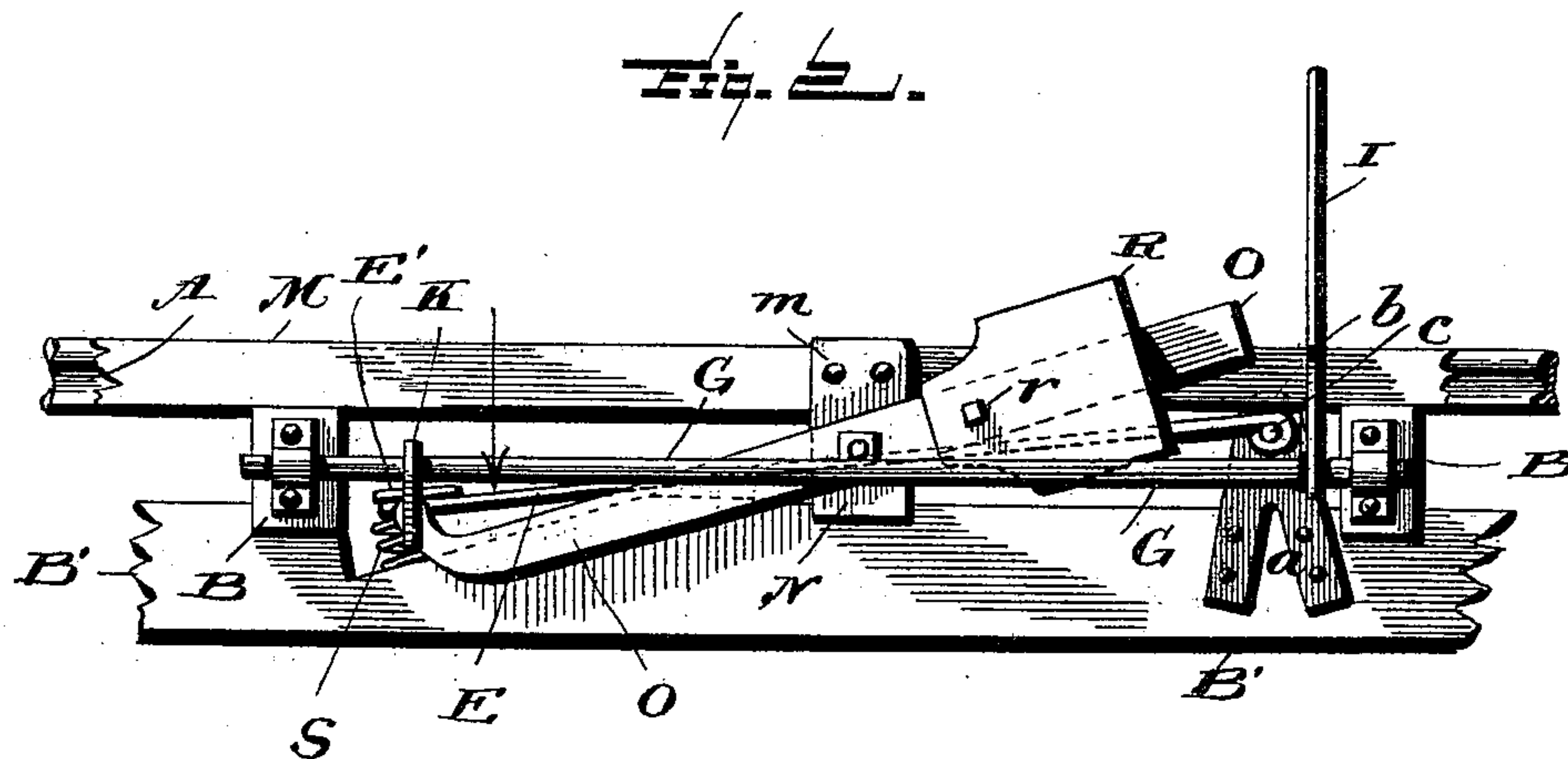
