

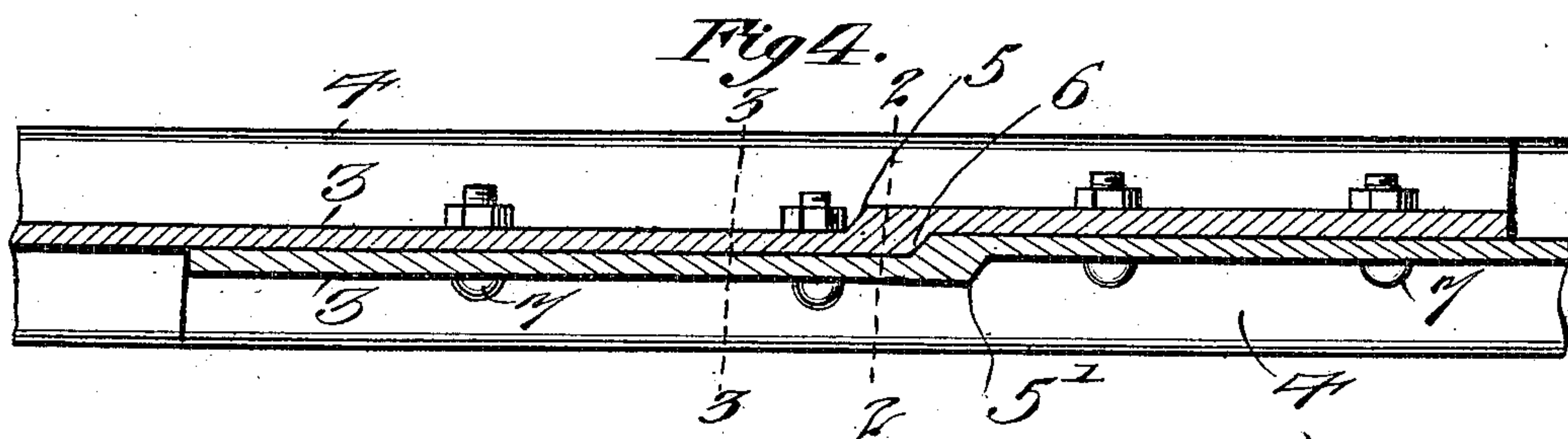
