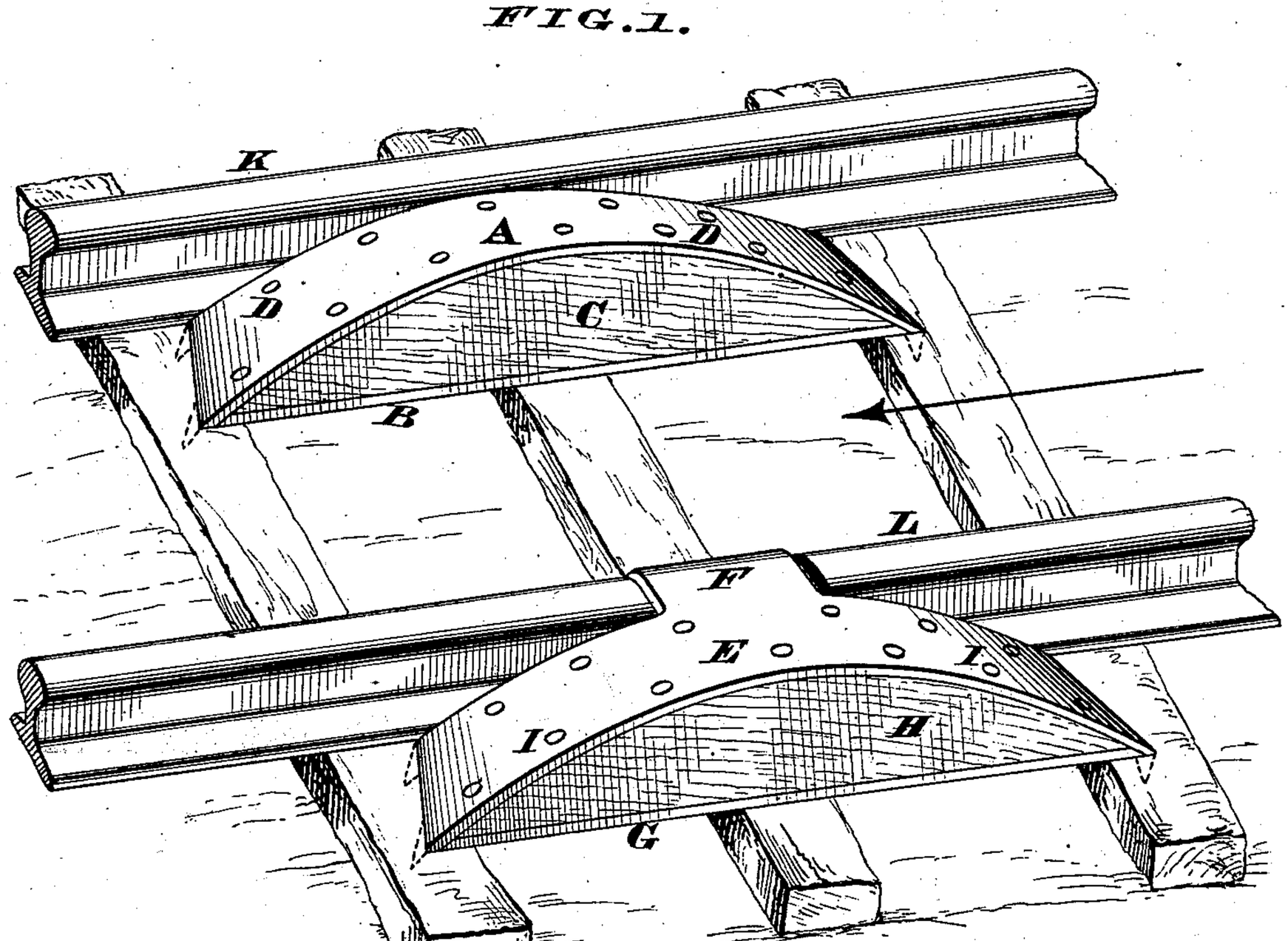
(No Model.)

J. T. FOSDICK.

CAR REPLACER.

No. 287,528. Patented Oct. 30, 1883.

FIG. 1.



