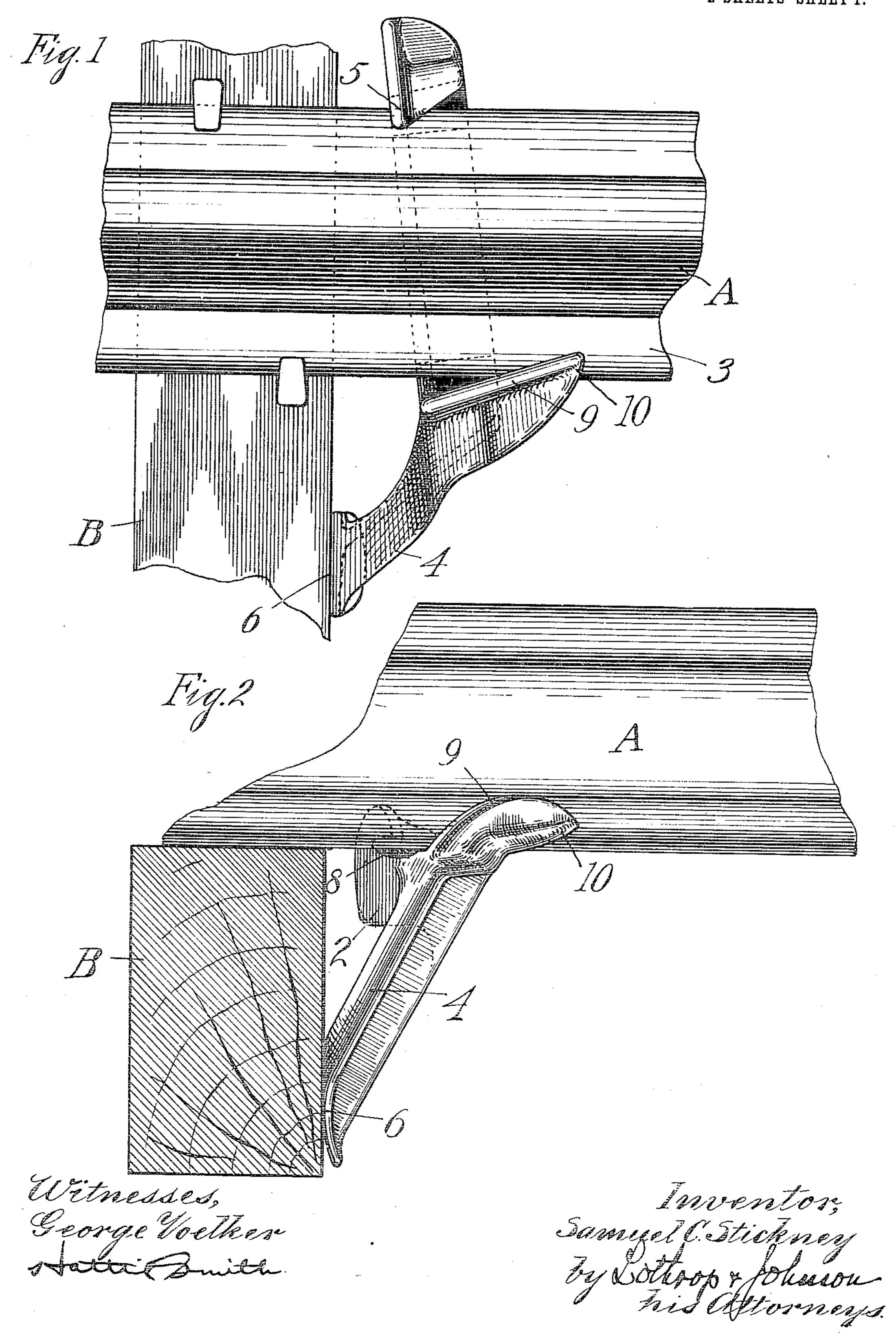
S. C. STICKNEY. ANTICREEPER FOR RAILWAY RAILS, APPLICATION FILED AUG. 21, 1908.

983,092.

Patented Jan. 31, 1911.

