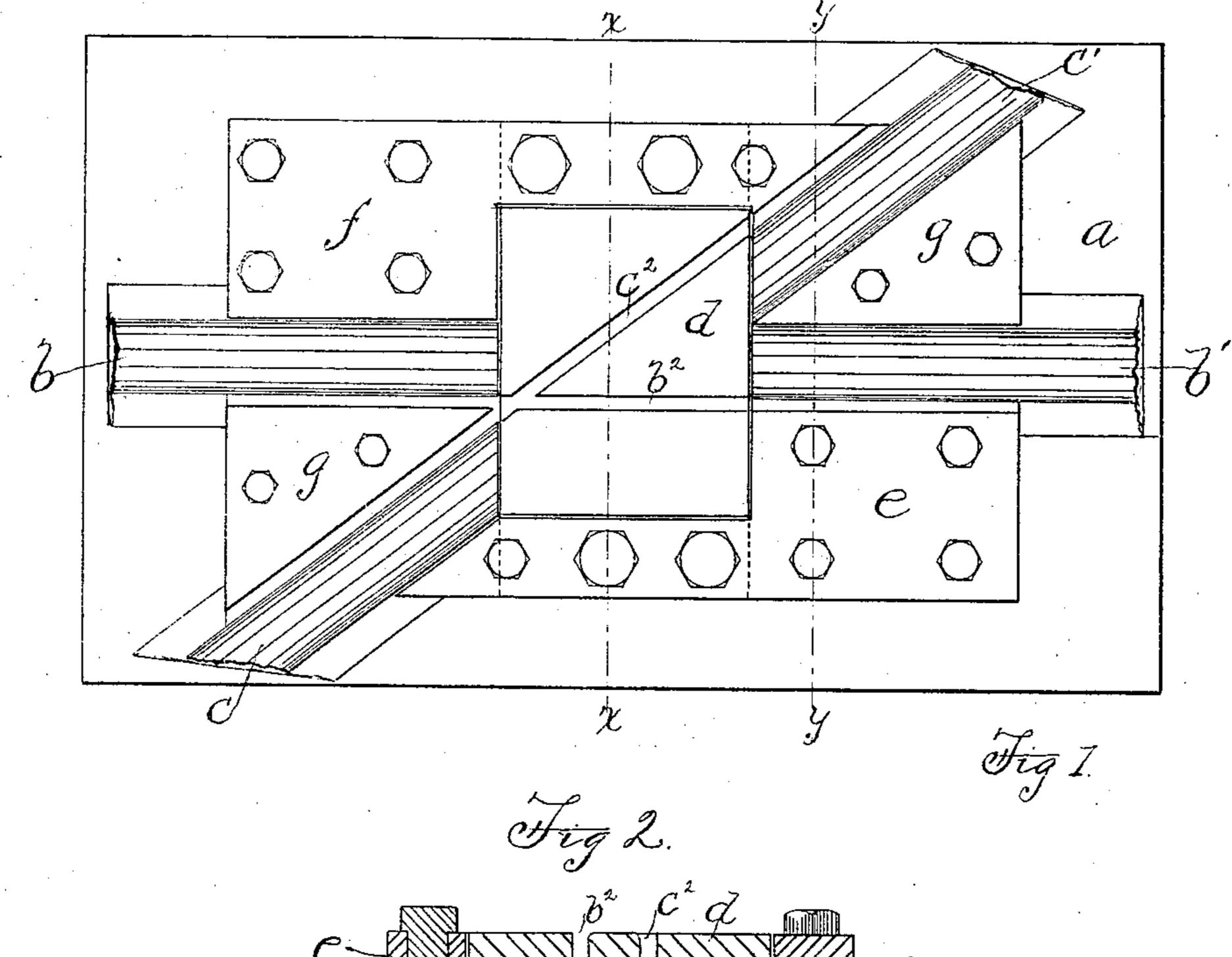
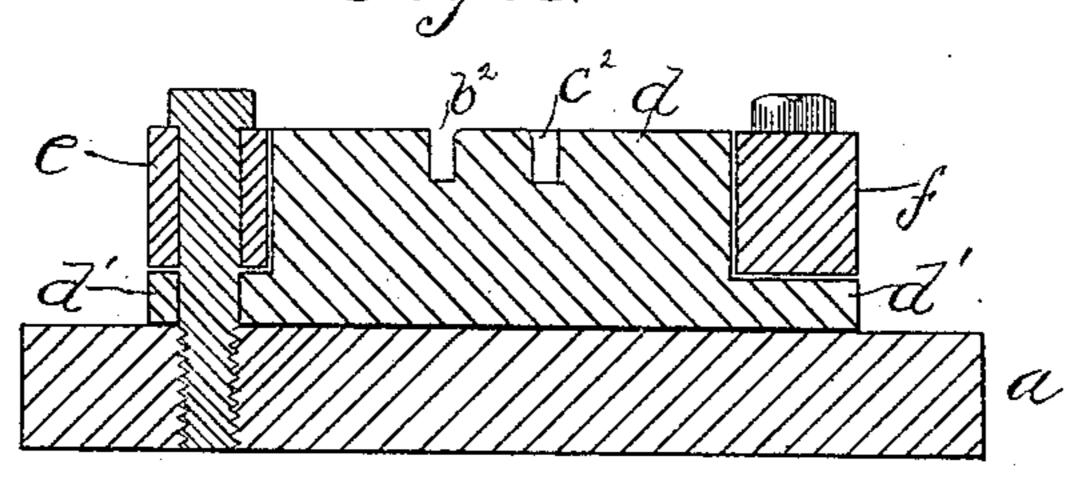
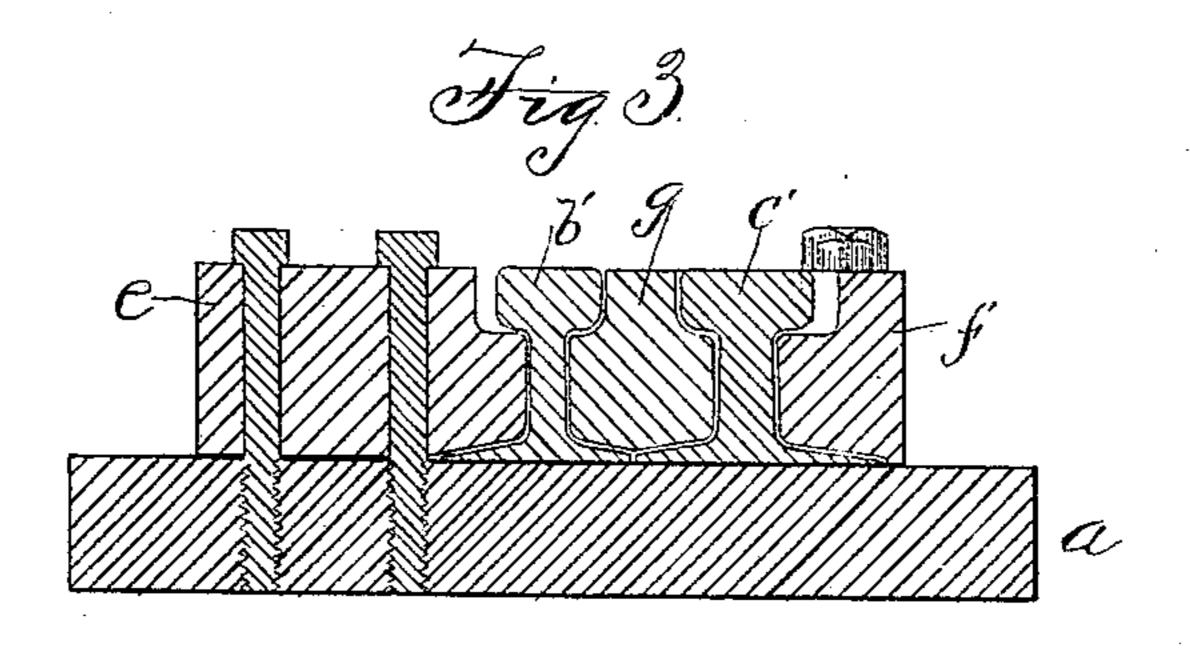
## W. J. McCLELLAN. RAILWAY FROG.