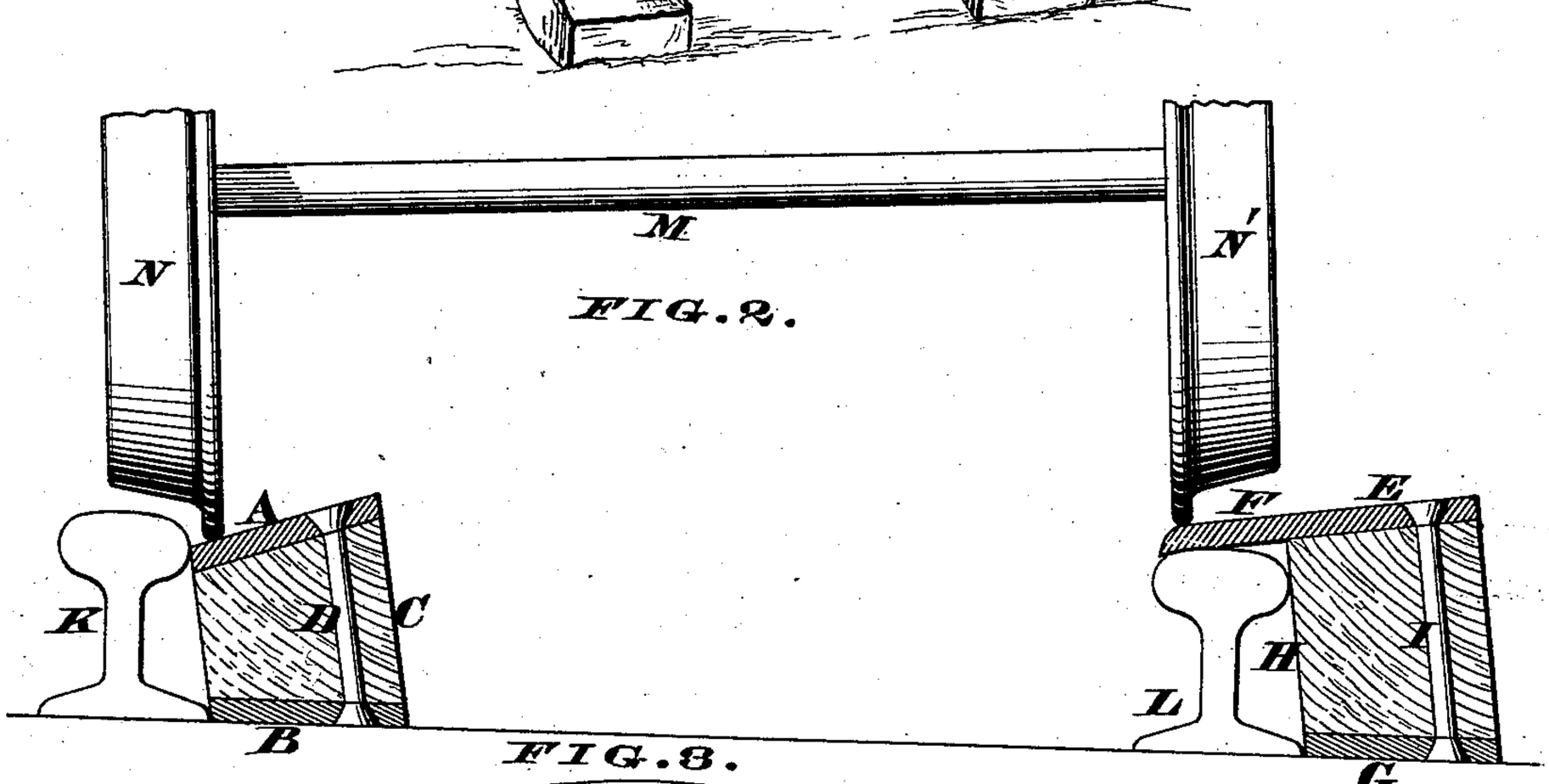


FIG. 2.

