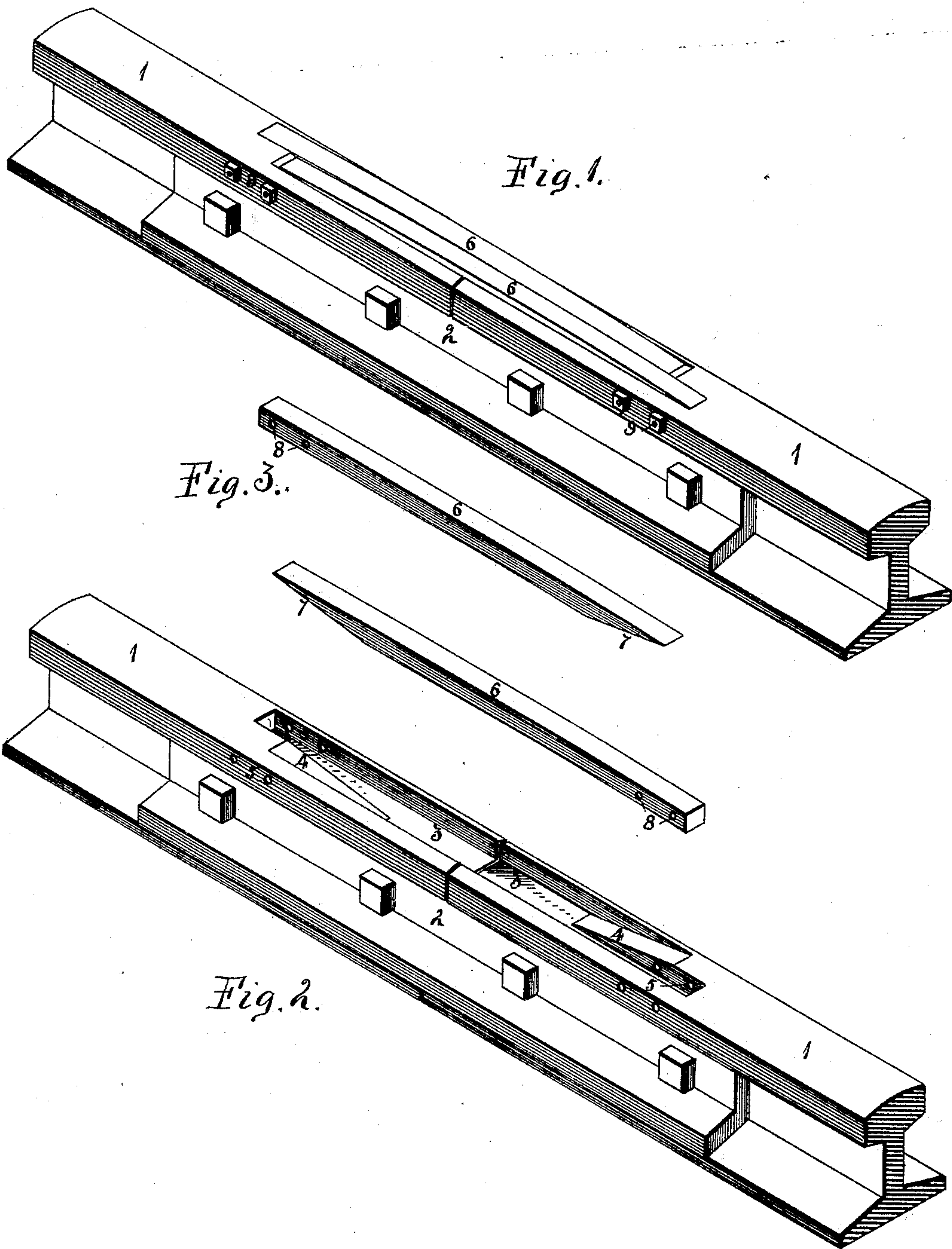


(No Model.)

H. P. STEARNS.
RAILROAD RAIL JOINT.

No. 497,834.

Patented May 23, 1893.



Witnesses:
J. A. Lurenford
E. Behel.

Inventor:
Herbert P. Stearns
By A. O. Behel
Attys.

UNITED STATES PATENT OFFICE.

HERBERT P. STEARNS, OF BYRON, ILLINOIS.

RAILROAD-RAIL JOINT.

SPECIFICATION forming part of Letters Patent No. 497,834, dated May 23, 1893.

Application filed January 19, 1893. Serial No. 458,959. (No model.)

To all whom it may concern:

Be it known that I, HERBERT P. STEARNS, a citizen of the United States, residing at Byron, in the county of Ogle and State of Illinois, have invented certain new and useful Improvements in Railroad-Rails, of which the following is a specification.

The object of this invention is to form the meeting ends of railroad rails with recesses within which are placed flat springs the center portions of which project above the upper face of the rail so that the wheels are raised above the ends of the rails at their junction thereby preventing the pounding of the ends of the rails.

In the accompanying drawings, Figure 1, is an isometrical representation of the ends of two rails provided with my improvements. Fig. 2, is a similar view in which the springs have been removed. Fig. 3, is an isometrical representation of the springs removed from the rails.

The usual manner of connecting the ends of railroad rails is by the employment of fish-plates and bed plates, which are designed to hold the rails rigid, but even such devices do not prevent the wheels of the cars from battering the ends of the rails until it becomes necessary to cut off a section of the ends of the rails. My improvements are designed to overcome these difficulties.

In the drawings the rails 1, are of the usual construction joined together by the fish-plates 2. The upper surfaces of the rails at their ends are provided with a recess 3, extending lengthwise of the rail, a section 4, of the recess stopping short of the end and having an upward incline. Holes 5, are drilled transversely through the rail near the ends of the recess. Bars 6, of spring material and rectangular in form are formed curving being highest near the center of their length, and having the under side of one end 7, beveled upward, and provided with holes 8 at the square end thereof. These bars are secured in position in the recess by bolts 9, passing

through the holes 8 thereof and through holes 5, in the rails so that when the ends of the rails are brought together the beveled end of the spring will lie upon the incline 4, of the adjoining rail. The fish-plates are then placed in position and held in place by the usual bolts. The beveled ends of the springs stop short of the upper end of the incline as shown at Fig. 1, which will allow the spring to lengthen when the pressure of the train is brought to bear upon them without raising the free end of the spring above the level of the upper face of the rail. The springs form a connection between the rails upon which the wheels of the train can ride thereby holding them above the level of the upper faces of the rails at the meeting point of the rails, which will prevent the wheels engaging the ends of the rails thereby saving the usual battering of their ends. By the employment of these springs the train will ride very smoothly over the joining of the rails and owing to the ends of the springs which are secured within the recess extending farther along the rail than their free ends an easy and smooth approach is formed.

I claim as my invention—

1. A railroad rail provided with a recess in its upper face at the end thereof, and a spring secured within said recess.

2. A railroad rail provided with a recess in its upper face at the end thereof, and a spring secured within said recess and having its free end lying in a recess formed in the end of the adjacent rail.

3. A railroad rail provided with a recess in its upper face at the end thereof, the end of a portion of the recess being upwardly beveled, and a spring secured in the recess having its free end beveled and lying upon the incline of the adjacent rail.

HERBERT P. STEARNS.

Witnesses:

A. O. BEHEL,
E. BEHEL.