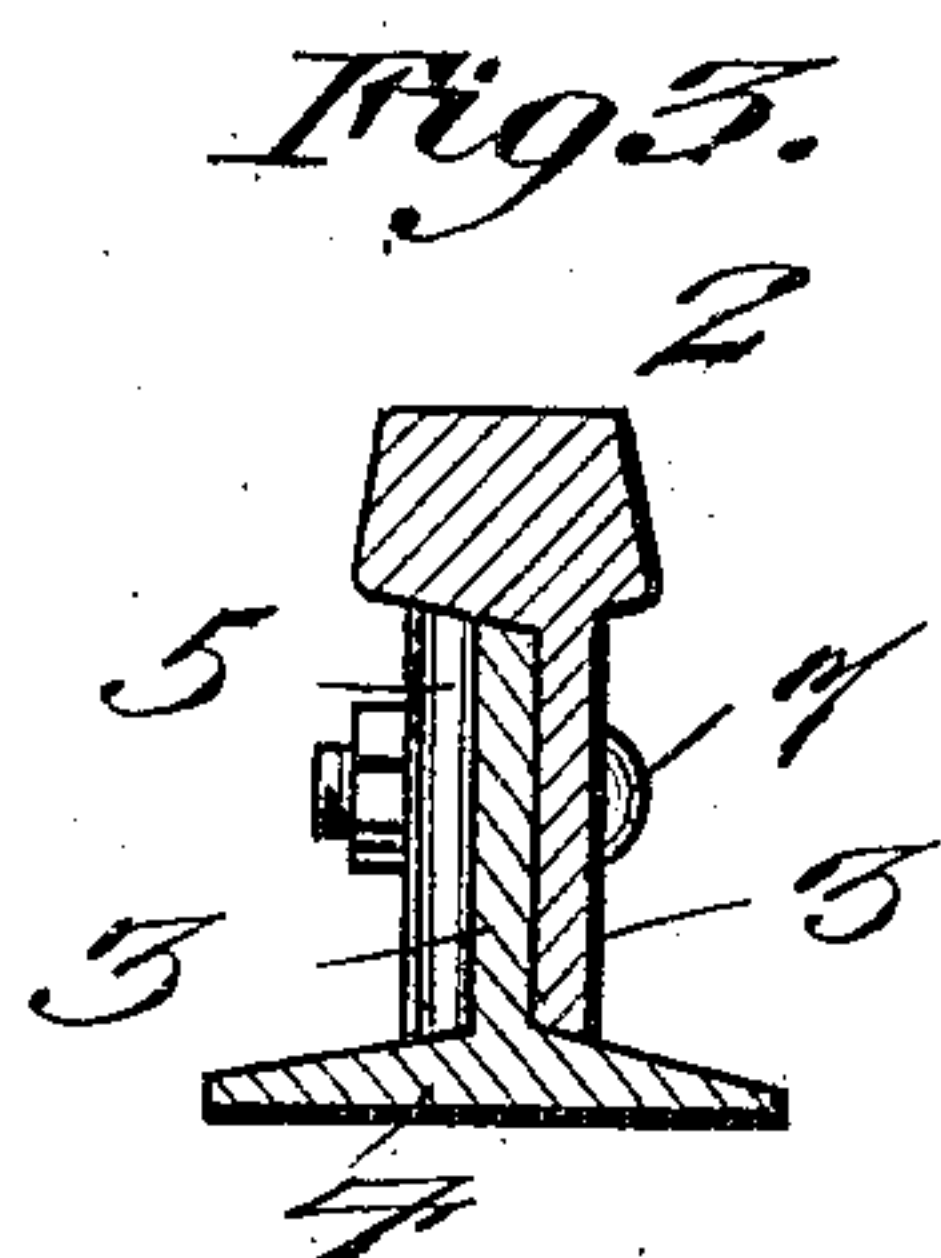
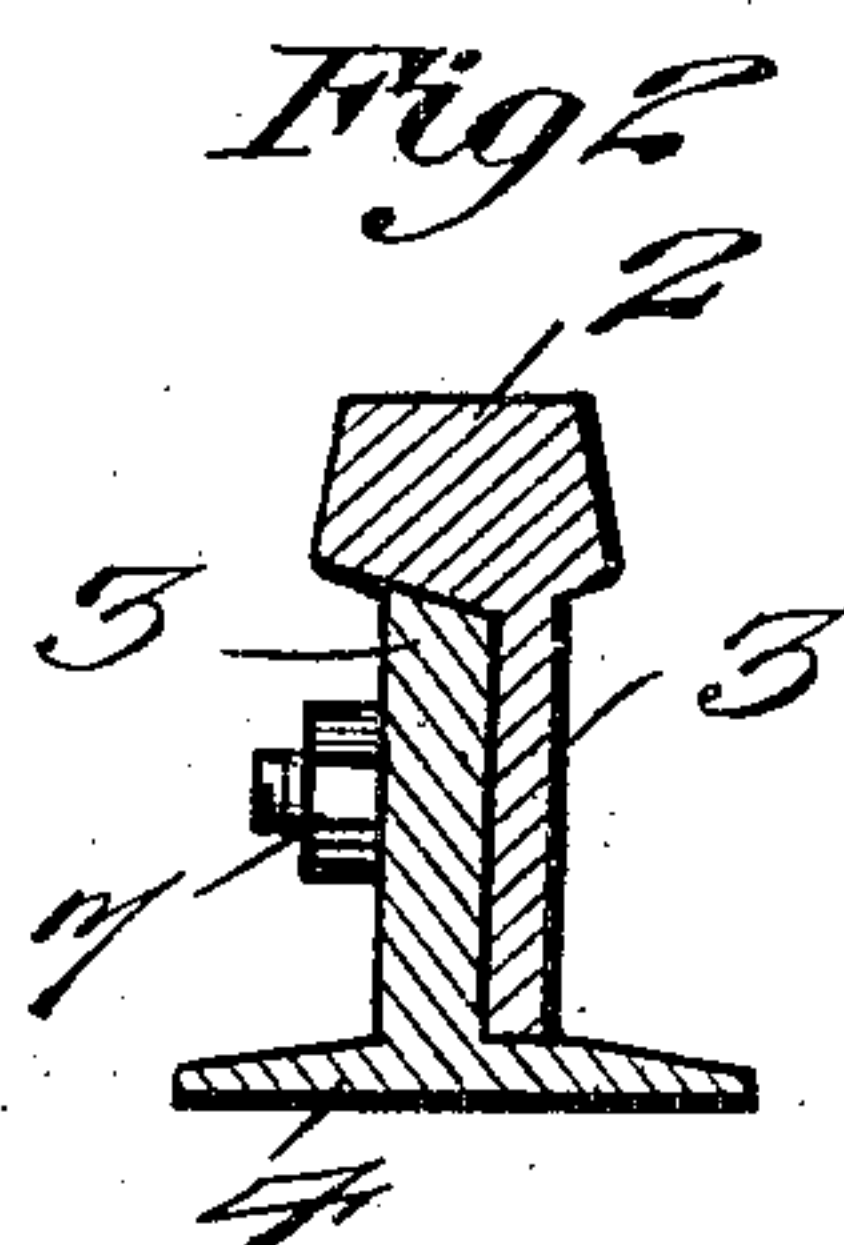