2 SHEETS-SHEET 1.

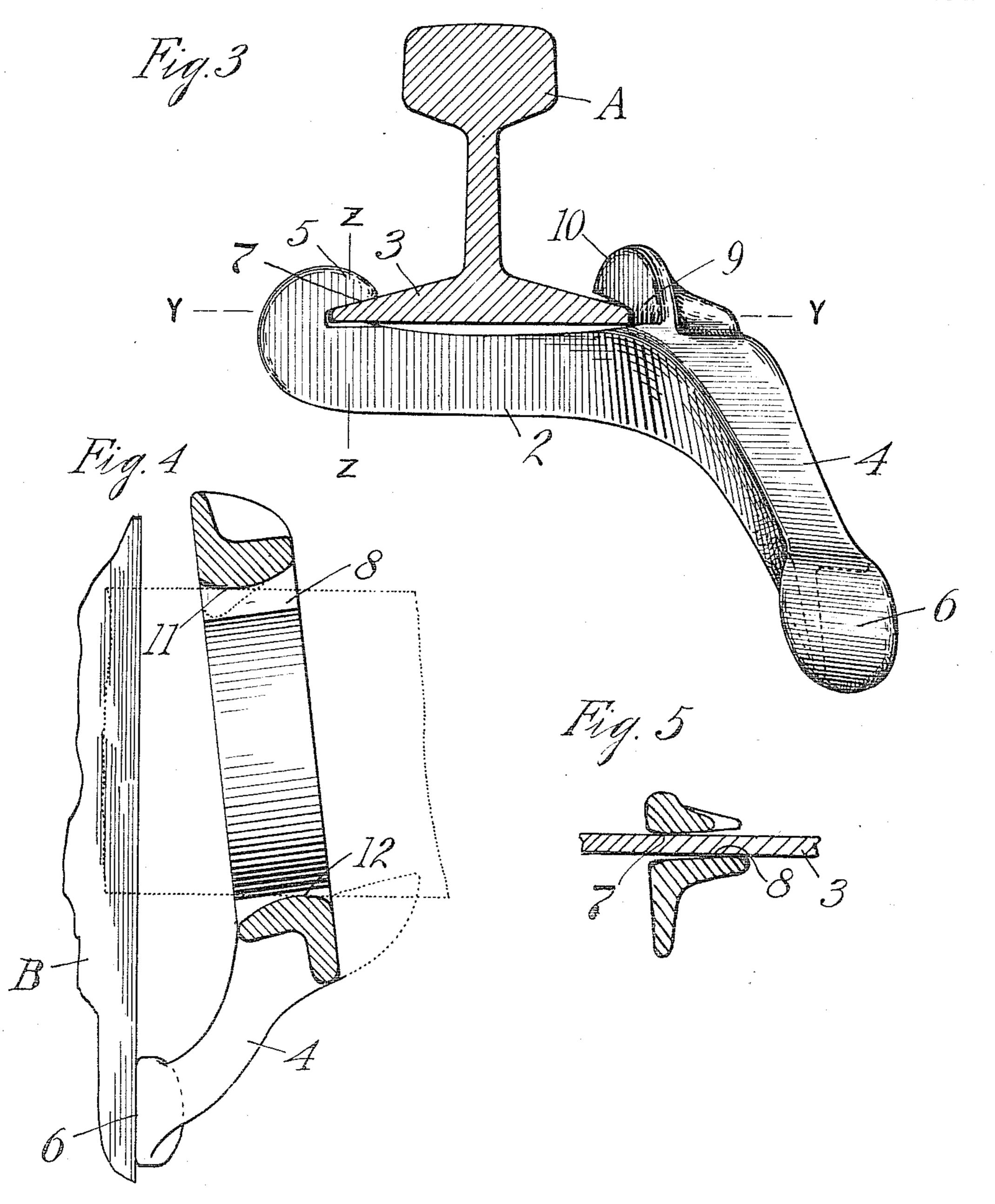


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Witnesses, George Voelker Autie Dmith

Inventor, Samegel C. Stickney by Dothrop & Johnson his atterneys.

MITED STATES PATENT OFFICE.

SAMUEL C. STICKNEY, OF ST. PAUL, MINNESOTA, ASSIGNOR, BY MESNE ASSIGNMENTS, TO POSITIVE RAIL ANCHOR COMPANY, OF LOUISVILLE, KENTUCKY, A CORPORA-TION OF VIRGINIA.

