

969,681.

Patented Sept. 6, 1910.

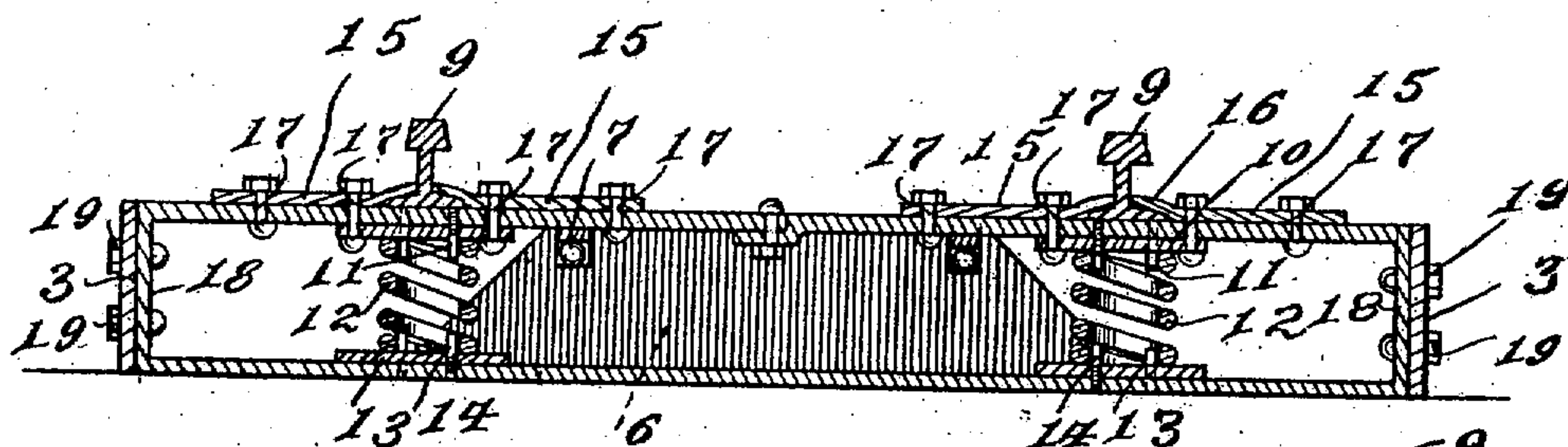
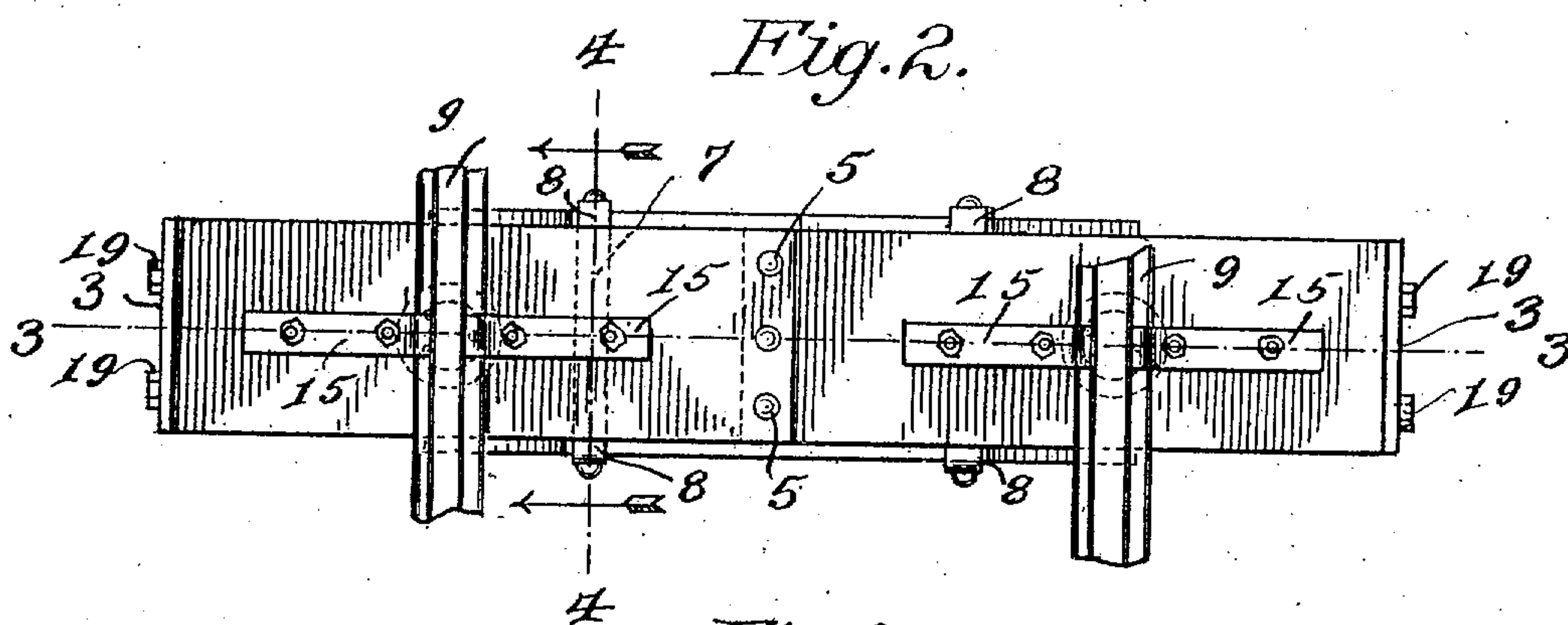
