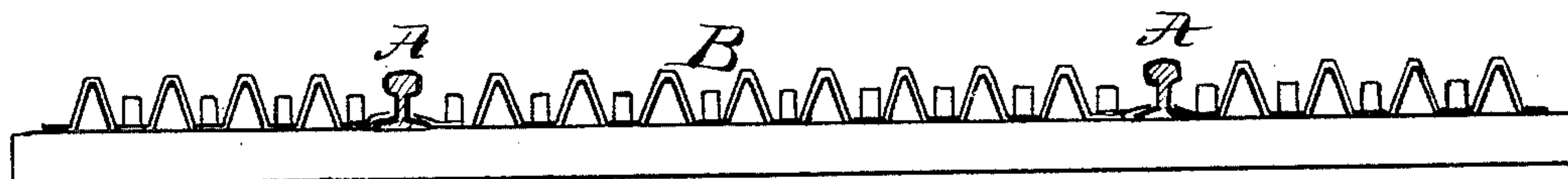
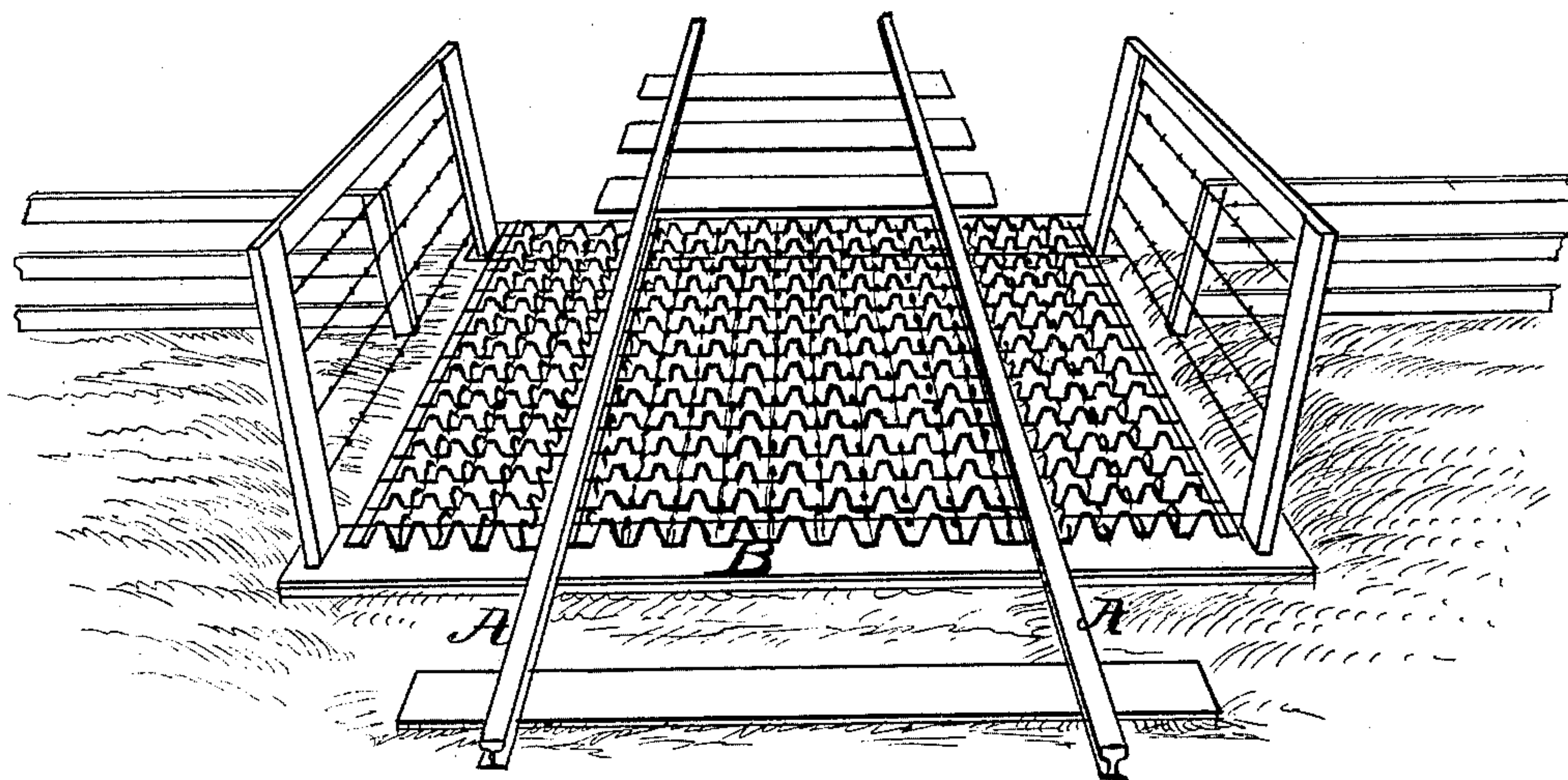
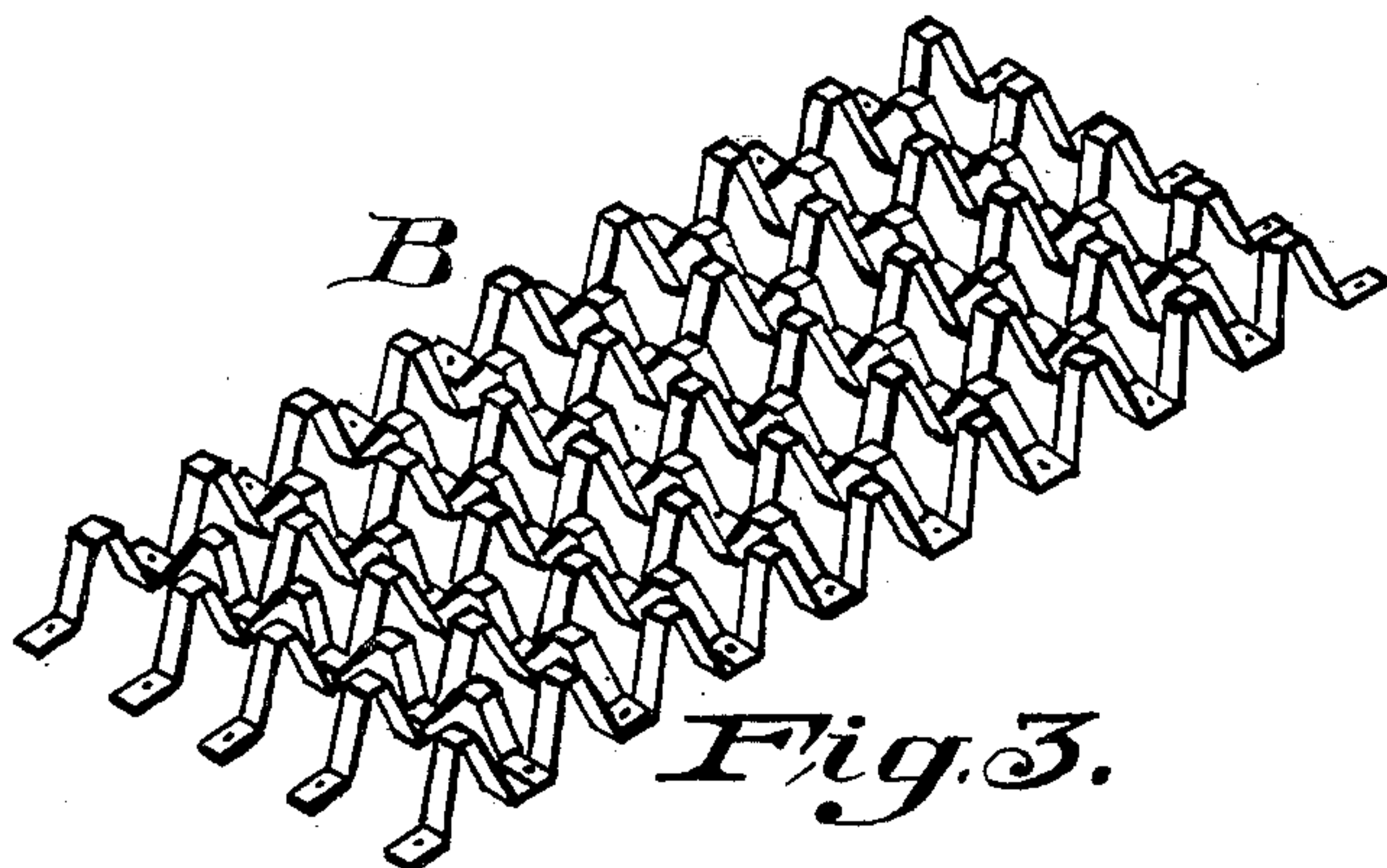