ANTICREEPER FOR RAILWAY-RAILS.

983,092.

Specification of Letters Patent. Patented Jan. 31, 1911.

Application filed August 21, 1908. Serial No. 449,652.

To all whom it may concern:

Be it known that I, SAMUEL C. STICKNEY, a citizen of the United States, residing at St. Paul, in the county of Ramsey and State of 5 Minnesota, have invented certain new and useful Improvements in Anticreepers for Railway-Rails, of which the following is a specification.

My invention relates to improvements in 10 anti-creepers for railway rails, and has for its object to provide an improved and efficient device for preventing the longitudinal creeping of rails under the thrust of passing trains, a device which is easily applied 15 to the rail and which will grip the rail tighter the harder the thrust.

To this end the invention consists in the construction, combination and arrangement of parts hereinafter described and claimed.

In the accompanying drawings forming part of this specification, Figure 1 is a top view of the anti-creeper in place upon a rail, the rail and tie being partly broken away, Fig. 2 is a side elevation of the same, 25 Fig. 3 is a front elevation of the anti-creeper with the rail in section, Fig. 4 is a horizontal section through the anti-creeper on line y-yof Fig. 3, with the tie shown partly broken away, and Fig. 5 is a vertical section on line 30 z—z of Fig. 3.

In the drawings is shown a railway rail A spiked in the usual way upon a cross tie B. The anti-creeper consists of a single casting or forging comprising a body por-35 tion 2 adapted to extend transversely under the base 3 of the rail and having at one end a downwardly, forwardly and laterally extending arm 4 and at the other end a hook or clamp 5. The arm 4 terminates in a 40 rounded bearing face 6 which is designed to abut and bear against the tie when the anticreeper is adjusted in position. The clamp or hook 5 is constructed to fit over the edge of the rail base, and has on the forward part of 45 its underside a bearing face 7 adapted to 7 and 8 at the hook end of the anti-creeper 100 engage the top of the rail-base and coöperate with the longitudinally alining bearing face 8 upon the rear part of the upper surface of the body portion of the anti-creeper in gripping the rail-base when the anti-creeper is tilted in a vertical plane, or, more strictly speaking, when it is rotated upon a transverse horizontal axis, as by pressure upon the bearing face 6. At its opposite end, near the point of union with the arm 4, the body

portion is formed with an upwardly extending flange 9 terminating in a rearwardly and inwardly extending lug or claw 10 adapted to fit over the rail-base to prevent the anti-creeper from dropping 60 from the rail. The hook is formed on the forward portion of the inner side of its end wall or shank with an interior bearing face 11, which is adapted to comperate with the bearing 12 on the rear portion of the 65 inner side of the flange 9 to grip the railbase when the anti-creeper is swung horizontally, or, more strictly speaking, when it is rotated on an approximately vertical axis toward the tie, as by pressure on the bearing 70

face 6.

In use the anti-creeper is adjusted to the rail by hooking the clamp or hook 5 over one edge of the rail-base and thrusting the arm 4 back so as to carry the lug or claw 10 75 over the opposite edge thereof, the earth or ballast below the rail and in front of the tie having been first scooped out to permit of this being done. The anti-creeper is then moved forwardly along the rail until the 80 bearing face 6 on the arm 4 abuts against the tie, as shown in Figs. 1 and 2. The hook end of the anti-creeper is then driven toward the tie until the staggered bearing faces 7 and 8 and 11 and 12 grip the rail 85 base between them. This will bring the anti-creeper into a position where it extends diagonally under the rail with the clamp 5 nearer to the tie than the flange 9. In order that the thrust of the rail may be confined 90 as far as possible to the bearing faces, the body portion of the anti-creeper is cut away or depressed between the hook 5 and the flange 9 so as not to present an intermediate surface having frictional contact with 95 the rail base. When the anti-creeper has been adjusted to this position, as shown in Fig. 1, the rail base will be gripped between the staggered upper and lower bearing faces and also between the staggered lateral bearing faces 11 and 12 at the sides. Now when the rail is thrust forward by a moving train, it will be held by these gripping bearing faces from sliding through or over the anti- 105 creeper. The pressure against the anticreeper will be greatest at the hook end where the rail-base is most firmly gripped, and this end, being farthest away from the bearing face 6 which bears against the tie as 110

