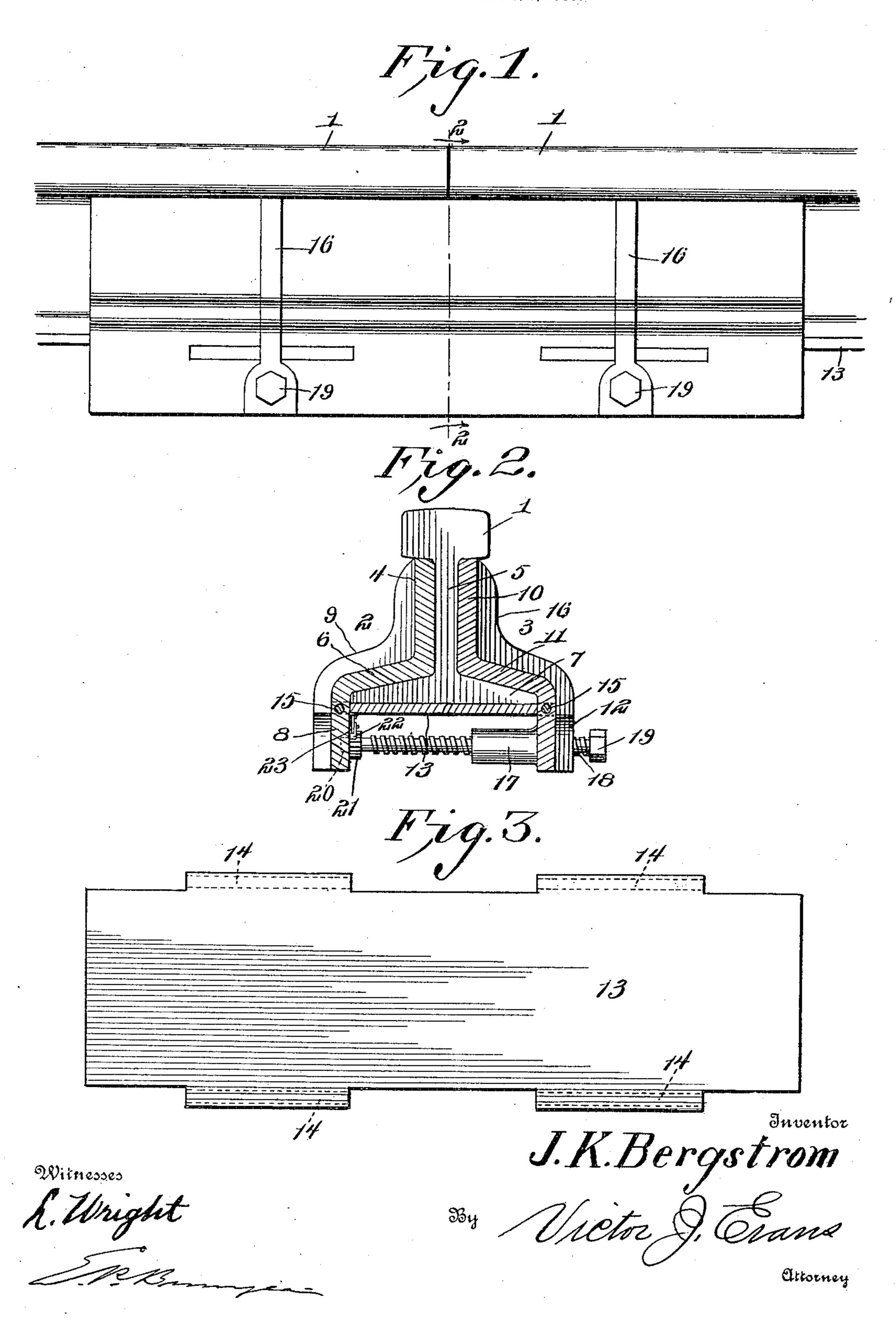
J. K. BERGSTROM.

RAIL SPLICE.

APPLICATION FILED SEPT. 5, 1906.



UNITED STATES PATENT OFFICE.

JOHAN K. BERGSTROM, OF KANE, PENNSYLVANIA.

