H. CHANCE.

Railway-Crossing.

No. 206,323. Patented July 23, 1878.

Fig. 1.

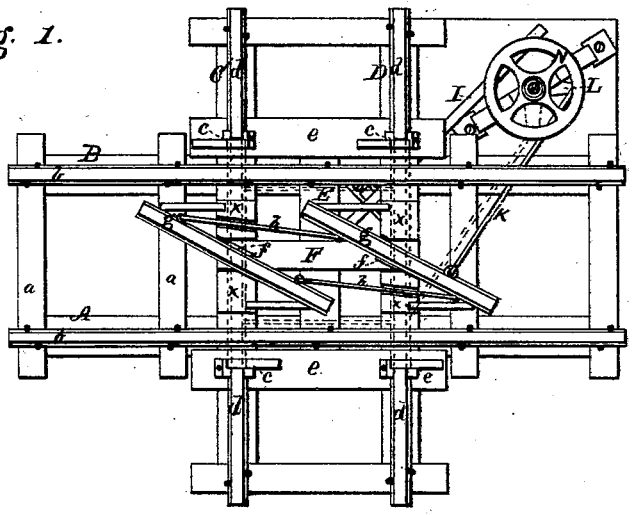
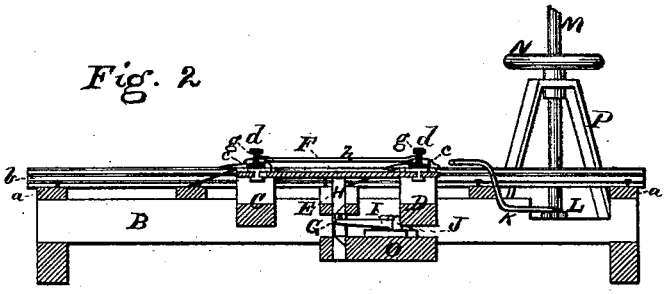


Fig. 2.



Witnesses;

E. C. Brooke

J. L. Byrne

Inventor;

Henry Chance

UNITED STATES PATENT OFFICE.

HENRY CHANCE, OF FOSTORIA, OHIO, ASSIGNOR OF ONE-HALF HIS RIGHT TO RAWSON CROCKER, OF SAME PLACE.

IMPROVEMENT IN RAILWAY-CROSSINGS.

Specification forming part of Letters Patent No. **206,323**, dated July 23, 1878; application filed May 28, 1877.

To all whom it may concern:

Be it known that I, HENRY CHANCE, of Fostoria, in the county of Seneca and State of Ohio, have invented a new and useful Improvement in Railroad-Crossings, which improvement is fully set forth in the following specification, reference being had to the accompanying drawings.

The object of my invention is to provide a railroad-crossing forming a continuous rail or track each way, thereby doing away with the frogs used in the ordinary railroad-crossings.

The accompanying drawings show every part of my invention.

The timbers A and B represent the road-bed or grade upon which the ties *a a* are laid. The rails *b b* are spiked fast to these ties in the ordinary way. At the point where I wish to put down a crossing I place under the rails *b b* the sills C D. These may be made of wood, iron, or any other material of suitable size and strength. Upon these sills, and outside of the rails *b b*, I place ties *e e*, of suitable thickness to raise the bottom of the rails *d d* when laid thereon on a level with the top of the rails *b b*. Under the ends of the rails *d d*, and outside of rails *b b*, I place chairs *c c c c*, made in the form shown in the drawing. These chairs are securely fastened by spikes or any other suitable device to the ties *e e*, which are firmly secured to the sills C D. Under the rails *b b*, and in the center of the crossing, I place a tie or sill, E, of any suitable material. This is held in place by being fastened to the rails *b b*, or by being laid in masonry, or any other suitable device. On top of this tie and the sills C D, and parallel with the rails *b b*, I place the sill F. This is made of iron or any other suitable material, with a standard, H, extending downward and passing through an opening provided in the tie E. This standard H is made long enough to allow the end to pass through an opening provided in a foundation or ground sill, O, of wood or any other suitable material, laid far enough below the tie E to allow sufficient room for the action of the lever I, which is used in raising the standard H. The lever I is made of sufficient length to reach from the standard H outside of both tracks, and is hinged to a fulcrum, J, under the rail *b*. The lever is provided with a slotted opening, G, in the end, which works around the standard H and between the shoulders on the standard, as shown in the drawing, or the end of the lever may be straight and work in an opening provided in the standard.

On top of the sill F, and at suitable distances apart, I pivot two plates or chairs, *f f*, to which the rails *g g* are firmly fastened.

The rails *g g* are also hinged together near the ends by the rods *h h*. To the outside of the rail *g* I hinge the rod K, bent in the form shown in the drawing, which passes outward and under the rail *b*, and is hooked or otherwise fastened by a joint to the crank L on the shaft M. This shaft M is mounted in a framework, P, of iron or any other suitable material, near the outer end of the lever I, and is provided with a wheel or lever, N, by which it is turned, at a suitable height from the ground. The shaft M may be made high enough to attach a target at the top, for the purpose of signaling trains.

The crossing is opened by pressing with the foot, or otherwise, upon the outer end of the lever I, which raises the standard H and the sill F, to which the rails *g g* are fastened by means of the pivoted chairs *f f*. The rails *g g*, being connected with the crank L on the shaft M by means of the rod K, by turning the shaft M with the wheel or lever N the rails *g g* are turned across the rails *b b* and the ends of the rails *g g* drop into the chairs *c c c c*, which hold them firmly in place. The crossing is now open, and a train may pass on the rails *g g* across the rails or track *b b*. To support the rails *g g* in the center when turned across the rails *b b*, blocks *x x x x* are attached to the sills C D, high enough to be on a level with the top of the rails *b b*.

The crossing is closed by raising the rails *g g* out of the chairs *c c c c* by means of the lever I, and turning these by means of the rod K and the shaft M until they fall between the rails *b b* and drop into the notches cut out of the top of the sills C D and the tie E. These notches are made deep enough to allow the rails *g g* to drop down on a level with the rails *b b*. The crossing is now closed, and a train of cars may pass over the rails *b b*.

I claim as my invention—

1. The rails *g g*, connected by the rods *h h*, and mounted on the chairs *f f*, which are pivoted to the sill F, to which the standard H is attached, all combined substantially as and for the purposes set forth and described.

2. The rails *g g*, rods *h h*, chairs *f f*, sill F, standard H, in combination with the lever I, fulcrum J, rod K, crank L, shaft M, wheel N, and chairs *c c c c*, substantially as and for the purposes described.

HENRY CHANCE.

Witnesses:
J. S. BYERS,
L. E. BYERS.