(No Model.)

F. G. BOTSFORD.  
CATTLE GUARD FOR RAILWAYS.

No. 462,649.

Patented Nov. 3, 1891.



*Witness,*

*E. Jay Pinney*  
*E. A. Tibbitts*

*Inventor,*

*Frederick G. Botsford,*  
*By Geo. W. Tibbitts Atty.*

# UNITED STATES PATENT OFFICE.

FREDERICK G. BOTSFORD, OF CLEVELAND, OHIO.

## CATTLE-GUARD FOR RAILWAYS.

SPECIFICATION forming part of Letters Patent No. 462,649, dated November 3, 1891.

Application filed October 30, 1890. Serial No. 369,762. (No model.)

*To all whom it may concern:*

Be it known that I, FREDERICK G. BOTSFORD, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Cattle-Guards for Railways, of which the following is a detail specification.

This invention relates to cattle-guards for railways; and it consists in securing together two sets of corrugated cross-bars, the apices of one set extending above the other for presenting an obstruction to prevent cattle walking over.

The invention is illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of a railway having my guard attached. Fig. 2 is a cross-section of same. Fig. 3 is a perspective view of the guard detached.

In Fig. 1 the railroad and line fence shown are of the common construction.

B represents the guards placed on each side of the rails A A and between them. To form this guard I take bars of iron, bend them, and join them together crosswise, as shown, form-

ing a network of raised corrugations having small flat apices. The corrugations in the bars running across the track are made lower than those in the bars running lengthwise or vice versa, for the purpose of forming apices at two different levels, so as to render the foothold more uncertain and be liable to cause a foot to turn over and throw an animal in endeavoring to step, yet not let the foot go through or down between the bars.

These guards are made in sections with suitable frame-pieces for securing the corrugated bars at their ends and suitable means for securing the sections to the railway-ties.

Having described my invention, I claim—

The herein-described cattle-guard for railways, consisting of two sets of corrugated cross-bars secured together at their depressed portions, the apices of the bars of one set being on a higher level than those of the bars which cross them, substantially as described.

FREDERICK G. BOTSFORD.

Witnesses:

J. A. BURKE,  
ABNER SLUTZ.