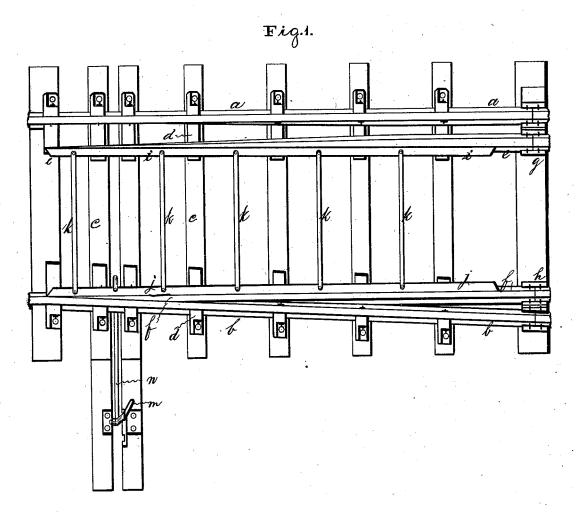
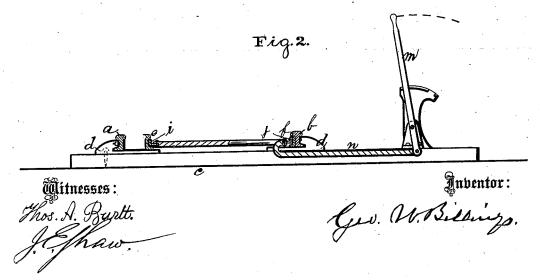
G. W. BILLINGS.

RAILROAD SWITCH.

No. 184,693.

Patented Nov. 28, 1876.





UNITED STATES PATENT OFFICE,

GEORGE W. BILLINGS, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN RAILROAD-SWITCHES.

Specification forming part of Letters Patent No. 184,693, dated November 28, 1876; application filed May 27, 1876.

To all whom it may concern:

Be it known that I, GEORGE W. BILLINGS, of Chicago, Cook county, Illinois, have invented an Improvement in Railroad-Switches, of which the following is a specification:

Letters Patent No. 137,050 were granted to me March 25, 1873, for a railroad-switch. In that patent I describe re enforcing bars in combination with the main rails, the latter being constructed with offsets or recesses to receive the ends of the switch-rails, respectively, when the main and switch rails are brought into contact. The recesses referred to are objectionable.

The invention herein described consists of a combination of tapered switch rails with angle bars of iron or steel, riveted or otherwise securely attached to the insides of said switch-rails, respectively, as hereinafter described, the object in view being the ability to construct the main rails without the aforesaid objectionable recesses; also, to prevent breakage of the switch rails and the springing of these rails; and also to afford foundations other than the flanges of these rails as fastenings for the tie-rods of the switch.

In the drawings, Figure 1 represents a plan of a railroad-track and switch embodying my invention; Fig. 2, a transverse section of the same.

a and b are stationary rails attached to the cross-ties c, with or without chairs d, in any approved manner. e and f are movable sections of rails, they being flexibly attached, at g and h, to chairs, in the usual manner. Each of the sections e and f is tapered by being beveled off on its exterior side, so that when the front or free end of section e is brought into contact with the side of the stationary rail a, (or the front end of section f into contact with the stationary rail b,) said front end fits in a little under the head of the stationary rail, as shown. i and j are angle-bars of iron or steel, riveted or otherwise securely attached to the inner sides of the tapered rails e and f, respectively. The tie-rods k are attached to the angle-bars i and j, as shown.

The free ends of the switch rails e and f are operated by a lever, m, and rod n, in the usual manner.

I make no claim to the tapered rails, separately considered; but

I claim—

The augular bars i and j, in combination with the tapered switch-rails e and f, substantially as set forth, for the purpose specified.

GEO. W. BILLINGS.

Witnesses:

THOS. A. BURTT, J. E. SHAW.