

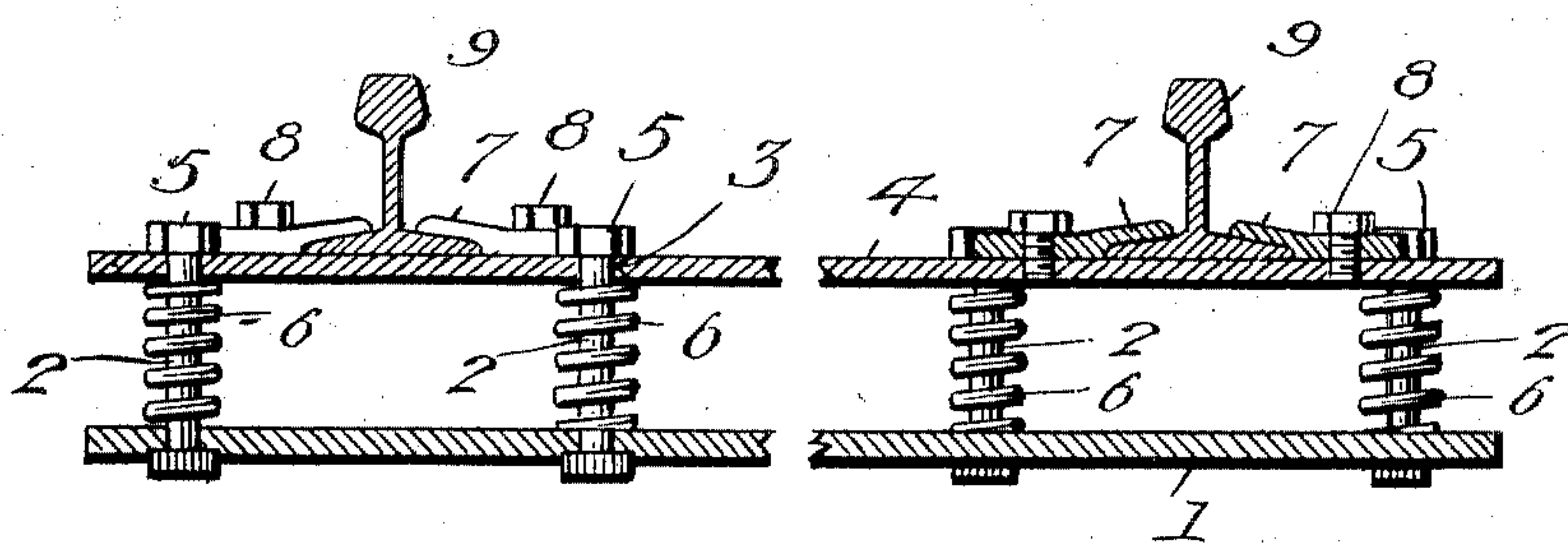
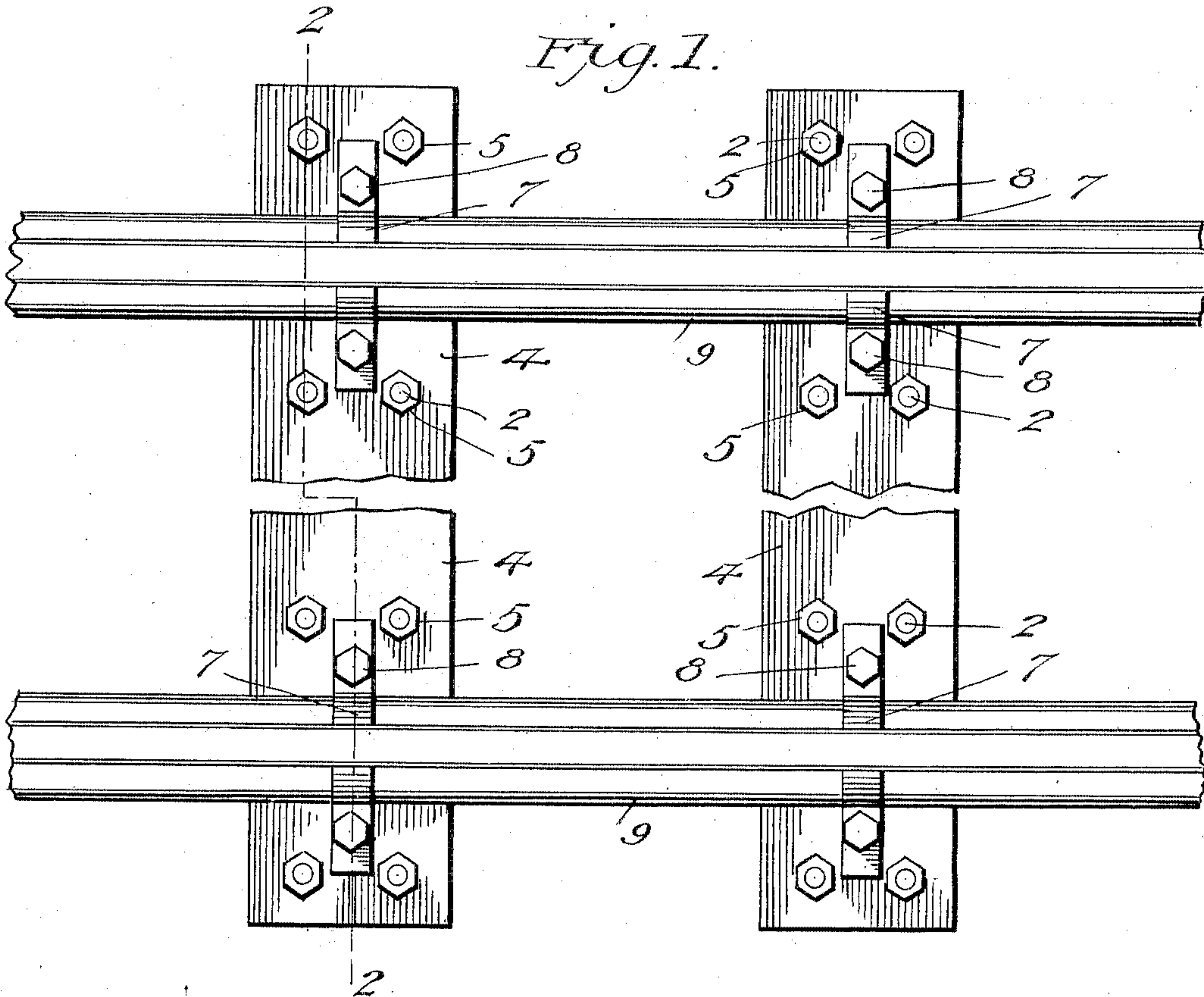
No. 759,175.

