

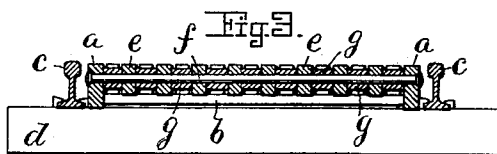
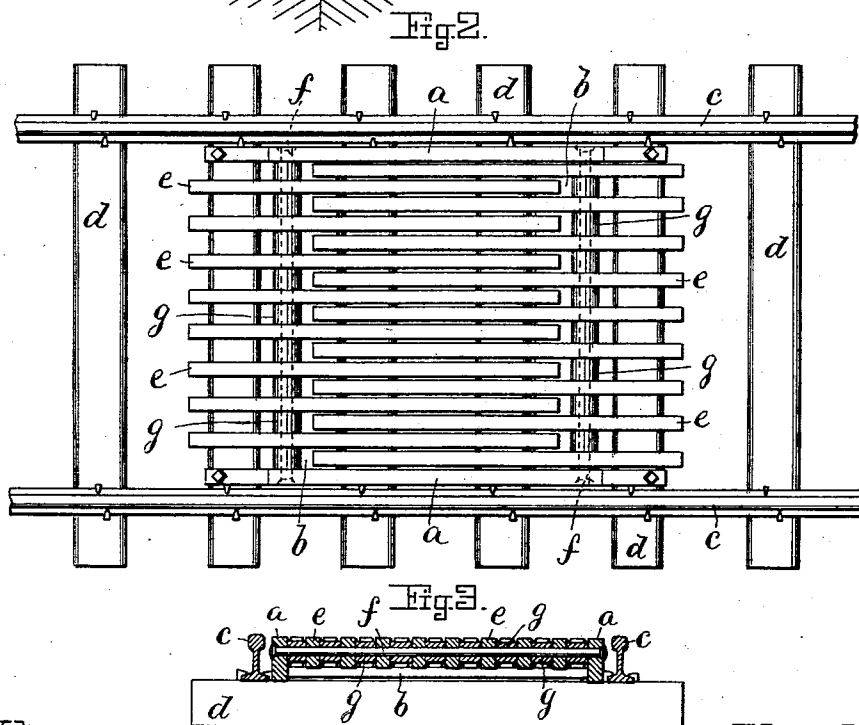
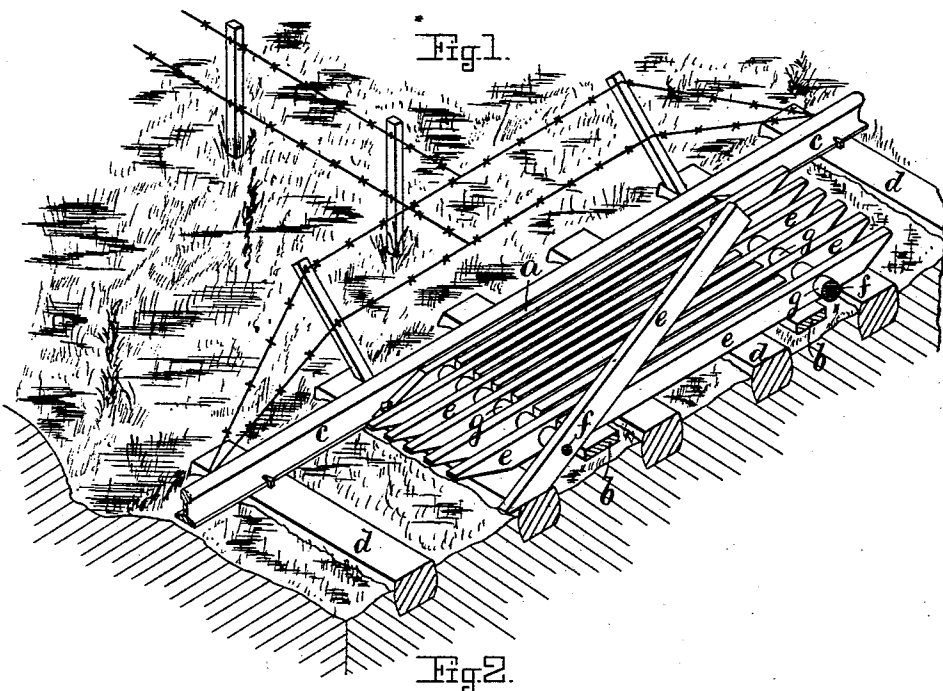
(No Model.)

