S. A. Otis.

Railroad Switch.

No. 60,044. Patented Nov. 27, 1866.

Fig. 1.

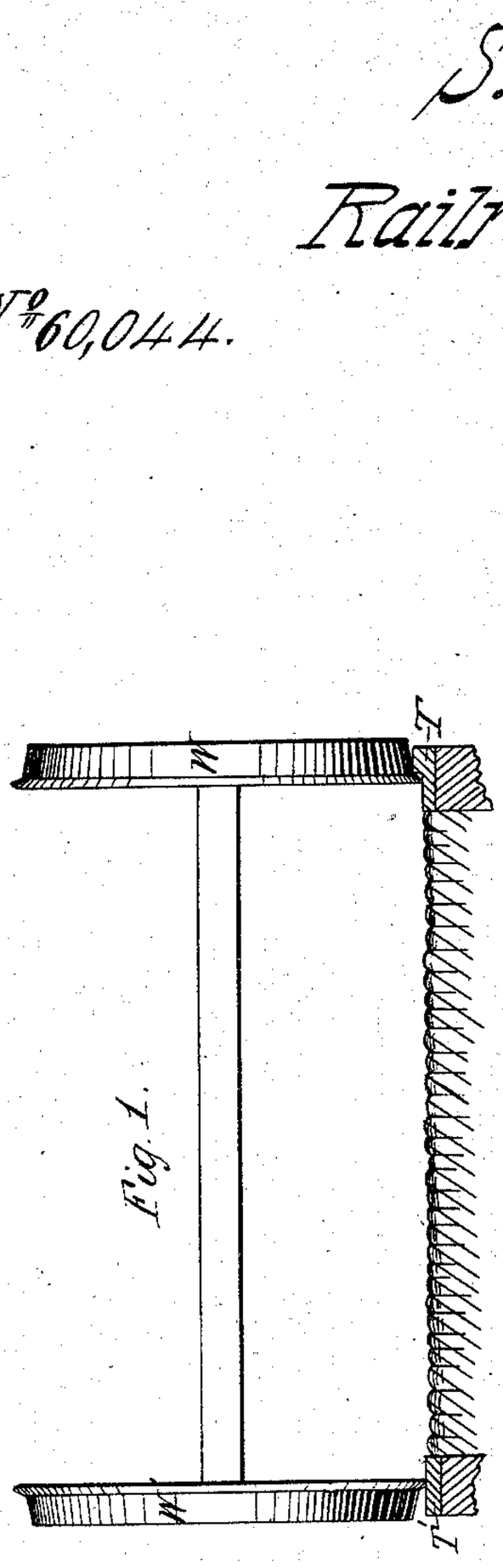


Fig. 2.

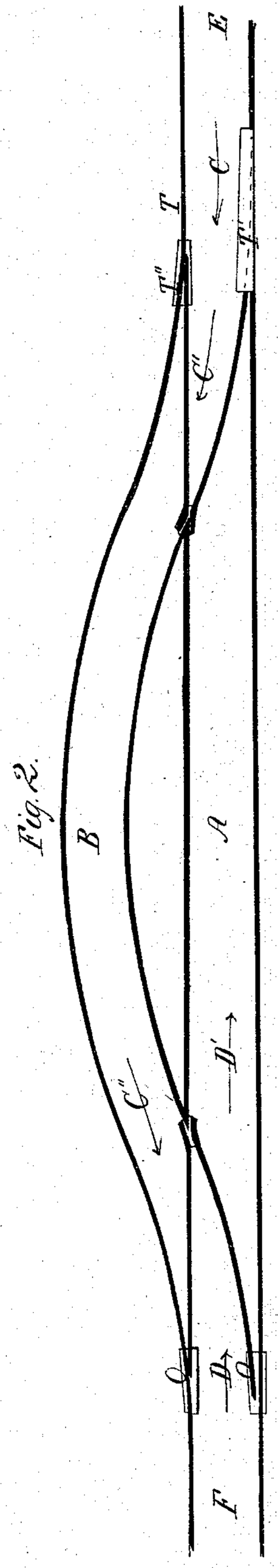
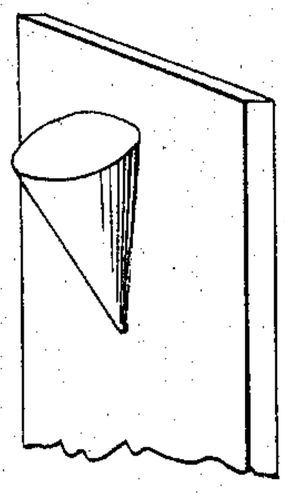


Fig. 3.



Witnesses;
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Frank G Parker

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United States Patent Office.

IMPROVED TURNOUT FOR RAILROADS.

SAMUEL A. OTIS, OF BOSTON, MASSACHUSETTS.

Letters Patent No. 60,044, *dated November* 27, 1866; *antedated November* 11, 1866.

SPECIFICATION.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, SAMUEL A. OTIS, of Boston, in the county of Suffolk, and State of Massachusetts, have invented an improved Turnout; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Nature.

The nature of my invention consists in combining and arranging, with fixed or dummy switches, a system of rails of such a nature that the wheels upon one side of a car shall run upon their flanges while those upon the other side shall run upon their treads, the whole so combined that as soon as the car is sufficiently turned out of the line of the main track it runs upon the points of the dummy switches and is thus conducted off on to the sideling or turnout. The object of first turning the car slightly away from the straight or main track is that the fixed points of the dummy switches may be outside of the line of the main track, so that the returning car (on the main track) may not have to run over the point of the dummy as is now the case where a "drop" dummy is in use. The advantage that my invention has over that for which a patent was granted to J. Herbert Shedd and William Edson, January 24, 1860, is that I do not have to curve the main track at all, and thus I save the shock that the return car receives when passing the Shedd & Edson switch.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and use.

Drawings.

Figure 1 represents a pair of car wheels, of which W runs upon its tread, and W′ upon its flange.

Figure 2 shows a turnout with my improved arrangement of switch-irons.

Figure 3 represents a cone upon a plane surface, and is shown in connection with my turnout simply to show the principle of action upon which my improvement is based.

I lay a turnout track, B, in connection with the main track, A, with any of the usual curves and frogs; the end F of the turnout is provided with ordinary inlet "dummy" switches, O O′; the end E of the turnout is represented as provided with my improved switch-irons, T′ and T″. The piece T′ is perfectly flat, having a cross-section, as shown at T′, fig. 1, and of about ten feet in length; upon this piece the flanges only of the wheels run. The other switch-iron, T″, is made in the usual form of a fix "dummy;" the exact shape and length of both of these switches will of course vary with the style of rail used.

The working of my switch is this: A car coming in the direction indicated by the arrow, C, strikes the switch-iron, T, and the wheels of one side of the car run upon their flanges, as shown by W′ and T, fig. 1, while the other wheels run upon their treads, as shown by W and T, fig. 1, the effect of which is to make the car "cone" or run on a curve, as indicated by the dotted line on the switch-iron T and by the arrow C.

Claim.

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination of the device described for turning the car out of the straight line, with the fixed points of the dummy switches, as shown and described.

SAMUEL A. OTIS.

Witnesses:

HARRY W. CARROLL,

FRANK G. PARKER.