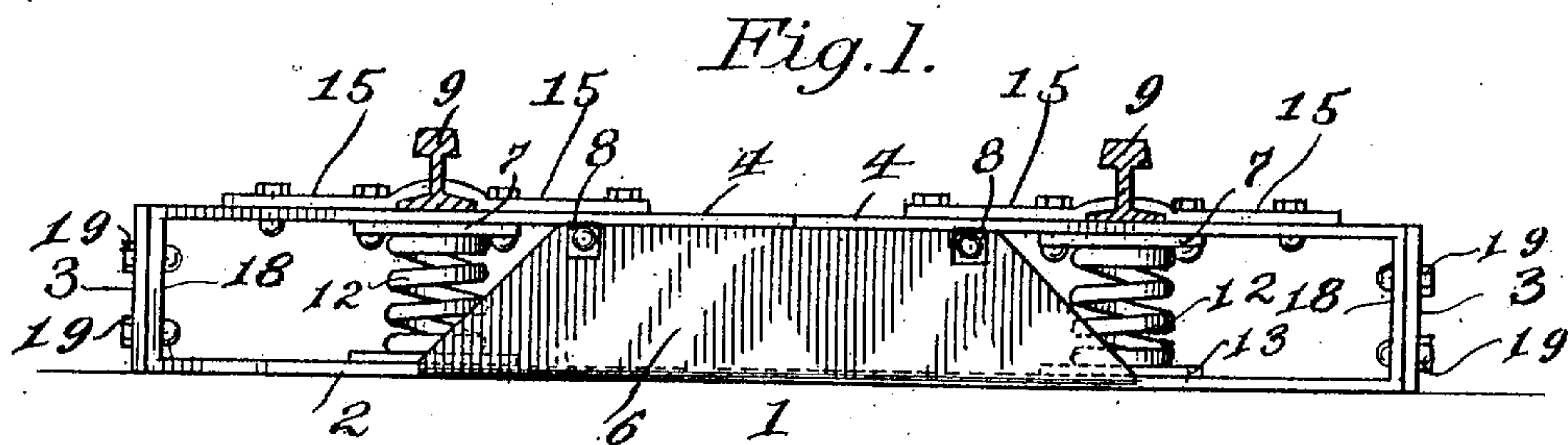
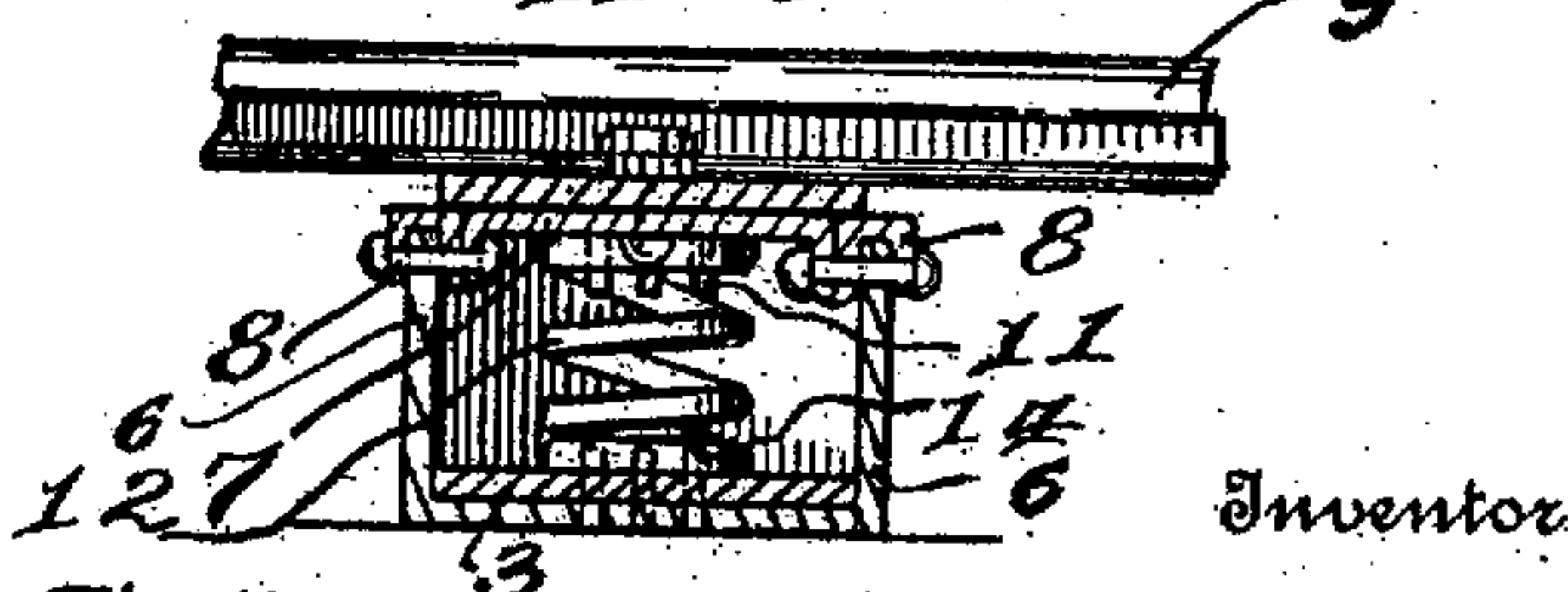