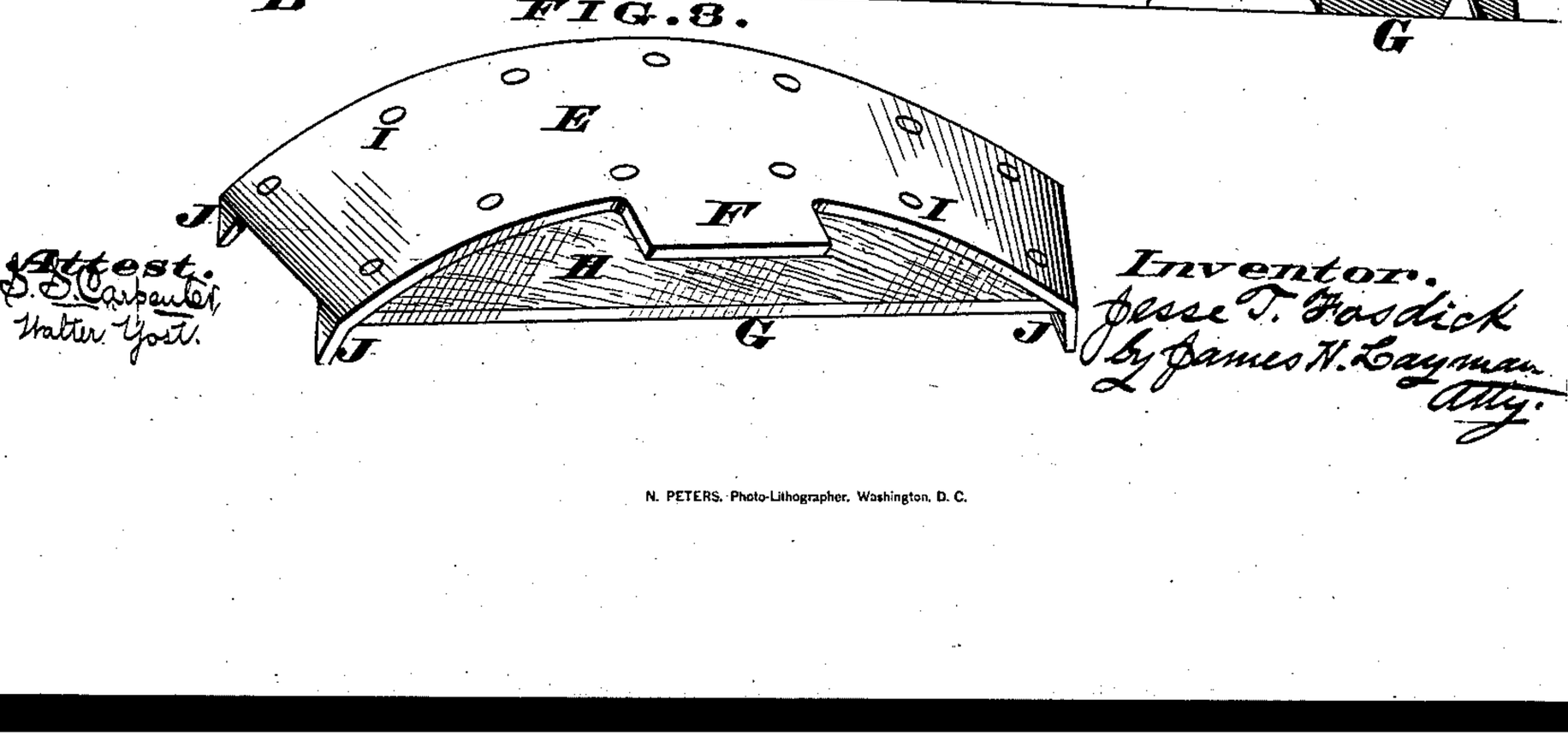


FIG. 3.

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UNITED STATES PATENT OFFICE.

JESSE T. FOSDICK, OF SALAMANCA, NEW YORK, ASSIGNOR TO CHARLES W. ARCHER, OF LUDLOW, KENTUCKY.

CAR-REPLACER.

SPECIFICATION forming part of Letters Patent No. 287,528, dated October 30, 1883.

Application filed March 30, 1883. (No model.)