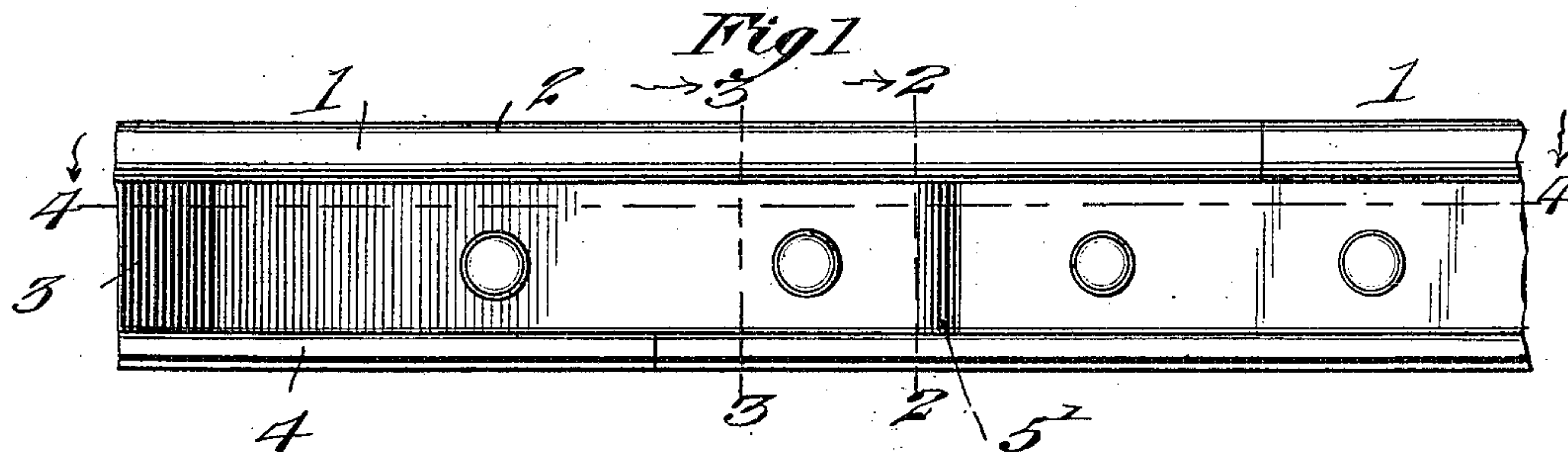
No. 825,404.