a fulcrum will yield most to the forward pressure of the rail. As the bearing face 6 is much lower than the hook or clamp 5 the thrust of the rail will tilt the anti-creeper 5 slightly forward in an approximately vertical plane, or rather upon an approximately horizontal axis, and cause the rail-base to be clamped or gripped the more tightly between the upper and lower bearing faces 7 10 and 8 as illustrated in Fig. 5; and, as the bearing face 6 is projected out beyond the opposite end of the anti-creeper, the hookend will be swung forward horizontally (rotating upon a vertical axis) toward-the tie, 15 whereby the sides of the rail-base will be gripped the more tightly between the opposed side bearings 11 and 12, as illustrated in Fig. 4. Thus, the greater the pressure exerted by the rail against the anti-creeper 20 the more tightly will it become held and clamped therein, the tie forming always a solid abutment against which the anticreeper is fulcrumed.

Where the anti-creeper is described as 25 swinging in a horizontal or vertical plane, or rotating upon a vertical or horizontal axis, the words vertical and horizontal are to be understood as meaning approximately vertical or approximately horizontal, as the

30 case may be.

It is particularly to be observed that the anti-creeper engages the rail at short pivotal bearing faces only, so that the thrust of the rail will be exerted entirely to rotate the 35 anti-creeper, and these bearing faces are not long enough to interfere with the free turning of the anti-creeper.

I claim as my invention:

1. An anti-creeper formed of a single in-40 tegral piece of metal comprising a body portion having at one end a hook constructed to fit over one edge of a rail base, and at the other end a flange adapted to abut against the other edge of the rail base, and an abut-45 ment arm integral with the flange and extending downwardly, forwardly, and outwardly therefrom, said hook having a lateral bearing face on the forward portion of the inner side of its shank and the flange 50 having a lateral bearing face at its rear end, whereby the flange and the shank of said hook will engage the side edges of the rail base at said staggered bearing faces only, when the anti-creeper is swung forwardly 55 in a horizontal plane under the longitudinal

thrust of the rail at the hook end, and the hook and body portion having coöperating upper and lower bearing faces adapted to grip the base of the rail when the anticreeper is tilted in a vertical plane.

2. An anti-creeper formed of a single integral piece of metal comprising a body portion having at one end a hook constructed to fit over one edge of a rail base, and at the other end a flange adapted to abut against 65 the other edge of the rail base, and an abutment arm integral with the flange and extending downwardly, forwardly and outwardly from the outer side thereof, the hook standing in advance of the flange, and the 70 shank of the hook and the inner side of the flange having coöperating lateral bearing the flange, whereby the rail-base is gripped between the flange and the shank of the hook when the anti-creeper is swung forwardly in 75 a horizontal plane, and the hook and body portion being formed with staggered upper and lower bearing faces respectively, the upper bearing standing forwardly of the lower bearing, said bearing faces being adapted 80 to grip the base of the rail when the anticreeper is tilted in a vertical plane under the longitudinal pressure of the rail.

3. An anti-creeper comprising a body portion having at one end a hook constructed to 85 fit over one edge of a rail-base and at the other end a flange adapted to abut against the other edge of the rail-base and a downwardly outwardly and forwardly projected arm adapted at its lower end to abut against 90 a cross-tie, the hook standing in advance of the flange, whereby the rail-base is gripped between the flange and the shank of the hook when the anti-creeper is swung forwardly in a horizontal plane under the longitudinal 95 pressure of the rail at the hook-end, and the hook and body portion being formed with staggered upper and under bearing faces, respectively, the upper bearing standing forwardly of the lower bearing, said bearing 100 faces being adapted to grip the base of the rail when the anti-creeper is tilted in a ver-

tical plane under the longitudinal pressure of the rail. In testimony whereof I affix my signature 105

in presence of two witnesses. SAMUEL C. STICKNEY.

Witnesses:

JOHN W. ADAMS, ALEXANDER E. HORN.