To all whom it may concern:

Be it known that I, JESSE T. FOSDICK, a citizen of the United States, residing at Salamanca, in the county of Cattaraugus and State of New York, have invented certain new and useful Improvements in Car-Replacers, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to those devices which are temporarily adjusted to railroad-tracks for the purpose of restoring cars, locomotives, &c., after they have been derailed; and my replacer consists of a pair of segmental members, designated, respectively, as the outer and inner frogs. The outer frog, which is somewhat higher at its center than the rail, has an inwardly-projecting flange or lip that rests on the rail-head, in order that the wheel which rides up said frog may be launched toward the center of the track. The inner frog, on the contrary, is somewhat lower at its center than the rail, thereby causing the tread of the wheel that rides up said frog to get fairly onto the rail-head as soon as the wheel on the outer frog is launched inwardly, as previously described. Furthermore, each frog is composed of two plates, of which the upper or effective one is bowed, arched, or curved to the desired height, and is pitched inwardly, or toward the rail, while the lower plate of the frog extends from end to end of said arched plate. Consequently a segmental space is formed between these two plates, which space is occupied by a wooden filling or beam retained in place with bolts or rivets. The upwardly-bowed or crowning plate of the frog terminates at its ends with a pair of spurs or dogs adapted to penetrate the cross-ties, and thereby retain the replacer alongside the rail, as hereinafter more fully described, and pointed out in the claim.

In the annexed drawings, Figure 1 is a perspective view showing a pair of my frogs applied to an ordinary track. Fig. 2 is an enlarged transverse section of the same, taken at the center of the frogs, the wheels of a car being shown as in the act of being launched onto the rails. Fig. 3 is a perspective view of the outer frog.

The inner frog consists of a stout plate, A, either of iron or steel, said plate being bent or bowed upwardly, and at the same time pitched or sloped toward the rail. Care must be taken, however, to keep that side of the frog which bears against the rail somewhat lower than the rail-head, as shown in Fig. 2.

Extending from end to end of this plate A is another plate or bar, B, which is preferably flat, and about long enough to span three cross-ties, as seen in Fig. 1. As a result of this arrangement of arched and straight plate, a segmental space is afforded that is occupied with a beam or wooden filling, C, said members A B C being united with a system of rivets, bolts, or tie-rods, D. Furthermore, it will be noticed that the filling C is very much inclined with reference to the plate B, thereby imparting a very steep inward pitch to the arch-plate A. The outer frog consists of a bowed or arched plate, E, having at its mid-length a flange or lip, F, adapted to rest on the rail-head. This frog also has a flat plate, G, beam or filling H, and rivets or tie-rods I, uniting said plates and beam; but it need not be inclined at such a steep pitch as is the other frog, A B C. In order to retain the frogs securely in place alongside the rails, the ends of the arched plates are bent downwardly and sharpened, so as to afford spurs or dogs J, capable of being forced into the cross-ties by the weight of the car the moment the latter runs onto said frog.

To illustrate the advantage of my invention, I will suppose the truck M N N′ has been derailed and that it is desired to run the same back on the tracks K L in the direction indicated by the arrow in Fig. 1. To accomplish this result, the frog A B C is fitted up closely against the inner side of rail K, and the other frog, E F G H, is placed directly opposite the frog A B C, but on the outside of rail L, its flange F resting on said rail. The truck is now pushed against these fixed frogs, thereby forcing the spurs J into the ties, and compelling the wheel N to ride up the arched plate A and the wheel N′ to ascend the other crowning plate, E. Owing to the inclination of these plates, the constant tendency is to pitch the wheels N N′ toward the rails, and as soon as the wheel N′ has fairly run upon the flange or lip F the other wheel, N, is immediately launched

directly onto the rail K, on account of the inner edge of plate A not being as high as the head of said rail. The truck being then advanced a little farther, so as to run the wheel N′ off of the flange F, the replacing operation is completed and the frogs are at once removed. By making the frogs with arched top plates, straight bottom plates, and wooden fillings, they will be very strong, somewhat longer than usual, and yet light enough to be handled with perfect ease, which increased length renders the curved planes at the ends of the frogs quite gradual, thereby facilitating the ascent of the wheels up these arched surfaces A and E. Finally, it is apparent that the arched plates A E enable cars, locomotives, &c., to be run up onto the tracks at either end of the frogs, as may be the most convenient.

I claim as my invention—

A car-replacer consisting of a pair of frogs composed of arched plates A E, base-plates B G, wooden fillings C H, and fastening devices D I, the arched plate E having at its center a laterally-projecting flange, F, for the purpose specified.

In testimony whereof I affix my signature in presence of two witnesses.

JESSE T. FOSDICK.

Witnesses:

OLIVER S. VREELAND,

JAMES G. JOHNSON.