(No Model.)

2 Sheets—Sheet 1.

E. SAMUEL.

RAILWAY CASTING.

No. 424,728. Patented Apr. 1, 1890.

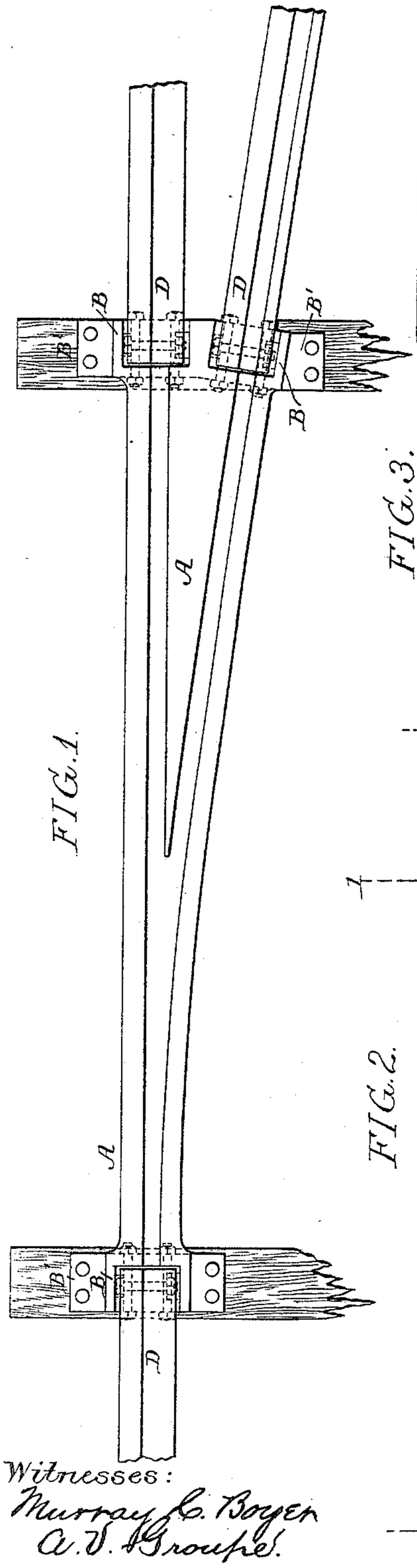

FIG. 1.