2 Sheets—Sheet 1.

H. N. WHITCOMB.
CATTLE GUARD.

No. 564,809.

Patented July 28, 1896.



Witnesses
Henry Chadbourne,
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Inventor
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Fig. 4.

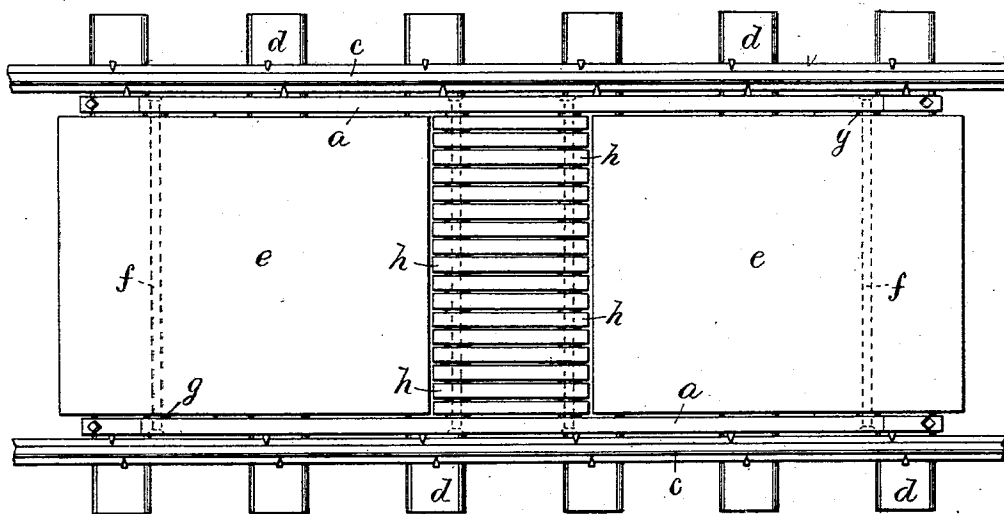


Fig. 5.

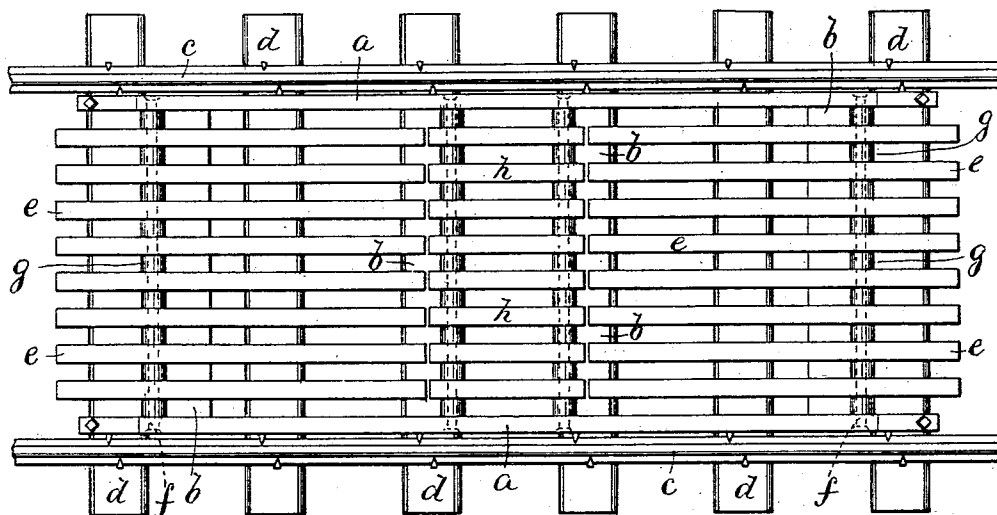


Fig. 6.