PATENTED JULY 10, 1906.

E. B. McCASLIN.

RAIL JOINT.

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EDWARD B. McCASLIN, OF TERRY, MONTANA.

RAIL-JOINT.

No. 825,404.

Specification of Letters Patent.

Patented July 10, 1906.

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To all whom it may concern:

Be it known that I, EDWARD B. McCASLIN, a citizen of the United States, residing at Terry, in the county of Custer and State of Montana, have invented new and useful Improvements in Rail-Joints, of which the following is a specification.

This invention relates to rail-joints, and has for its objects to produce a comparatively simple inexpensive device of this character in which the meeting ends of the rail-sections will be firmly and securely united, one in which the use of fish-plates is dispensed with, and one wherein pounding of the ends of the rail-sections is wholly obviated.

With these and other objects in view the invention comprises the novel features of construction and combination of parts hereinafter more fully described.

In the accompanying drawings, Figure 1 is a side elevation of a portion of a railway-rail embodying the invention. Fig. 2 is a section taken on the line 2 2 of Fig. 1. Fig. 3 is a section on the line 3 3 of Fig. 1. Fig. 4 is a horizontal sectional plan taken on the line 4 4 of Fig. 1.

Referring to the drawings, 1 1' designate rail-sections arranged in endwise relation and each comprising a tread 2, web 3, and a base-flange 4, the sections, except as hereinafter explained, being of the usual or any approved construction and material. In accordance with the present invention the rail-section 1 has its base-flange terminated at a point short of and suitably remote from the terminal of the tread 2, while the web 3 is offset laterally from the medial line at the point 5 intermediate the terminals of the base-flange and tread and is projected a suitable distance beyond the terminal of the latter, while the section 1' has its tread 2 terminated short of and at a point suitably remote from its base-flange 4, its web 3 being offset laterally relative to the medial line at the point 5' and projected beyond the terminal of the base-flange 4. The webs of the rails at the points 5 and 5' are offset in relatively reverse directions, thus presenting on the inner meeting faces of the rails abutting shoulders 6, preferably coincidently inclined diagonally, as seen in horizontal section in Fig. 4.

In practice when the rail-sections are assembled the meeting ends of the treads 2 and those of the base-flanges 4 abut at points re-

mote from each other, thereby obviating the formation of a complete joint at any one point, while the laterally-offset portions of the webs 3 extend along and contact with the outer faces of the companion rail-sections, with the inclined shoulders 6 abutting at a point substantially centrally between the terminals of the treads and base-flanges of the rail-sections, the parts of the webs which project beyond the terminals of the rails being each seated between the tread and base-flange of the companion rail-section, whereby relative vertical movement of the rail-sections is wholly precluded, it being apparent that owing to the shoulders meeting at a point between the terminals of the tread and base extensions additional strength is afforded at its intermediate point for sustaining downward pressure to which the tread extension may in practice be subjected.

The sections are united, as usual, by transverse bolts 7, entered through the offset portions of the webs and the adjacent centrally-disposed portions of the webs of the companion sections, it being particularly observed that the meeting ends of the treads abut at a point centrally between a pair of the connecting-bolts 7, while the abutting ends of the base-flanges meet centrally between a second pair of said bolts.

From the foregoing it is apparent that I produce a comparatively simple device in which the formation of a complete joint at any one point in the rail-line is obviated and one wherein the meeting ends of the rail-treads will be sustained vertically by the overlapping portion of the web carried by the companion rail-section, thus obviating pounding of the rail ends, it being understood that in attaining these ends minor changes in the details herein set forth may be resorted to without departing from the spirit or scope of the invention.

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

A rail-joint comprising a pair of rail-sections each consisting of a tread, a web and a base-flange, the tread of one section being terminated at a point beyond and remote from the terminal of its base-flange and the base-flange of the other section being terminated at a point beyond and remote from the terminal of the tread of the other section, portions of the webs of the companion sections being offset laterally relative to each

other and to the transverse medial line of the rail and projected beyond the terminals of their respective sections to overlap the webs of the companion sections, shoulders formed
5 at the inner ends of the offset portions of the webs and adapted to abut at a point centrally between the terminals of the tread and base extensions of the rail-sections when assembled, and connecting-bolts entered trans-

versely through the overlapping portions of the rail-webs.

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

EDWARD B. McCASLIN

Witnesses:

ROYAL A. SPACE,
GEORGE A. TUSLER.