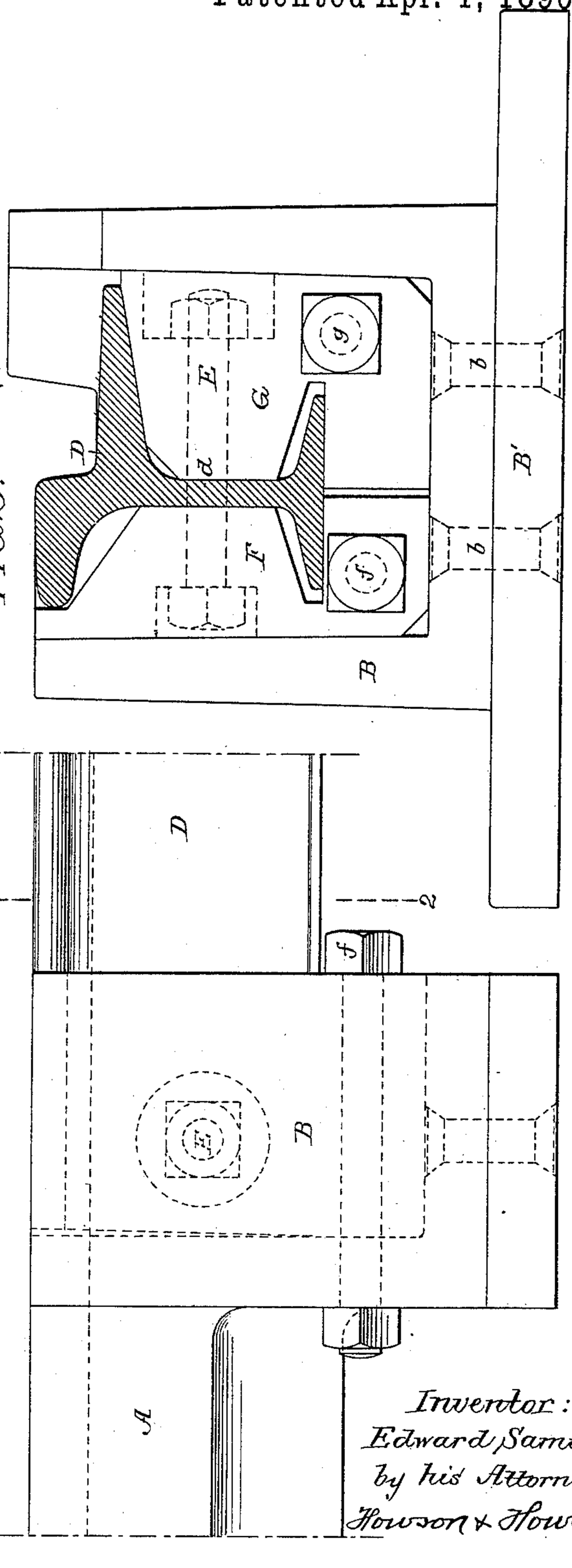

FIG. 3.

FIG. 2.

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Inventor:
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(No Model.) 2 Sheets—Sheet 2.

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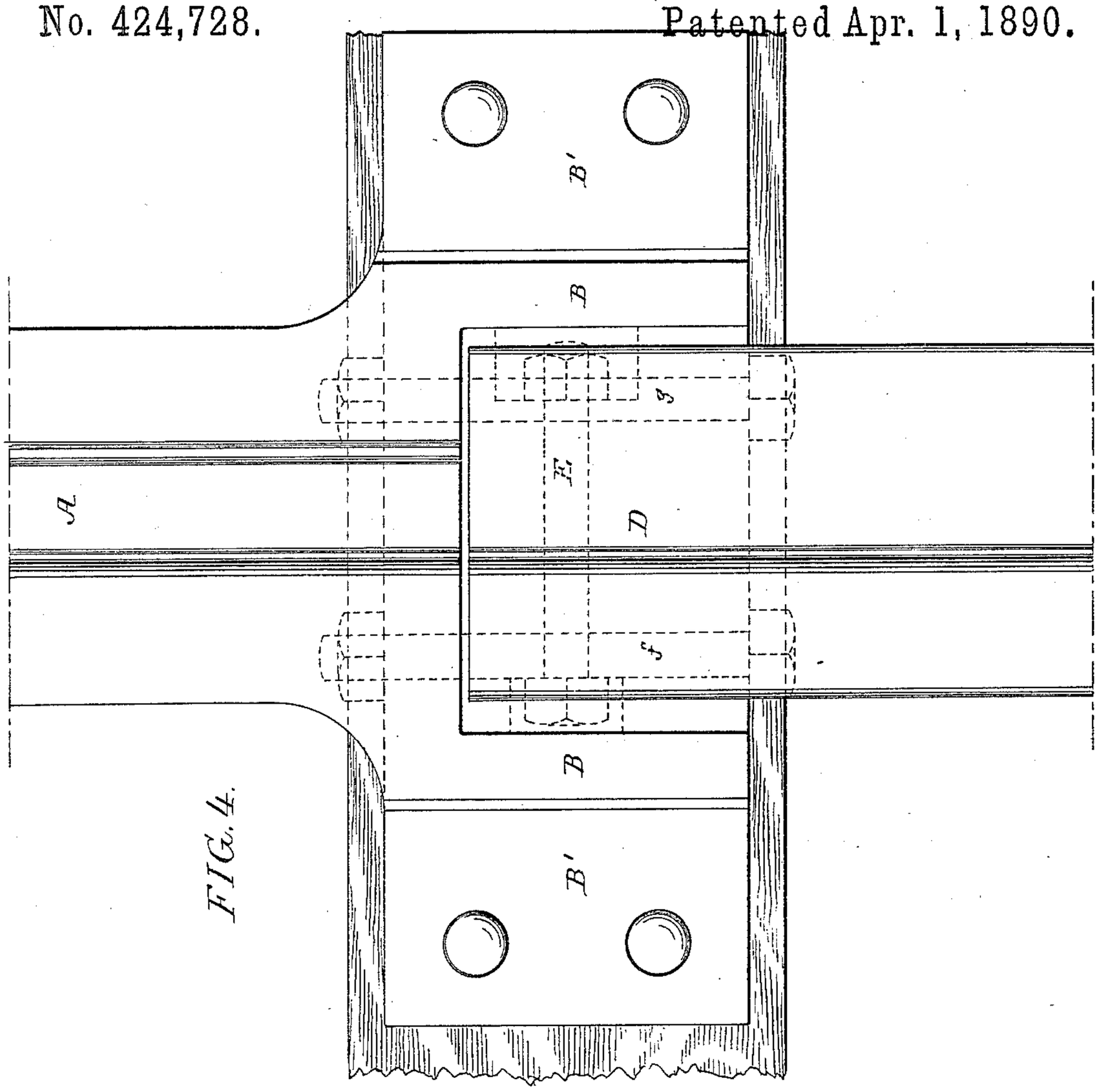

