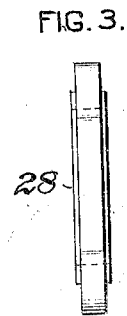
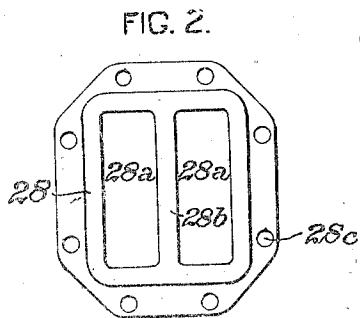
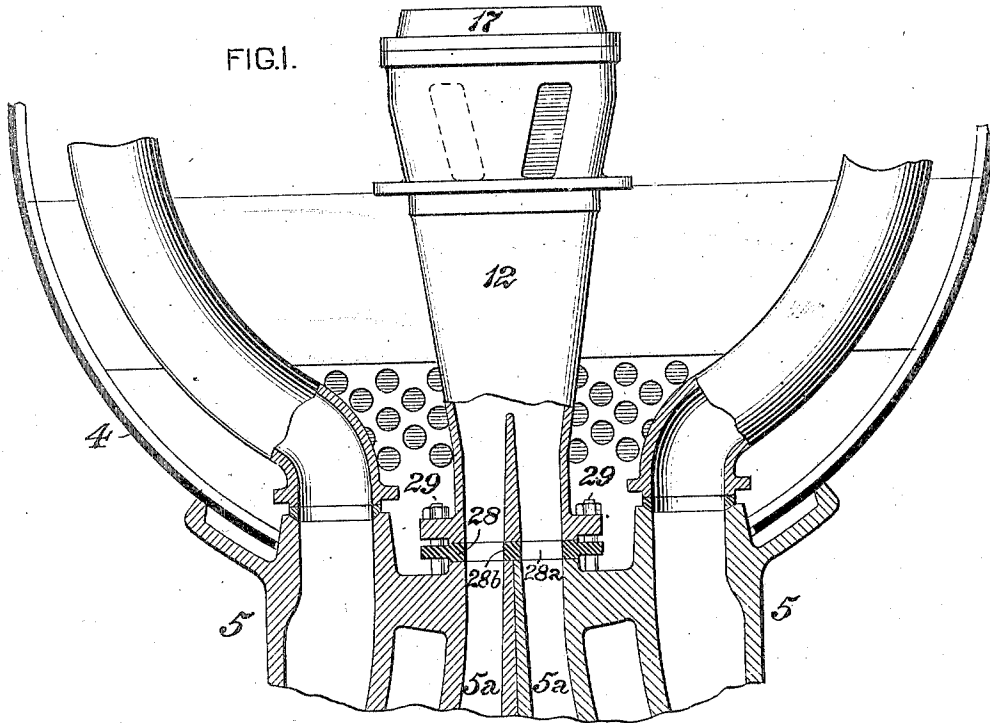


J. PLAYER.
LOCOMOTIVE EXHAUST PIPE.
APPLICATION FILED SEPT. 16, 1909.

948,021.

Patented Feb. 1, 1910.



WITNESSES
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LOCOMOTIVE EXHAUST-PIPE.

948,021.

Specification of Letters Patent.

Patented Feb. 1, 1910.

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To all whom it may concern:

Be it known that I, JOHN PLAYER, of Schenectady, in the county of Schenectady and State of New York, have invented a certain new and useful Improvement in Locomotive Exhaust-Pipes, of which improvement the following is a specification.

My invention relates to locomotive exhaust pipes which are, in American locomotives of substantially all of the present standard types of construction, connected to a bed plate or cylinder saddles constituting the support of the smoke box, and which communicate with, and form the exit passage from, exhaust steam passages formed in said support.

The object of my invention is to provide simple and effective means whereby a tight joint between the exhaust pipe and the bed plate or cylinder saddles may be readily made, and time and labor in handling heavy pipes, be economized.

The improvement claimed is hereinafter fully set forth.

In the accompanying drawings: Figure 1 is a vertical transverse central section through the upper portion of a pair of locomotive cylinder saddles and a connected exhaust pipe, illustrating an application of my invention; Fig. 2, a plan or top view of the joint ring, detached; and, Fig. 3, a side view of the same.

My invention is herein illustrated as applied in connection with a locomotive exhaust pipe, 12, having a detachable tip or nozzle, 17, connected to its top. The exhaust pipe may be of any of the known types, and is herein exemplified as of the construction set forth in an application for Letters Patent filed by me February 9, 1909, Ser. No. 476,922, of which application the present one is a division. In ordinary practice, the exhaust pipe is directly connected to the cylinder saddles, 5, or equivalent bed plate, on which the smoke box, 4, of the locomotive, is supported, and communicates with exhaust steam passages, 5^a, cored in the saddles or bed plate, through which and through the communicating exhaust pipe, the exhaust steam from the engine cylinders is discharged to the atmosphere. A tight joint between the exhaust pipe and saddles or bed

plate is manifestly necessary, and this is ordinarily made by grinding, which operation, in the case of large and heavy exhaust pipes, involves considerable time and labor.

In the practice of my invention, I provide a separate and independent grinding block or joint ring, 28, which is in the form of a flat metal plate, the upper and lower faces of which are finished truly, and which is provided with two passages, 28^a, separated by a central bridge, 28^b, and corresponding in contour with the end openings of the exhaust steam passages, 5^a. The grinding block may be either of the same contour as the grinding surface on the saddles or exhaust pipe base, or be reduced in thickness at and adjacent its periphery, and provided with bolt holes, 28^c, formed in the portion of reduced thickness, for the reception of bolts, 29, which pass through said bolt holes and through bolt holes registering therewith in a circumferential flange, 12^a, formed on the exhaust pipe adjacent to its lower end, and secure the exhaust pipe and the interposed grinding block firmly to the cylinder saddles, 5.

The opposite surfaces of the joint ring or grinding block, 28, can be alternately and independently ground to the bearing surfaces of the bottom of the exhaust pipe and of the cylinder saddles, respectively, thereby enabling more perfect joints to be made and economizing time and labor in handling exhaust pipes, which, in many of the latest constructions of locomotives, are comparatively large and heavy.

I claim as my invention and desire to secure by Letters Patent:

1. The combination, in a locomotive engine, of a bed plate having exhaust passages terminating in a seat for the exhaust pipe, an exhaust pipe adapted thereto, and a metallic grinding block interposed between said seat and exhaust pipe.

2. The combination, in a locomotive engine, of a bed plate having separated exhaust passages terminating in a seat for the exhaust pipe, an exhaust pipe adapted thereto, and a metallic grinding block having passages registering with the terminals of the cylinder exhaust passages and interposed between said seat and exhaust pipe.

3. The combination, in a locomotive engine, of a bed plate having exhaust passages terminating in a seat for the exhaust pipe, a flanged exhaust pipe adapted thereto, a peripherally flanged metallic grinding block
5 interposed between said seat and exhaust pipe, and bolts engaged in said bed plate and

passing through said flange of the grinding block and clamping against the flange of the exhaust pipe.

JOHN PLAYER.

Witnesses:

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