No. 765,882.

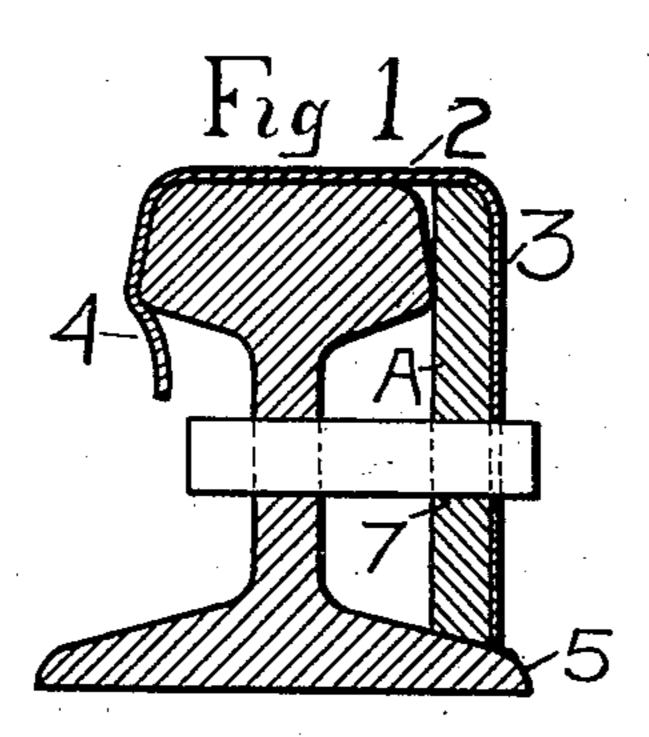
PATENTED JULY 26, 1904.

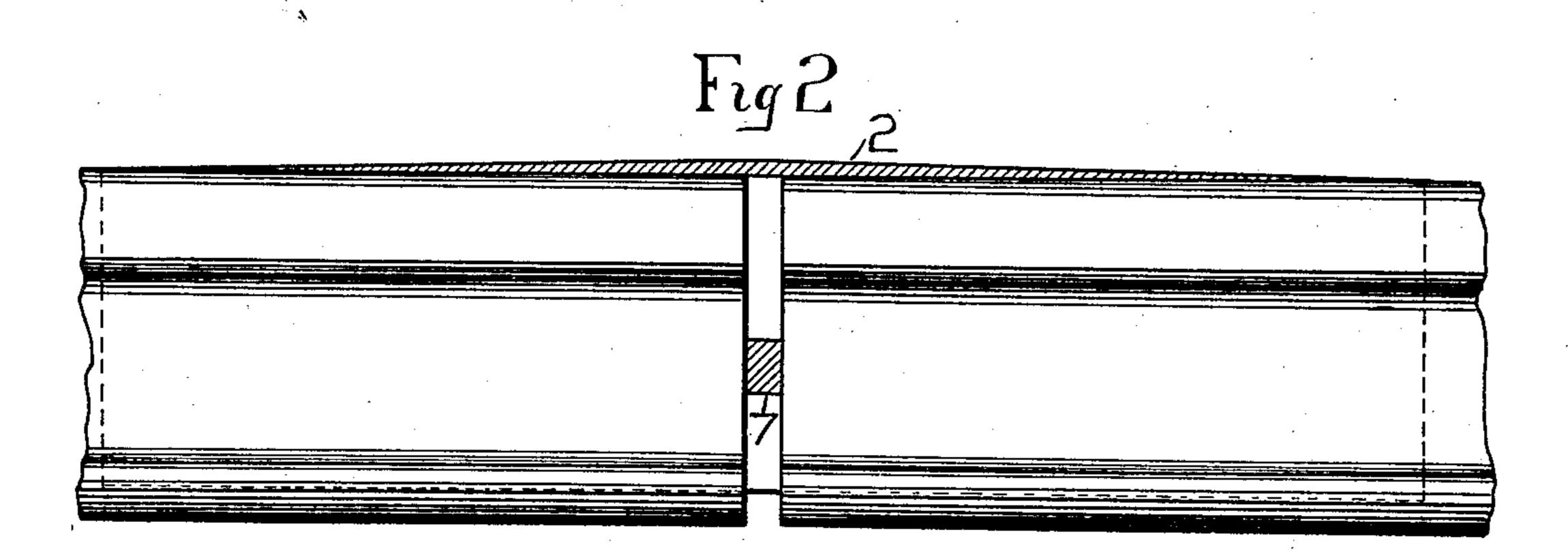
C. W. COBURN.