FIG. 4.

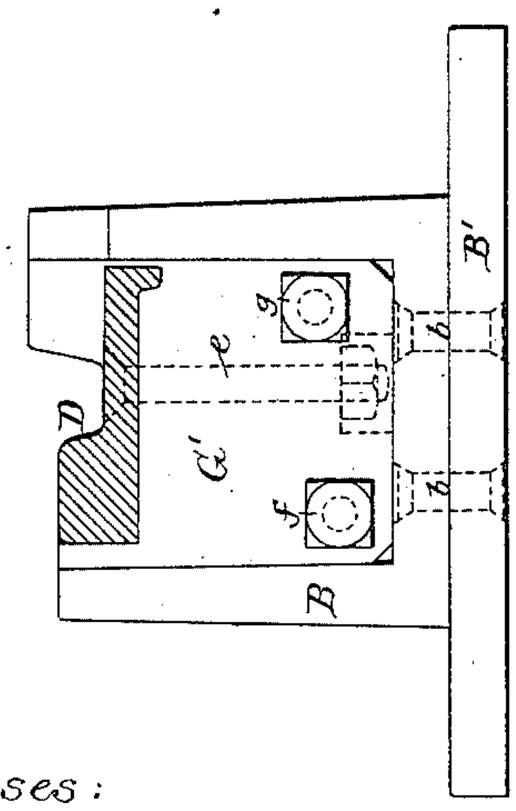

FIG. 5.

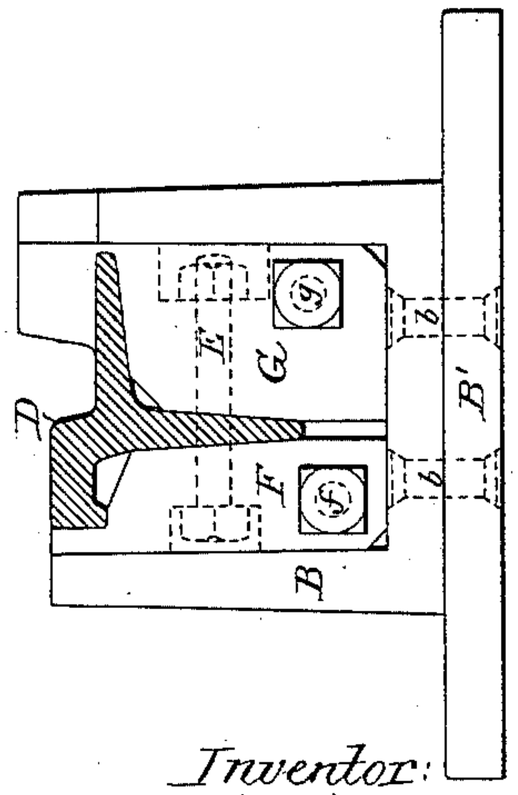

FIG. 6.