Fig. 4.



Witnesses

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UNITED STATES PATENT OFFICE.

SOLOMON A. WRIGHT, OF BUCKMAN, TERRITORY OF NEW MEXICO, ASSIGNOR OF ONE-EIGHTH TO STEPHEN H. DAVIS, OF SANTA FE, TERRITORY OF NEW MEXICO.

METALLIC RAILROAD-TIE.

969,681.

Specification of Letters Patent.

Patented Sept. 6, 1910.

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To all whom it may concern:

Be it known that I, SOLOMON A. WRIGHT, a citizen of the United States, residing at Buckman, in the county of Santa Fe and Territory of New Mexico, have invented new and useful Improvements in Metallic Railroad-Ties, of which the following is a specification.

This invention relates to improvements in metallic railroad ties, and the object of the invention is to produce an article of this character which is extremely simple in construction, comparatively cheap to manufacture, and which has its parts so arranged as to render the same sufficiently resilient to compensate for all irregularities of the road-bed and thereby adding greatly to the comfort of the traveling public.

With the above, and other objects in view which will appear as the description progresses, the invention resides in the novel construction and combination of parts hereinafter fully described and claimed.

In the accompanying drawings there has been illustrated a simple and preferred embodiment of the improvement, and in which drawings,

Figure 1 is a side elevation of a rail road tie constructed in accordance with the present invention. Fig. 2 is a top plan view of the same. Fig. 3 is a longitudinal sectional view upon the line 3—3 of Fig. 2. Fig. 4 is a transverse sectional view upon the line 4—4 Fig. 2.

