No. 803,439. PATENTED OCT. 31, 1905.

E. F. SEIDER.

RAILROAD TRACK.

APPLICATION FILED JAN. 18, 1905.

Fig. 1

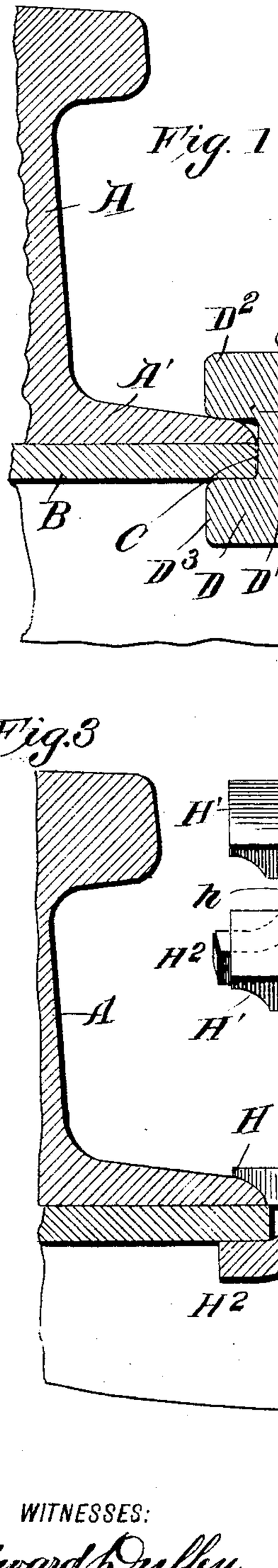


Fig. 2

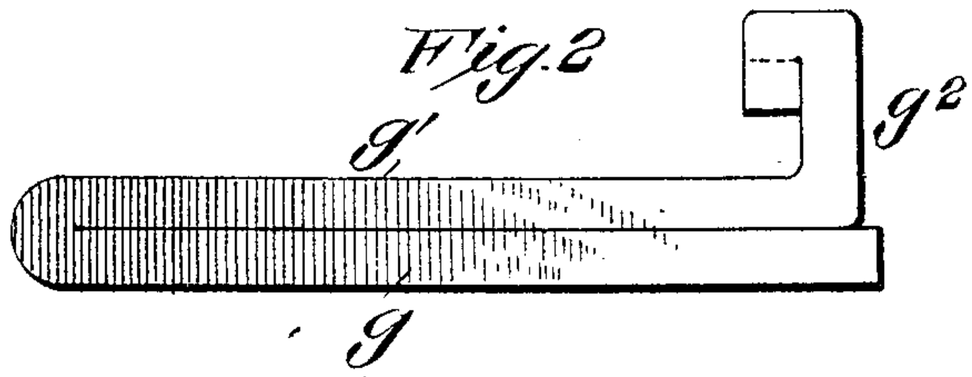
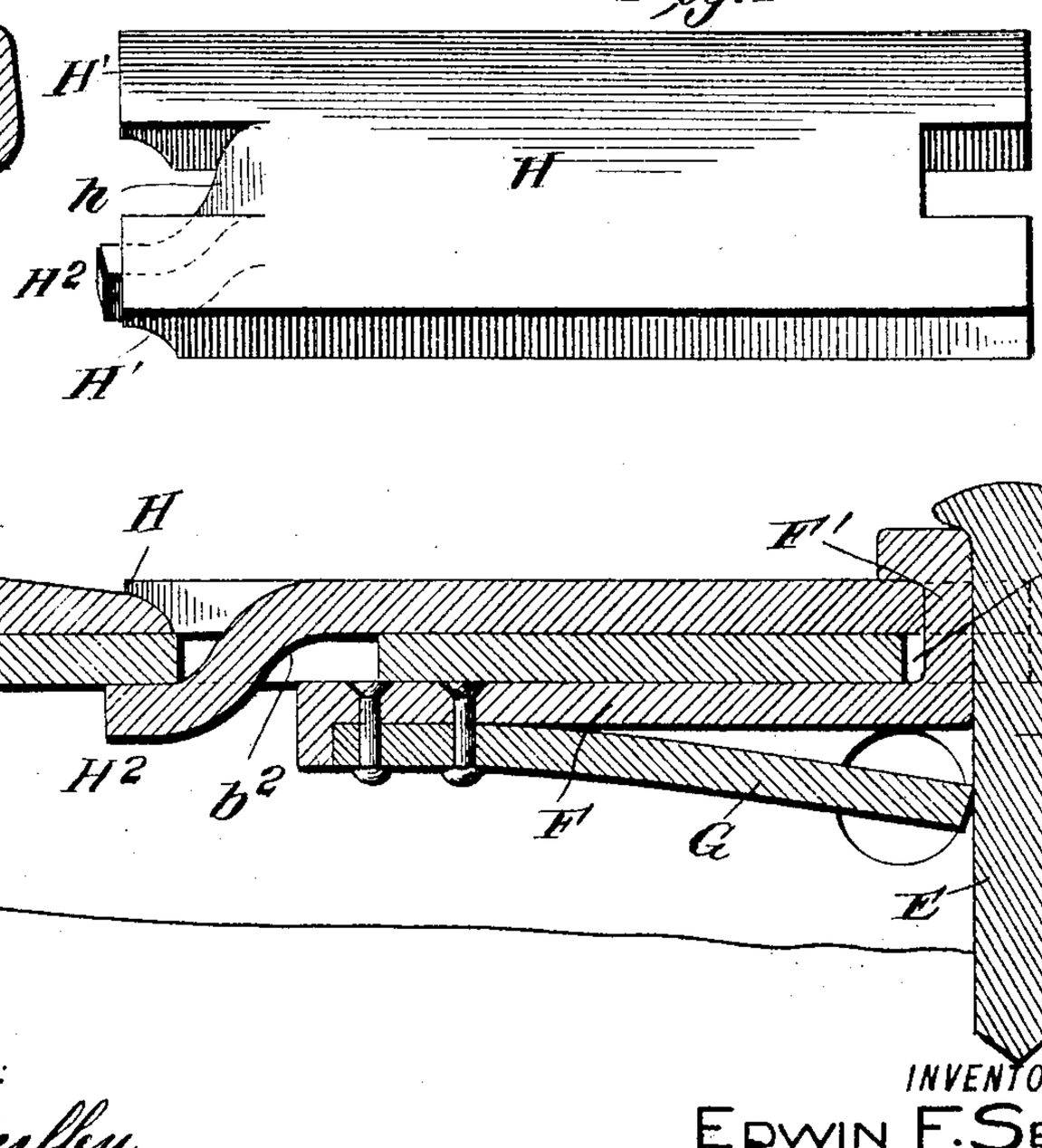


