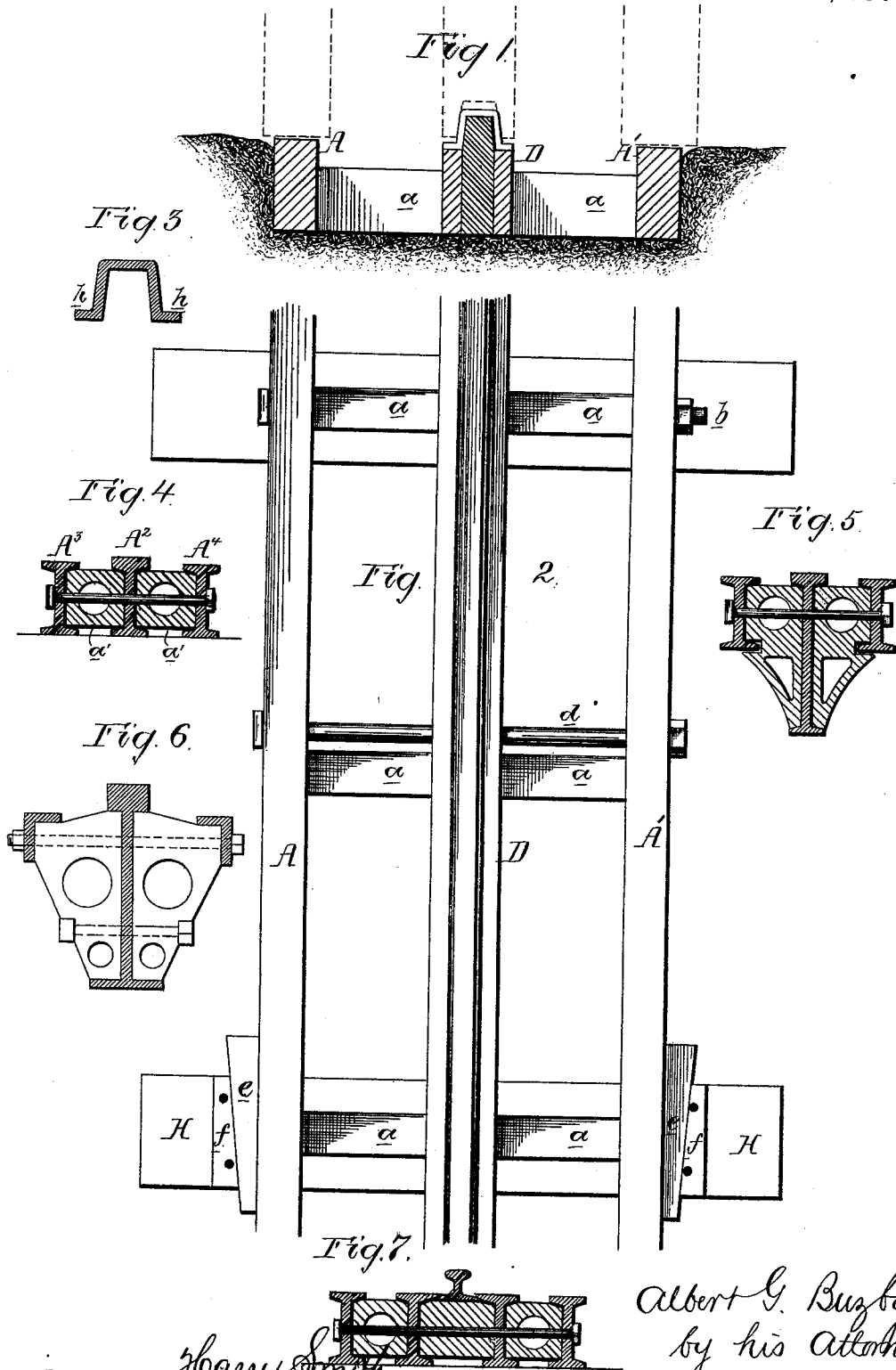


A. G. BUZBY.

PERMANENT WAY FOR ONE-RAIL RAILWAYS.