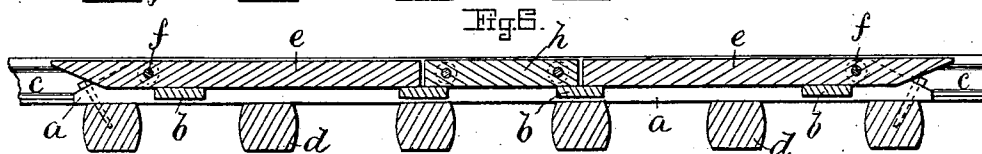


Fig. 7.

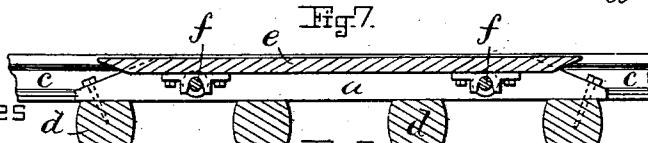


Fig. 8.



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UNITED STATES PATENT OFFICE

HORATIO N. WHITCOMB, OF WATERLOO, CANADA.

CATTLE-GUARD.

SPECIFICATION forming part of Letters Patent No. 564,809, dated July 28, 1896.

Application filed February 25, 1896. Serial No. 580,695. (No model.)

To all whom it may concern:

Be it known that I, HORATIO N. WHITCOMB, of Waterloo, in the Province of Quebec and Dominion of Canada, have invented certain new and useful Improvements in Cattle-Guards, of which the following, taken in connection with the accompanying drawings, is a specification.

This invention relates to cattle-guards for railroads and other places where it is impossible to have a fence erected to prevent the passage of cattle.

The invention has for its object to provide a positive and durable device for this purpose which will be simple and cheap in construction and capable of being manufactured complete in all its parts, so as to be easily transported to any point and quickly adjusted and attached between the rails, so as to effectually prevent the passage of cattle thereon.

The invention consists substantially in the device herein shown and described, and especially pointed out in the claims.

In the drawings hereto annexed and forming a part of this specification similar letters of reference represent corresponding parts in all the views.

Figure 1 represents a sectional perspective view of the invention applied to the railroad-track. Fig. 2 is a plan view of the same. Fig. 3 is a cross-section of the same. Figs. 4 and 5 are plan views of modified forms of the invention. Fig. 6 is a longitudinal section of the same. Figs. 7 and 8 are longitudinal sections of two other modified forms of the invention.

Broadly speaking, the invention is constructed and carried out substantially as follows:

A frame composed of two parallel side bars or members *a* and connecting cross-bars or members *b* is arranged between the rails *c*, so as to rest upon the ties *d* of the road-bed and be held fast thereon, the ends of the side bars *a* being beveled off slanting, so as to facilitate securing them to the ties by suitable fastenings. The side bars or members *a* are sufficiently far apart to cause them to lie adjacent to the rails *c*. Between the side bars or members *a* of the frame and arranged substantially parallel therewith are one or more bars or members *e*, pivoted at one side of their center on the rods *f*, so as to form a

tilting platform. When the shorter ends of said members *e* are depressed, the opposite ends are elevated at an angle sufficient to effect a barrier to the passage of cattle thereover, but in its normal position all the members are substantially horizontal and flat with the road-bed.