Fig. 3

Fig. 4



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RAILROAD-TRACK.

No. 803,439. Specification of Letters Patent. Patented Oct. 31, 1905.

Application filed January 18, 1905. Serial No. 241,676.

To all whom it may concern:

Be it known that I, EDWIN FREDERICK SEIDER, a citizen of the United States, and a resident of Upper Sandusky, in the county of Wyandot and State of Ohio, have invented a new and useful Improvement in Railroad-Tracks, of which the following is a specification.

My invention is an improvement in railroad-tracks; and it consists in certain novel constructions and combinations of parts, as will be hereinafter described and claimed.

In the drawings, Figure 1 is a longitudinal section of a portion of a tie-plate and rail in connection with rail-securing devices. Fig. 2 shows a somewhat different form of pawl. Fig. 3 is a sectional elevation showing a different form of rail-clasp and a somewhat different arrangement of spike and pawl, and Fig. 4 is a detail perspective view of the rail-clasp shown in Fig. 3.

My invention relates generally to that class of rail-securing devices shown in my former application for patent, Serial No. 233,509, filed November 19, 1904, in which the rail-supporting plate has a spike-opening and a pawl is arranged at its free end or point to lock the spike when driven through the said opening. In the present invention I employ a pawl arranged at its free end to lock the spike, and I also employ in connection with the spike a pawl and clasp having a portion passed through an opening in the rail-supporting plate and provided with upper and lower portions, the upper portion engaging the rail-base and the lower portion engaging below the rail-supporting plate, the spike being arranged to secure the said rail-clasp in engagement with the rail and its supporting-plate, as shown.