The improved tie is constructed of some slightly yieldable metal, such as steel and the main body portion 1 of the tie is constructed of a single piece of such metal. The body 1 comprises a base member 2, provided with vertical ends 3 from which are extended in opposite directions and toward each other the top members 4. These members 4 are in a plane substantially parallel with the base 2 which they overlap, and the meeting ends of the top members 4 may be welded together or connected through the medium of bolts 5, as illustrated in the figures of the drawing. The base 2 is provided adjacent each of its longitudinal edges with centrally arranged integrally formed side sections 6. The side sections 6 are spaced a suitable distance away from the ends 3, as clearly illustrated in Figs. 1 and 3 of the drawing and the said sides are bent to assume a vertical plane and have their up-

per edges connected through the medium of suitable straps 7. By reference to Fig. 4 of the drawings, it will be noted that each of these straps 7 is constructed of a single piece of suitable material having its ends bent in the form of a U the vertical walls of which are adapted to lap the edges of the side members 6 and the said members as well as the upper portions of the sides 6 are provided with suitable alining openings which are adapted for the reception of retaining elements 8.

The numerals 9 designate the rails adapted to be positioned upon the top of the tie, and directly below the points at which the rails are positioned the top sections 4 are provided with reinforcing plates 10; the said plates having downwardly extending pins 11, which are adapted to serve as retaining elements for the helical springs 12 which are positioned between the top and the bottom of the tie. The base 2 of the tie 1 is also provided with suitable reinforcing plates 13, the said plates having upwardly extending pins 14 which are adapted to engage within the convolutions of the springs 12 and retain this end of the spring in proper position upon the tie.

The numerals 15 designate the rail securing members. These members 15 are each constructed of a single strand of suitable metal and have one of their edges provided with lips 16 which are adapted to overlies the base flanges of the rails 9 and to contact the lower portions of the webs thereof. These members 15 as well as the top sections 4 are provided with a plurality of alining openings, the central pair of which are adapted to aline with similar openings provided within the bearing plate 10, and all of these openings are adapted for the reception of suitable removable retaining elements 17. In order to render the ends 18 of the ties 1 sufficiently rigid I have provided the said ends with reinforcing plates 19 which may be removably connected therewith through the medium of the elements 19.

It will be noted, by reference to the figures of the drawing, that the springs 12 are positioned between the ends 3 of the tie 1 and the supporting strips 7 for the top sections, so as to allow the said top sections a certain amount of resiliency between these points, and the springs 12, exerting a pressure between the base 2 and the top sections

4 normally sustain the said top sections in parallel spaced relation with the base 2.

From the above description, taken in connection with the accompanying drawings, it 5 will be noted that I have provided a simple and effective device for the purpose intended, and while I have illustrated and described the preferred embodiment of the improvement, as it now appears to me, minor details of construction, within the scope 10 of the following claims may be resorted to if desired.

Having thus fully described the invention what I claim as new is:—

15 1. A tie constructed of slightly resilient metal, said tie having its body portion formed of a single strip of material and comprising a base, ends and top sections, the base of the tie being also provided with in- 20 tegrally formed side members at its center, and spacing and retaining strips engaging the side members beneath the top sections of the tie.

25 2. A metallic tie for railway rails, comprising a member constructed of a single piece of slightly resilient material, said tie

comprising a rectangular base, ends and overlying top sections, the base being provided with centrally arranged sides, bracing and supporting straps connected with 30 the tops of the sides and positioned below the top sections, and helical springs between each top section and the base of the tie.

3. A railroad tie having its body constructed of a single piece of slightly resilient metal, said tie comprising a base, ends and top sections overlying the base, the said base being centrally provided with integrally formed sides, straps connecting the sides and underlying and engaging the top 40 sections, reinforcing plates for the top sections, reinforcing plates for the base, helical springs between these reinforcing plates, reinforcing plates for the ends of the tie and means for connecting the rails to the top sec- 45 tions of the tie.

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

SOLOMON A. WRIGHT.

Witnesses:

S. H. DAVIS,

N. S. INGRAMM.