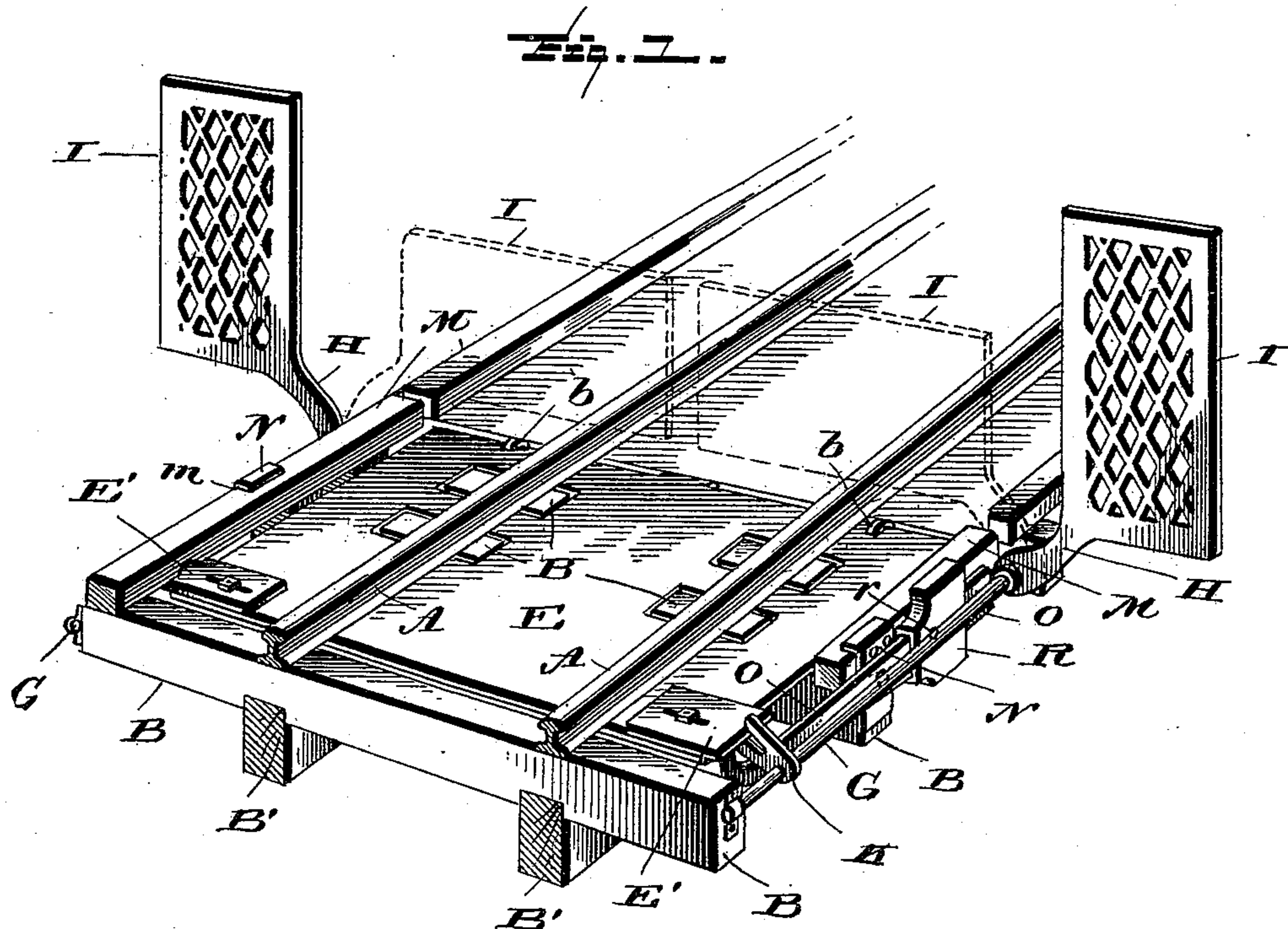