PATENTED MAY 3, 1904.

S. HARTENSTEIN.
RAILROAD TIE.

APPLICATION FILED FEB. 13, 1904.

NO MODEL.



Inventor

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Witnesses

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SYLVANUS HARTENSTEIN, OF EASTON, PENNSYLVANIA.

RAILROAD-TIE.

SPECIFICATION forming part of Letters Patent No. 759,175, dated May 3, 1904.

Application filed February 13, 1904. Serial No. 193,437. (No model.)

To all whom it may concern:

Be it known that I, SYLVANUS HARTENSTEIN, a citizen of the United States, residing at Easton, in the county of Northampton and State of Pennsylvania, have invented new and useful Improvements in Railroad-Ties, of which the following is a specification.

My invention relates to new and useful improvements in railroad-ties; and its object is to provide a spring-tie of simple construction which will form a cushion for the rails connected thereto and will permit the production of a smooth track which will prevent the violent jars which are ordinarily incident to the movement of a railroad-car.

With the above and other objects in view the invention consists of a tie comprising similar plates slidably mounted upon guide-pins and having springs interposed between them and arranged on the pins. Suitable rail-engaging devices are secured to the upper plates of the ties.

The invention also consists in the further novel construction and combination of parts hereinafter more fully described and claimed, and illustrated in the accompanying drawings, showing the preferred form of my invention, and in which—

Figure 1 is a plan view of rails connected to ties constructed in accordance with my invention; and Fig. 2 is a longitudinal section through one of the ties, the central portion of the tie being removed.

Referring to the figures by numerals of reference, 1 is a base-plate having, preferably, two parallel series of pins 2 extending therefrom, and these pins project through apertures 3, formed within a top plate 4. Heads 5 are formed at the ends of the pins, so as to prevent displacement thereof, and springs 6 are coiled about the pins and abut at their ends upon the inner faces of the two plates 1 and 4. Rail-engaging blocks 7 are adapted to be secured upon the upper plate 4 by means of bolts 8 or in any other suitable manner and when overlapping the base-flanges of rails 9 will securely hold them upon the plate 4.

It will be seen that a tie constructed in the

manner herein described is very simple and resilient, and at the same time the rails connected thereto are held in proper relation to each other. Any downward pressure upon the plate 4 will cause said plate to slide downward on the pins 2 and compress the springs 6, and these springs will promptly return the upper plate 4 to its normal position when pressure is removed therefrom.

In the foregoing description I have shown the preferred form of my invention; but I do not limit myself thereto, as I am aware that modifications may be made therein without departing from the spirit or sacrificing any of the advantages thereof, and I therefore reserve the right to make such changes as fairly fall within the scope of my invention.

Having thus described the invention, what is claimed as new is—

1. In a railroad-tie, the combination with a base-plate having pins extending therefrom; of a top plate slidably mounted upon the pins, springs coiled about the pins and interposed between and bearing upon the plates, and means upon the top plate for securing rails thereto.

2. The combination with a base-plate having parallel series of pins extending therefrom, of an apertured top plate slidably mounted upon the pins, springs coiled about the pins and interposed between and bearing against the plates, heads upon the pins, and means upon the top plate for securing rails thereto.

3. The combination with a base-plate having parallel series of pins extending at right angles, and heads at the ends of the pins; of an apertured top plate slidably mounted upon the pins, springs inclosing the pins and bearing at opposite ends upon the inner faces of the base and top plates, and rail-engaging blocks detachably secured to the top plate.

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

SYLVANUS HARTENSTEIN.

Witnesses:

E. H. SHAWDE,
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