RAIL-SPLICE.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, Johan K. Bergstrom, a subject of the King of Sweden, residing at Kane, in the county of McKean and State of Pennsylvania, have invented new and useful Improvements in Rail-Splices, of which the following is a specification.

This invention relates to rail-splices; and one of the principal objects of the same is to provide a device which can be quickly applied to the meeting ends of two railway-rails for securing the same firmly in position without the use of through-bolts.

Another object of the invention is to provide a splice for uniting the broken ends of a pair of rails without the necessity of drilling bolt-holes in the ends of said rails.

These and other objects are attained by means of the construction illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of a pair of rail-way-rails united by a splicing device made in accordance with my invention. Fig. 2 is a vertical section on the line 2 2 of Fig. 1. Fig. 2 is a plan view of the base-plate forming part

of the splicing device.

Referring to the accompanying drawings for a more particular description of my invention, the numeral 1 designates the meet-30 ing ends of a pair of railway-rails of usual construction, but which may not be provided with the usual bolt-holes near the meeting ends to accommodate through-bolts. The splicing device consists of two plates 23. The 35 plate 2 is provided with a vertical flange 4, which fits the web 5 of the rail, and a flange 6, which fits the top of the rail-flange 7 and a downwardly - extending vertical flange 8. Ribs 9 are formed at suitable intervals on the 40 plate 2. The member 3 of the splicing device consists of a similar plate provided with a vertical flange 10, fitting against the side of the web 5 of the rail, an outwardly-extending portion 11 to bear upon the upper portion of 45 the flange 7 of the rail, and a downwardlyextending portion 12. A base-plate 13, provided with longitudinally - disposed pintlebearings 14, is pivotally connected by means of longitudinally-extending rods or pintles 15 50 between the two members 2 3. The plate 13 is adapted to rest underneath the flange 7 of the rail. Ribs 16 are formed on the member 3 in transverse alinement with the ribs 9 |

of the member 2, and upon the inner face of the flange 12 a tubular threaded sleeve 17 is 55 formed. Passing through this sleeve and engaging the interior threads thereof is a bolt 18, having a polygonal head 19 to accommodate a wrench. The opposite end of the bolt 18 is seated in a sprocket 20 on the inner 60 face of the flange 8 of the member 2, and a ratchet-wheel 21 is secured to said bolt near its end, said ratchet being engaged by a suitable pawl 22, provided with a spring 23. As shown in Fig. 1, it will be seen that a bolt 18 65 is located one on each side of the rail-joint. Any suitable number of these bolts may be utilized.

The operation of my invention may be briefly described as follows: When it is required to secure the meeting ends of a pair of rails, the splicing device is slipped over the end portion of the web 5 and the flange 7 of each rail, and a wrench is applied to the head 19 of the bolt 18, and upon turning said bolt 75 the flanges 4 and 10 are firmly pressed against the opposite side of the web 5 of the rail, the ratchet-wheels 21 and the spring-pawl holding said bolts against backward movement.

From the foregoing it will be obvious that 80 my invention may be used to advantage in repairing broken or injured rails without requiring the necessity of drilling bolt-holes in the meeting ends thereof. Moreover, my device can be quickly applied to the meeting 85 ends of ordinary railway-rails without the use of through-bolts.

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

1. A splicing device for railway-rails comprising two plates hinged together and extending below the flange of the rail, securing-bolts passing through the extended flanges, and means for preventing the reverse movement of the bolts, substantially as described. 95

2. In a splicing device for railway-rails, a pair of plates adapted to bear against the sides of the web and against the base-flange of the rail, a base-plate hinged to said members, and bolts passing through one of said 100 members and bearing against the other, and a ratchet for preventing the reverse rotation of the bolts, substantially as described.

3. A railway splicing device comprising two members having flanges to fit the sides of the 105 web of the rail, portions to bear upon the top

of the flange of the rail, downwardly-extending side portions, a base-plate pivotally connected to said members and extending under the flange of the rail, tubular threaded portions extending inward from one member of the splicing device, screws extending through said tubular portions engaging the threads thereof, a ratchet-wheel upon the end of each

of said bolts, and spring-pawls engaging said ratchets, substantially as described.

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

JOHAN K. BERGSTROM.

Witnesses:

CHAS. J. JOHNSON, DAVID HOWELLS.