(No Model.)

L. HILLS.
CATTLE GUARD.

No. 525,900.

Patented Sept. 11, 1894.



Witnesses:

L. C. Hills,
A. L. Hough

Inventor

Lorenzo Hills,
By Franklin H. Hough,
Atty.

UNITED STATES PATENT OFFICE.

LORENZO HILLS, OF PITTSBURG, TEXAS.

CATTLE-GUARD.

SPECIFICATION forming part of Letters Patent No. 525,900, dated September 11, 1894.

Application filed April 16, 1894. Serial No. 507,733. (No model.)

To all whom it may concern:

Be it known that I, LORENZO HILLS, a citizen of the United States, residing at Pittsburg, in the county of Camp and State of Texas, have invented certain new and useful Improvements in Cattle-Guards; and I do declare the following to be a full, clear, and exact description of the invention, such as it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to certain new and useful improvements in cattle guards for railways to be used at crossings, and my aim is to improve upon the construction of somewhat similar inventions for which I have been granted Letters Patent No. 516,307, of March 13, 1894, and No. 501,785, of July 18, 1893.

In my present invention, while utilizing the main features of my guard already patented, the invention resides in certain details of construction, such as the provision of a counter balance or lever with a weight slidingly thereon, which can be adjusted so as to better regulate the platform.

I further improve upon my former inventions by the provision of perforated guards, having a considerable amount of open work, so as to offer as little resistance to the wind as possible, and the provision of coiled springs to act against the under surface of the platform in place of the springs disposed along the sides of the sills, as shown in a former patent recently issued to me.

To these ends and to such others as the invention may pertain, the same consists in the novel construction, combination and adaptation of the parts as will be hereinafter more fully described and then specifically defined in the appended claim.

I clearly illustrate my invention in the accompanying drawings, which with the letters of reference marked thereon, form a part of this specification, and in which drawings, similar letters of reference indicate like parts throughout both views, in which—

Figure 1 is a perspective view of my cattle guard. Fig. 2 is a side elevation of the guard.

Reference now being had to the details of the drawings by letter, A, A, represent the rails of a railway supported on the ties B, underneath which are sills B'. To these sills at any convenient points as at *a a*, are secured the bearings *b b*, which support the rod *c*, immediately beneath the rails A, and running at right angles to the same. To this rod is hinged the platform E, which extends beneath the rails. The ties beneath this platform are either recessed, so as to allow the platform to tilt, to operate the guards, or they may be dispensed with altogether if desired.

To the ends of two or more of the ties or sleepers, are journaled in suitable bearings the rods G, which have rigidly secured thereto by being shrunk on or fastened by set screws, the arms H, which operate the perforated guards I, and are made preferably of a strong pliable material.

K, K, are bifurcated arms either shrunk on or adjustably held to the shafts G, the said bifurcated portions extending one above and the other beneath the platform E, or an adjustable projection E' thereof, so that when the platform tilts, the shaft G is rocked and the guards are turned across the tracks at right angles thereto.

M are stringers secured to the upper surfaces of the ties near their ends.

Secured to the stringers M, at any convenient points, are the clips N, N, and pivoted thereto are the levers O, O, provided with the sliding weights R, R, having the set screws *r r*, the said weighted lever being utilized as a counterbalance, the forward end of the same adapted to bear against the under surface of the platform.

Beneath the platform at any convenient locations are disposed the spiral springs S, S, which bear up against the under surface of the platform, and serve to return the platform to its original position after being tilted.

If it is desired to guard a double pass, the rod G may be lengthened out and adjusted in a similar manner to a second platform, so that cattle coming from the second passageway, and onto the platform, will operate the same guards. It is my plan to paint these guards in a bright color, so as to frighten the animal stepping on the platforms.

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

In combination with a railway guard, as
5 described, a counterbalance lever pivoted to a side rail clip N, one end of the said lever bearing against the under surface of the platform, an adjustable weight sliding on the free
end of the lever, and coiled springs bearing
10 against the under surface of the platform,

which in co-operation with the weighted lever, are adapted to return the platform to a horizontal position after being tilted, substantially as shown and described.

In testimony whereof I affix my signature in 15 presence of two witnesses.

LORENZO HILLS.

Witnesses:

F. E. RUSSELL,

W. C. HASGROVE.