PORTABLE RAIL JOINT BRIDGE.

APPLICATION FILED JAN. 6, 1904.

NO MODEL.





WITNESSES: Hornse

Clarence & BY Geo. H. Strong, ATTORNEY

United States Patent Office.

CLARENCE W. COBURN, OF SAN FRANCISCO, CALIFORNIA.

PORTABLE RAIL-JOINT BRIDGE.

SPECIFICATION forming part of Letters Patent No. 765,882, dated July 26, 1904.

Application filed January 6, 1904. Serial No. 187,905. (No model.)

To all whom it may concern:

Be it known that I, Clarence W. Coburn, a citizen of the United States, residing in the city and in the county of San Francisco and 5 State of California, have invented new and useful Improvements in Portable Rail-Joint Bridges, of which the following is a specification.

My invention relates to a device which I

10 call a "portable rail-joint bridge."

It consists of a plate of metal adapted to rest upon the outer flanges of contiguous abutting rails and crossing the open space between said ends, the upper surface of said plate being substantially on a plane with the tops of the rails, and an elastic steel plate secured thereto and adapted to spring over the tops of the rails to retain the bridge-plate in position and form a continuous surface for the passage of car-wheels.

My invention also comprises details of construction, which will be more fully explained by reference to the accompanying drawings,

in which—

Figure 1 is a transverse section of a rail, showing application of the invention. Fig.

2 is an elevation in partial section.

In factories where cement, clay, or similar materials are molded into structural forms it 3° is necessary to transport the molded articles from the place where they are formed to ovens where they are baked and solidified, and for this purpose trucks or cars are usually employed, upon which trucks the articles are 35 loaded. In moving such trucks they usually pass over a number of small turn-tables upon which a change of direction may be accomplished and the cars run to their various destinations. The junction of the tracks of such 40 turn-tables with the main fixed tracks are usually quite open, and by reason of the instability of the turn-tables a very considerable jar is given to the car with its load as it passes each joint, the result of which is to 45 break and disintegrate a large proportion of the yet soft articles which are being transported.

It is the object of my invention to provide a portable bridge which may be used upon on any of these joints, so that the cars may move

smoothly and without damage to their contents.

In the carrying out of this invention I form a steel or other suitable bar or plate A, having sufficient length to extend across the joint 55 of meeting rails, the lower edge of the bar resting upon the flanges of the rails and the upper edge extending approximately level with the upper surfaces of the rails. This forms a bridge upon which the wheel-flanges 60 may travel in passing over the joint, and thus making a smooth passage. In order to retain this bar in place, I form a thin sheet-steel or other elastic casing 2, the upper surface of which is shaped substantially like the up- 65 per surfaces of the rails. One side is bent down, as at 3, and is secured to the bar A. The other side is bent down and curved inwardly, so that the lower part of the inclosed space is slightly narrower than the head of 70 the rail. This portion being free and elastic will spring outwardly when the device is pushed down over a rail-joint, and when thus forced down the bar A will rest in its proper position upon the flange 5 of the rail, and the 75 elastic portion 4, extending down on the opposite side of the rail, acts to retain the bar in place. The upper surface of this elastic portion covers the rail-joint smoothly, and at the ends of this portion it is drawn down to 80 a thin knife-edge, so that the wheels of a car approaching will ride smoothly upon this portion and over the slightly-thicker central portion at the joint, and thence will pass off upon the succeeding rail over a similarly-formed 85 smooth knife-edge. The car will thus be submitted to the very least possible jar when passing these open joints in the rails, which are often of considerable size.

It will be seen that the inclosing elastic cap 90 forms a perfectly-smooth surface for the tread of the car-wheels and also for the flanges, so that there will be little or no jar to the passing cars.

In order to obtain these joint-bridges in 95 proper position, I have shown narrow slots made through the bars and the inclosing casing, as shown at 7, and these slots being substantially midway of the length of the device are designed for the introduction of keys or 100