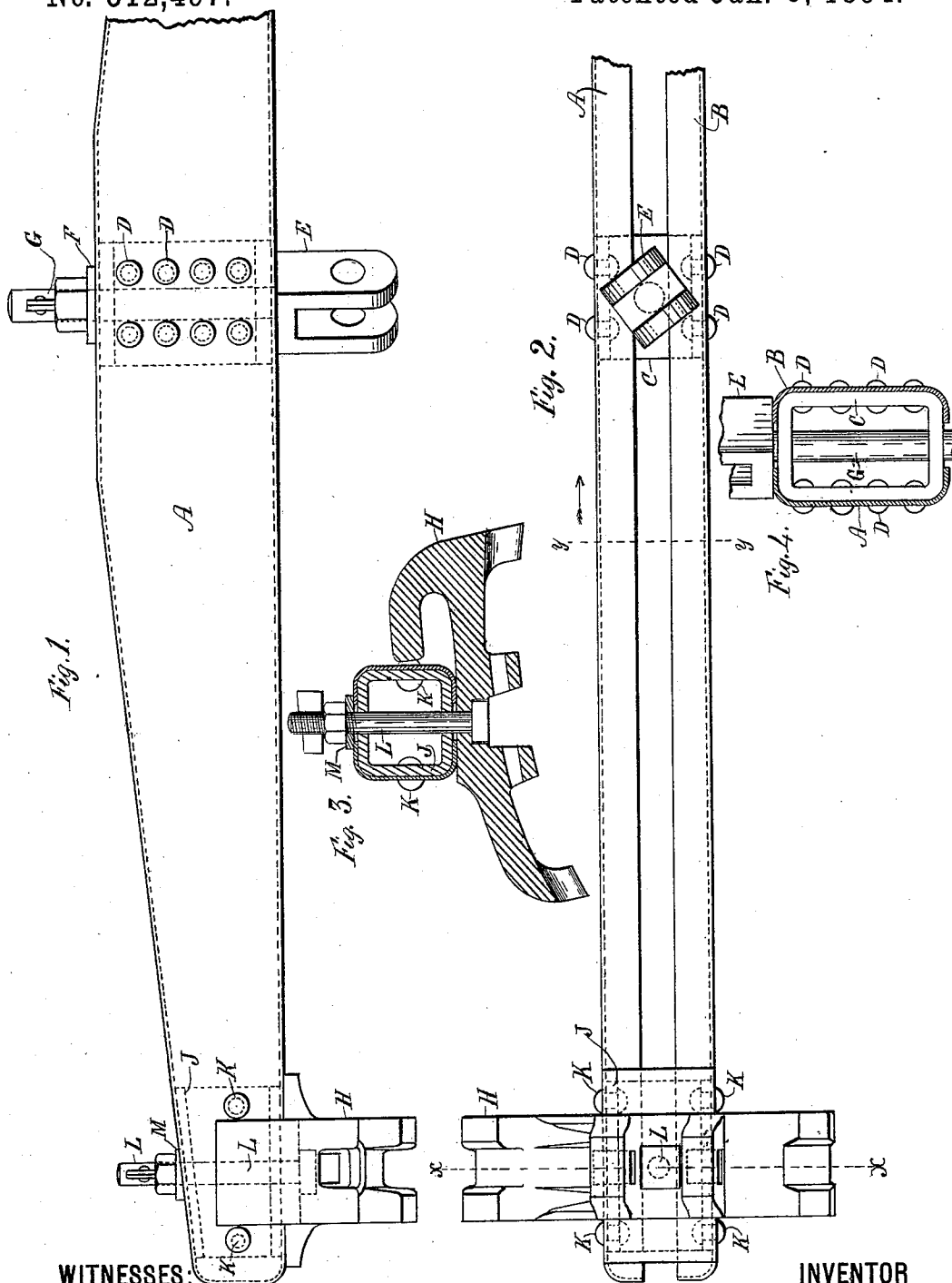


(No Model.)

D. L. BARNES.
BRAKE BEAM FOR RAILWAY CARS.

No. 512,497.

Patented Jan. 9, 1894.



WITNESSES.

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DAVID L. BARNES, OF CHICAGO, ASSIGNOR TO THE FOX SOLID PRESSED STEEL COMPANY, OF JOLIET, ILLINOIS.

BRAKE-BEAM FOR RAILWAY-CARS.

SPECIFICATION forming part of Letters Patent No. 512,497, dated January 9, 1894.

Application filed April 16, 1891. Serial No. 389,253. (No model.)

To all whom it may concern:

Be it known that I, DAVID L. BARNES, of Chicago, Cook county, State of Illinois, have invented a new and useful Improvement in
5 Composite Brake-Beams for Cars, of which the following is a full, true, and exact description, reference being had to the accompanying drawings.

This invention relates to an improvement
10 in metallic brake beams, or brake beams composed essentially of metal; and it consists of an arrangement of such beams whereby lightness and strength are combined, with, at the same time, a low cost in construction.

15 My invention will be readily understood from the accompanying drawings, in which—

Figure 1 represents a plan view; Fig. 2, an end elevation on the shoe side; Fig. 3, a section through Fig. 2 on the line *x x*; and Fig.
20 4, a section through Fig. 2 on the line *y y*.

My brake beam consists essentially of two open boxes, by preference made of pressed steel bolted together and separated by intermediate blocks.

25 The top and bottom members, A B, of my beam are substantially alike, and are generally of box shape, as clearly indicated in the drawings. They are separated at the middle by a box C, which may be of one or two pieces, as desired. The top and bottom members are
30 riveted to the box C by rivets D, and the box C serves likewise to aid in carrying the brake lever fulcrum E, which may be of any suitable construction, and is preferably provided
35 with wearing-plate F and bolt G, as shown.

The brake shoe H may be of any suitable form. It is supported in the usual way at the ends of the brake beam, and the parts A and B are separated by similar boxes J at

those ends, as shown,—the upper and lower 40 members being secured to said boxes by rivets K.

The combination of the pressed steel parts A and B and of the boxes C and J, which may be of cast metal, enables the formation of a 45 very rigid beam, easy of repair and cheap in construction.

The brake shoes may be attached in any proper way. As shown, they are carried by the bolts L attached by nuts and washers M, 50 as clearly shown in Fig. 3. The closing of the ends of the box shaped portions may be omitted, although I prefer the construction shown.

By the separation of the boxes I evidently 55 increase the lightness of the beam without diminishing its rigidity against strain.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination of the pressed steel 60 boxes A B separated and attached together by box C, substantially as described.

2. The combination of the pressed steel boxes A B separated and attached together by box C and by boxes J, substantially as de- 65 scribed.

3. The combination in a brake beam of the parts A B having lips at the front and back, the said lips embracing the box C which is riveted to the parts A B, substantially as de- 70 scribed.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

DAVID L. BARNES.

Witnesses:

E. M. WEST,
FRANK H. CLARK.