No. 562,968.

Patented June 30, 1896.







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## United States Patent Office.

WILLIAM J. McCLELLAN, OF PORTLAND, CONNECTICUT.

## RAILWAY-FROG.

SPECIFICATION forming part of Letters Patent No. 562,968, dated June 30, 1896.

Application filed March 30, 1896. Serial No. 585,449. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM J. MCCLEL-LAN, a citizen of the United States of America, residing at Portland, in the county of Mid-5 dlesex and State of Connecticut, have invented a certain new and useful Improvement in Railway-Frogs, of which the following is a description, reference being had to the accompanying drawings, wherein—

Figure 1 is a plan view of a frog embodying said improvement. Fig. 2 is a view in vertical cross-section on the dotted line x x. Fig. 3 is a view in vertical cross-section on the dotted line yy.

The improvement pertains to a railwayfrog.

The letter a denotes the base-plate of the frog.

20 appurtenant to one track, and c c', respectively, denote rails appurtenant to another track.

The letter d denotes a block of hard metal, steel, for instance, superimposed upon the 25 base-plate, as are also the rails b b' c c'. The block d has in its upper face a flangeway  $b^2$ for the passage of the flange of the wheel moving on tracks bb', and it also has a flangeway  $c^2$  for the passage of the flange of the 30 wheel moving upon tracks cc'. The block dhas sidewise-extending feet d'.

The letter e denotes a support-piece superimposed upon the base-plate a and fastened thereto by numerous bolts. This support-35 piece fits to and against portions of two of the vertical sides of the block d and it also overrides one of the feet d'.

The letter f denotes a corresponding support-piece likewise superimposed upon the 40 base-plate α and held thereto by numerous bolts. Like its fellow, it fits against two of

the vertical sides of the block d and overrides the other foot d'. It results that these two support-pieces e and f hold the block dfirmly in place against any lateral move- 45 ment and also—by overriding the feet d' hold it firmly to its seat on the base-plate. In addition thereto, these support-pieces may, and preferably do, help to support and keep in place the rails b b' c c'.

The support-piece e has a flangeway in practical continuation of the flangeway  $b^2$ , and the support-piece f has a flangeway in practical continuation of the flangeway  $c^2$ .

The letter g denotes blocks between the 55 rails and fastened by bolts to the base-plate, which aid in giving the whole structure strength and solidity.

By reason of the construction described the The letters b b', respectively, denote rails | only part of the frog liable to wear and break- 60 age in the ordinary course of events is the block e, which, because comparatively small, may be made of hard high-grade metal at comparatively low cost, and if it be broken or worn out that special part of the structure 65 can be readily replaced at small cost.

> In the drawings the rails c c' are shown as cut obliquely across. It is a matter of course that they may be cut straight across and to that extent let into the central block d.

I claim as my improvement—

In combination, first the block d provided with flangeways  $b^2 c^2$  and feet d', second the support-pieces ef each fitting to two sides of the block d and overriding a foot d', and third 75 the tracks b b' c c', all substantially as described and for the purposes set forth.

WILLIAM J. McCLELLAN.

Witnesses:

MATHIAS MCCLELLAN, THOMAS W. O'KEEFE.