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UNITED STATES PATENT OFFICE.

EDWARD SAMUEL, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO WILLIAM WHARTON, JR., AND COMPANY, INCORPORATED, OF SAME PLACE.

RAILWAY-CASTING.

SPECIFICATION forming part of Letters Patent No. 424,728, dated April 1, 1890.

Application filed February 8, 1890. Serial No. 339,720. (No model.)

To all whom it may concern:

Be it known that I, EDWARD SAMUEL, a citizen of the United States, and a resident of Philadelphia, Pennsylvania, have invented certain Improvements in Railway-Castings, of which the following is a specification.

The object of my invention is to construct railway-castings—such as frogs, switches, and crossings—with a standard or universal rail-pocket, so that rails of different shapes and sizes may be connected to the casting, as fully described hereinafter, reference being had to the accompanying drawings, in which—

Figure 1 is a plan view of a switch-casting, showing the application of the rails to the pockets thereof. Fig. 2 is an enlarged side view of one end of the casting, showing the pocket. Fig. 3 is a section on the line 1 2, Fig. 2. Fig. 4 is a plan view of Fig. 2, and Figs. 5 and 6 are views showing the application of other forms of rail to the pocket.

As castings used on railways are now made the pockets are formed to fit some one kind of rail only, and the consequence is that the castings cannot be made in quantities and stored away for use when required; but each casting must be made after the order for it has been given, so that the pockets may fit the particular form of rail joining up to it. This often necessitates a considerable delay in the delivery of the casting, besides the expenditure of labor in altering the pattern. I overcome these objections by forming a pocket that will receive any form of rail, so that the castings can be made in numbers and stored away, and the patterns will not have to be altered to conform with different shapes of rails.

Referring, in the first instance, to Figs. 2, 3, and 4, A is the casting, which may be either a crossing-casting or a switch or frog, and at one or both ends of this casting is a pocket B of sufficient width and depth to receive the largest rail.

D is the rail, and clamped to the rail—in the present instance by means of a transverse bolt E, passing through the web *d* of the rail—are two filling-blocks F and G, which fit snugly in the pocket B. In order to prevent any upward or longitudinal movement, longitudinal bolts *f* and *g* are passed through the blocks and through the rear end of the pocket. Thus the rail is secured to the casting through the medium of the transverse bolt E, blocks F and G, and the longitudinal bolts *f* and *g*, the rail shown in this case being what is termed a "flanged girder-rail." A base-plate B′ is secured to the casting in the present instance by rivets *b b;* but it may be cast with and form part of it, if desired.

In Fig. 5 I have shown a flat street-rail mounted on a block G′ and secured thereto by a vertical bolt *e*, which passes through a hole in the tram of the rail, while the block in turn is secured in the pocket B by the longitudinal bolts *f* and *g*.

Fig. 6 shows a rail with a depending web. The blocks F and G in this instance are not cut away to receive a base-flange. The inner form of the blocks F and G will vary to suit the shapes of the different kinds of rail that may be used to join up to the casting; but the outer form of these blocks will in all cases be the same, so that they will fit snugly into any pocket of any casting, and as these blocks are plain castings they also can be readily made and carried in stock. Orders for railway-castings to fit any kind of rail can thus be promptly filled, and at the same time the rails will be secured to the castings in a better manner than by other methods.

I claim as my invention—

1. The combination of a casting having a rail-pocket with a rail and filling-block, substantially as described.

2. The combination of a railway frog, switch, or crossing casting having a rail-pocket with a rail and a filling-block secured to said rail and the casting, substantially as described.

3. The combination of a railway-casting having a rail-pocket with a rail, a block secured to said rail, and a longitudinal bolt securing the said block to the casting, substantially as described.

4. The combination of a railway-casting having a rail-pocket with a rail, a block situated on each side of the rail, a transverse bolt for securing the blocks to the rail, and longitudinal bolts adapted to secure the blocks to the casting, substantially as described.

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

EDWD. SAMUEL.

Witnesses:
LOUIS KOPPENHOEFER,
HARRY SMITH.