In the construction shown in Fig. 1 the rail A rests on the plate B, which latter is provided at C with an opening adjacent to the base A′ of the rail, or, in other words, adjacent to the seat for the rail-base. In this construction the rail-clasp D is made in approximately U shape, having an intermediate portion D′ passing through the opening C in the plate B, the upper portion D^2 engaging over the rail-base A′ and the lower portion D^3 engaging below the plate B. In this construction the spike E operates to hold the rail-clasping plate D in engagement with the rail-base A′ and the plate B, and in the construction shown in Fig. 1 the spike bears directly against the outer side of the clasp D, the opening in the plate B being large enough to receive the clasp D, the spike E, and the upturned hook F′ on the pawl-carrier F. As shown, the plate B is re-turned at B′ at its outer end, and this re-turned portion B^2 laps upon the outer portion of the plate B and is provided at its inner end with an opening which registers with the opening C and permits the passage of the clasp D, the spike E, and the hook F′, as will be understood from Fig. 1 of the drawings. The pawl G is secured at G′ to the carrier F and is arranged with its point or free end G^2 engaging with the spike E when the latter is driven home, as shown in Fig. 1. In this construction an opening at *b* is provided in the side plate of the tie adjacent to the point of the pawl G for the insertion of the instrument whereby to free the pawl from engagement with the spike whenever it is desired to release the said spike for any reason.

It will be understood that the spike E is driven between the clasp D and the hook F′ and operates to secure both said parts in place, the spike being in turn locked by the pawl G, as will be understood from Fig. 1 of the drawings.

In Fig. 3 I show a somewhat different construction of rail-clasp, as well as a different arrangement of the spike and the pawl-carrier. In this construction the rail-clasping plate H is provided at its inner end with portions H′ and H^2, the parts H′ lapping upon the outer edge of the rail-base and the part H^2 lying between the upper parts H′ and being arranged to engage beneath the rail-supporting plate, the latter having an opening b^2, through which the intermediate portion *h* of the rail-clasping plate projects. This rail-clasping plate H is engaged at its outer end by the hook-like portion F′ of the pawl-carrier F, disposed through the opening b^3 in the rail-supporting plate near the outer end of the latter and held in engagement with the rail-clasping plate by the spike E, the pawl G locking the spike in place, as will be understood from Fig. 3, the specific construction of the rail-clasping plate H being best shown in Fig. 4 of the drawings. Manifestly, this construction shown in Figs. 3 and 4 may be employed when desired in lieu of that shown in Fig. 1. In Fig. 2 I show the pawl *g* made integral with and bent from the pawl-carrying plate *g′*, the latter having a hook g^2, by which it may be held in engagement with the rail-supporting plate, as will be understood from the preceding description.

In applying the construction shown in Fig. 1 the clasp or clamp D and the hook F′ may

be inserted through the opening C in the rail-supporting plate and the spike be driven between them to secure them both in place. The re-turned portion B^2 of the plate B bearing against the outer edge of the rail-base will operate to prevent any spreading of the rails, as it forms a shoulder for the rails to bear against.

In carrying out the construction illustrated in Figs. 3 and 4 it is obvious that the number of upper jaws or portions H′ and H^2 may be increased as may be desired and as many employed as deemed necessary.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination substantially as herein described of the rail-supporting plate having an opening adjacent to its rail-seat, the rail-clasping plate having a portion passing through the said opening and portions to engage above the rail-base, and below the supporting-plate, the pawl-carrier having a hooked portion projecting through said opening in the rail-supporting plate at the opposite side of the same from the rail-clasping plate, the spike arranged between the said hooked portion of the pawl-carrier and rail-clasping plate, and a pawl carried by the pawl-carrier and arranged at its free end or point to lock the spike, substantially as set forth.

2. The combination with the rail and its supporting-plate having an opening adjacent to the rail-seat, of the rail-clasping plate having a portion passing through the opening in said plate and portions engaging above and below the rail-base, the spike securing said rail-clasping plate in engagement with the rail and its supporting-plate, and a pawl arranged at its free end or point to lock the spike when driven through said opening, substantially as set forth.

3. The combination of the rail, the rail-supporting plate having an opening adjacent to the rail-seat, the U-shape rail-clasping plate fitting in said opening and engaging above the rail-base and below the rail-supporting plate, the spike securing the rail-clasping plate in engagement with said parts, and the pawl for locking the spike, substantially as set forth.

4. The combination of the rail, the rail-supporting plate having an opening adjacent to the rail-base, a rail-clasp fitting in said opening, a pawl-carrier also fitting in said opening, a spike securing both the rail-clasp and the pawl-carrier in place in the opening, and the pawl carried by the pawl-carrier and locking the spike, substantially as set forth.

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