No. 175,028.

Patented March 21, 1876.



Witnesses, Harry Smith
Thomas McIlwain

Albert G. Buzby
by his Attorneys,
Howson & Son

UNITED STATES PATENT OFFICE.

ALBERT G. BUZBY, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN PERMANENT WAYS FOR ONE-RAIL RAILWAYS.

Specification forming part of Letters Patent No. 175,028, dated March 21, 1876; application filed November 30, 1875.

To all whom it may concern:

Be it known that I, ALBERT G. BUZBY, of Philadelphia, Pennsylvania, have invented an Improved Permanent Way for One-Rail Railways, of which the following is a specification:

My improved track is adapted to cars and locomotives having double-flanged bearing or driving wheels adapted to a central rail, and steadying-wheels adapted to outer rails; and the object of my invention is to construct an economical and substantial track for cars and locomotives of this class—an object which I attain in the manner which I will now proceed to describe, reference being had to the accompanying drawing, in which—

Figure 1 is a transverse section; Fig. 2, a plan view of the track; Fig. 3, a view of one form of bearing-rail; and Figs. 4, 5, 6, and 7, sections illustrating modifications of the track.

In Figs. 1 and 2, A and A' are continuous beams, and constitute the rails, or serve as foundation for the rails, adapted to the steadying-wheels of the cars, and D is a central beam, to which are secured the single rails, adapted to the double-flanged supporting or driving wheels. The three beams are maintained at a proper distance apart from each other by distance or brace pieces *a a*, and are secured together by bolts *b* passing through beams and distance-pieces, or by bolts *d*, arranged near the distance-pieces and passing through the beams only; or the three beams may be confined to the distance-pieces by wedge *e*, adapted to projections *f f* on the transverse sleepers H. The central beam may be solid and furnished with an ordinary rail, or it may be composed of three strips, Fig. 1, properly secured together, and adapted to a rail of the character shown in Fig. 3, the said rail fitting over the central strip, and having flanges *h* resting on and secured to the two outer strips of the group composing the beam.

If desired, the outer beams A and A' may be furnished with simple flat bars of iron or light rails, for the steadying-wheels of the locomotive or car.

When iron has to be used in the place of wood for constructing my improved track I adopt the plan shown in Fig. 4, in which the track is composed of three H-beams, A², A³, and A⁴, secured together and maintained in their proper lateral positions by distance-

pieces *a' a'*, consisting of light castings or of wood. In this case the outer beams may be lighter than the central beam. In place of the H-beams, ordinary railroad-rails may be secured together in the manner described, the central rail being the heaviest.

In applying this plan as a girder for elevated railways or viaducts, I make the central beam or rail much deeper than the outer rails, as shown in Fig. 5, so that when the whole is properly secured together it will constitute a substantial girder, to which additional strength may be imparted by any suitable system of trussing or truss-rods.

Fig. 6 shows a modification of Fig. 5. In this case the outer rails consist of simple angle-irons, the central rail of a deep beam, and distance-pieces of wood or iron, adapted to the rail and beam, and secured in a manner too clearly shown in the drawing to need description.

In either of these plans the central rail may be higher than the side beams.

The modification shown in Fig. 7 consists of four iron beams with distance-pieces, the central distance-piece being made preferably of wood, and serving as a bearing for the central rail of the track.

It will be observed that my improved track is self-contained, the beams and distance-pieces constituting a substantial structure, capable of effectually withstanding the lateral strains which the central rail receives from the double-flanged wheels of the locomotive or car.

I claim as my invention—

1. A one-rail railroad-track, in which two continuous beams for steadying-rails and a central beam or beams for the bearing-rail are combined with and secured to transverse distance or brace pieces, all substantially as described.

2. The within-described girder for one-rail railroads, the said girder consisting of a deep central beam and two lighter beams or bars, combined with distance-pieces, all substantially as shown.

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

ALBERT G. BUZBY.

Witnesses:

HARRY HOWSON, Jr.,
HARRY SMITH.