No. 675,225. Patented May 28, 1901.

A. KRASHOWITZ & A. COGHE.

RAIL JOINT.

(Application filed Mar. 8, 1901.)

(No Model.)

Fig. 1.

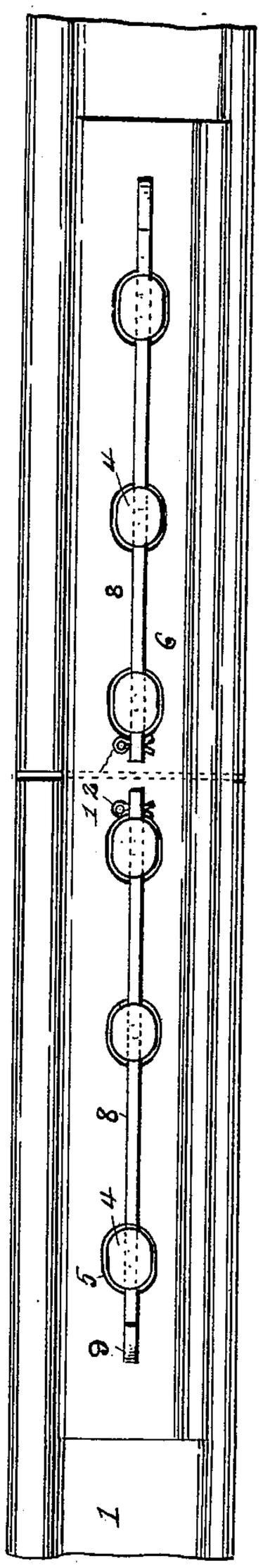


Fig. 2.

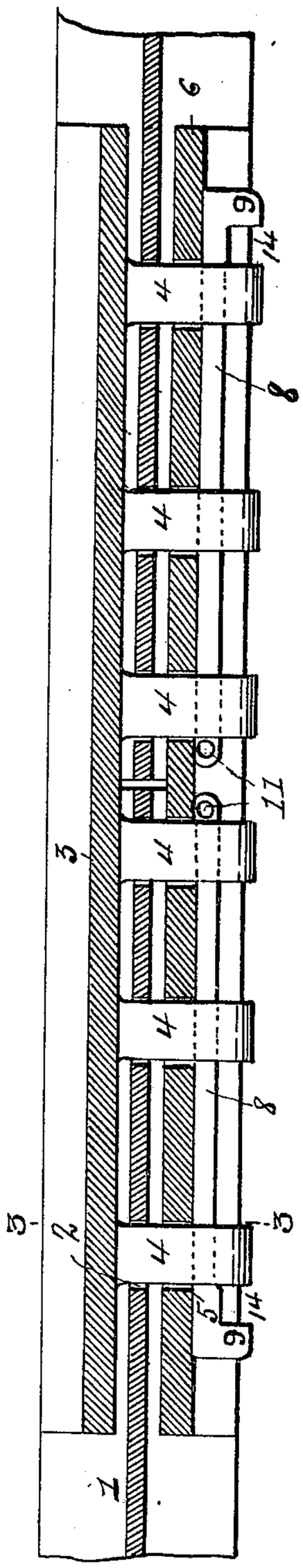


Fig. 3.

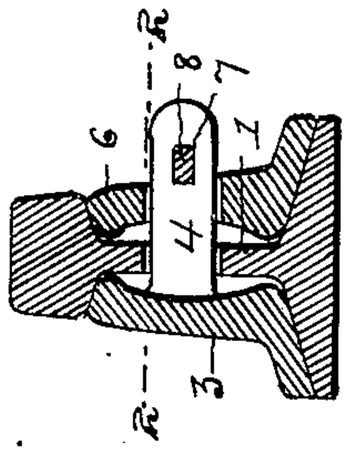
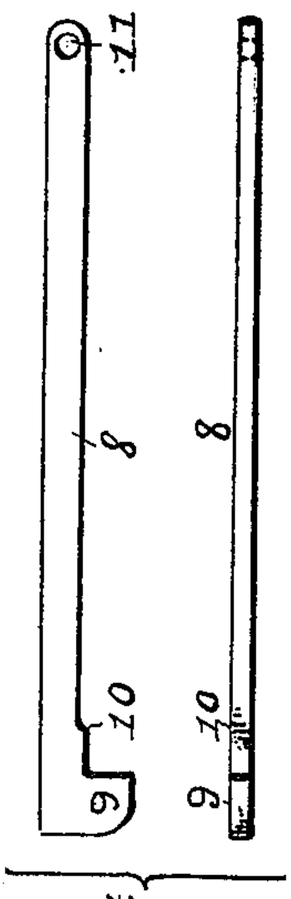