Figs. 1, 2, and 3 show the preferred form of construction of the invention, in which the tilting platform is composed of two series of parallel bars or members *e*, pivoted at opposite ends of the frame, the bars being arranged alternately, so as to lap by each other and thus shorten up the frame. The bars or members of each series are held in lateral position with relation to each other by blocks or rolls *g* of suitable thickness placed between them, thus forming a double open platform. By this construction a short frame is insured, and a cattle-guard produced which acts to form a barrier to cattle attempting to pass in either direction. This is obviously a great advantage and, furthermore, by this construction that portion of the fence or other barrier which is arranged parallel to the track and at an angle to the dividing fence between the two lots, or inclosures may be very short, as shown in Fig. 1, thus lessening the expense in placing the guards along the railway.

Referring again to Fig. 1, it will be seen that should cattle attempt to pass from one lot or inclosure to the other by means of the railroad-track they must of necessity step upon the free and extending ends of one or more of the pivoted bars or members *e*, they being sufficiently near enough together to prevent the cattle getting a footing without depressing them by their weight, which would simultaneously throw up the opposite ends of said bars or members at sufficient inclination to form an obstruction and an effectual barrier to the further passage of cattle over them.

Fig. 4 shows the frame *a b* elongated and having two opposite tilting members *e*, composed of solid platforms separated by a stationary open platform composed of short bars *h*. Fig. 5 shows a similar frame *a b*, having two opposite series of independently-tilting bars or members *e*, separated by a stationary open platform *h* similar to that in Fig. 4.

A longitudinal sectional view of the con-

structions shown in Figs. 4 and 5 is clearly illustrated in Fig. 6.

Fig. 7 shows a short frame having a tilting member *e*, said member consisting of a platform resting on two pivot-rods *f*, being provided with open boxes or bearings for said rods, so as to adapt the platform to be tilted by the depression of either end of the same. Fig. 8 shows a short frame *a b*, similar to that in Fig. 1, having two alternately-arranged series of pivoted bars or members *e*, lapping by each other, one of said series having the rod *i* and the other series having the slots *j*, thereby causing both of said series of pivoted bars or members to operate simultaneously when the outwardly-extending free end of any bar or member of either series is depressed, and thus form a barrier like the letter **X**, as will be readily understood without further description.

The cattle-guard is placed below the rails, so as to lie flat and offer no obstruction to any part of the rolling-stock or snow-plow passing over the same.

I have shown several ways of carrying out the invention, but I desire it to be understood that the invention is susceptible of any modification within the scope of mechanical skill without departing from the essential features and spirit of the invention.

Having thus fully described the nature, construction, and operation of the invention, I desire to secure by Letters Patent and claim—

1. A cattle-guard comprising a frame consisting of the two parallel side bars *a* and connecting cross-bars *b*, and a series of horizontal bars or members *e*, pivoted within said frame on the rod *f*, substantially as shown and described.

2. In a cattle-guard, the combination of two series of horizontal bars or members, each series having a pivotal bearing intermediate its ends, one series being arranged alternately with the other series, so that the bars or members of the two series lap past each other, and the outer ends of both series arranged and adapted to be depressed, for the purpose set forth.

3. A cattle-guard composed of two series of alternately-arranged horizontal bars or members, having transverse pivotal bearings intermediate their ends and connected together so as to be elevated and form an obstruction or barrier when the outer ends of either series of members are depressed, substantially as and for the purpose set forth.

4. In a cattle-guard, the combination with the horizontal, pivoted bars or tilting members *e*, of the frame *a, b*, for the purpose set forth.

5. In a cattle-guard, the combination with the two series of horizontal, pivoted bars or members *e*, of the frame *a, b*, having transverse bearings *f*, for the purpose set forth.

6. In a cattle-guard, in combination, the frame *a, b*, having the two transverse rods *f*, and the two alternately-arranged series of horizontal bars or members *e*, pivoted within said frame on said rods, for the purpose set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 20th day of February, A. D. 1896.

HORATIO N. WHITCOMB.

Witnesses:

C. A. NUTTING,
PIERCE HUBERT.