Fig. 4.



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UNITED STATES PATENT OFFICE.

AUGUST KRASHOWITZ AND ANDREW COGHE, OF PITTSBURG, PENNSYLVANIA.

RAIL-JOINT.

SPECIFICATION forming part of Letters Patent No. 675,225, dated May 28, 1901.

Application filed March 8, 1901. Serial No. 50,355. (No model.)

To all whom it may concern:

Be it known that we, AUGUST KRASHOWITZ and ANDREW COGHE, citizens of the United States of America, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Rail-Joints, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and useful improvements in rail-joints, and has for its object to dispense with the form of bolts and nuts now generally employed for connecting the fish-plates in position upon the rails.

In the accompanying drawings, Figure 1 is a side elevation of a portion of a pair of railroad-rails joined together in accordance with our invention. Fig. 2 is a longitudinal sectional view taken on the line 2 2 of Fig. 3. Fig. 3 is a transverse vertical sectional view taken on the line 3 3 of Fig. 2. Fig. 4 is a detail side and edge view of the locking-key.

To put our invention into practice, we provide the web 1 of the rails with oblong holes 2 and provide one fish-plate 3 with integral pins 4, which project through the holes 2 in the web of the rails and through the registering apertures or holes 5 in the opposite fish-plate 6. This fish-plate 6 may be of the usual form employed, with the exception that the openings 5 therein are oblong to correspond with the oblong openings 2 in the web of the rail and to the shape of the bolts or pins 4. These bolts or pins 4 are each formed integral with the inner face of the fish-plate 3 and are substantially elliptical or oval in cross-section and provided near their outer ends with an oblong opening 7 for the reception of the locking-key 8. This locking-key 8 is formed at its one end with a head 9 and on one edge adjacent to said head with an inclined shoulder 10. At its other end it is provided with an opening or eye 11 to receive the split key 12, which holds the locking-bar in position. Two of these locking-bars are provided and are inserted in the respective end bolts or pins, such a construction permitting the employment of the locking-bars at a curve or turn, which could not be accomplished by a single locking-bar. The holes in the web of the rails and in the fish-plate 6 are made larger than the cross-section size of the bolts or pins 4, so as to allow for the expansion and contraction of the rails. The locking-bars as they are driven inward will wedge in the end bolts by the engagement of the inclined shoulder 10 with the walls of the shoulder in the two end bolts, this shoulder limiting the inward movement of the locking-bar, so as to form a space 14 between the head and the end pins to permit the striking of the head to drive the locking-bar out of the bolts when the securing-key 12 has been removed.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

In combination with the rails having apertures in the web thereof, a fish-plate carrying integral pins, substantially elliptical in cross-section and provided near their free ends with oblong openings, a fish-plate having openings to register with the openings in the web of the rails, the said pins carried by the first-mentioned fish-plate projecting through the openings in the web of the rails and the openings of the last-mentioned fish-plate, a pair of locking-bars passing through the oblong apertures in the ends of said pins, said locking-bars each having a head on one end with a shoulder on one edge adjacent to said head to limit the inward movement of the locking-bars, and keys passing through the inner ends of said locking-bars to secure the same in position, substantially as described.

In testimony whereof we affix our signatures in the presence of two witnesses.

AUGUST KRASHOWITZ.
ANDREW COGHE.

Witnesses:
JOHN NOLAND,
J. P. APPLEMAN.