No. 885,552. PATENTED APR. 21, 1908.

R. M. WARK.

AUTOMATIC CATTLE GUARD FOR RAILWAYS.

APPLICATION FILED SEPT. 11, 1907.

2 SHEETS—SHEET 1

Fig. 1.

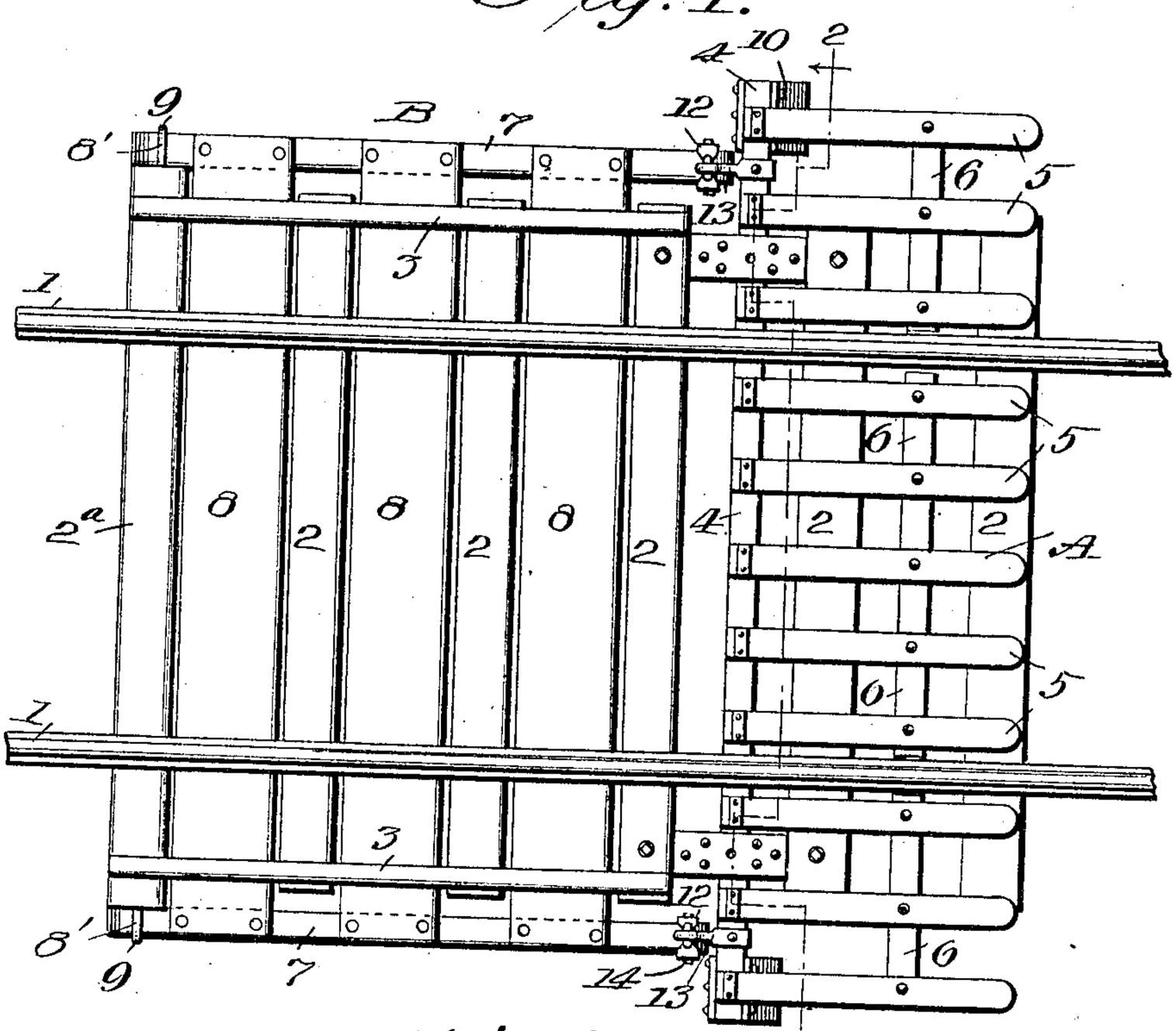


Fig. 2.

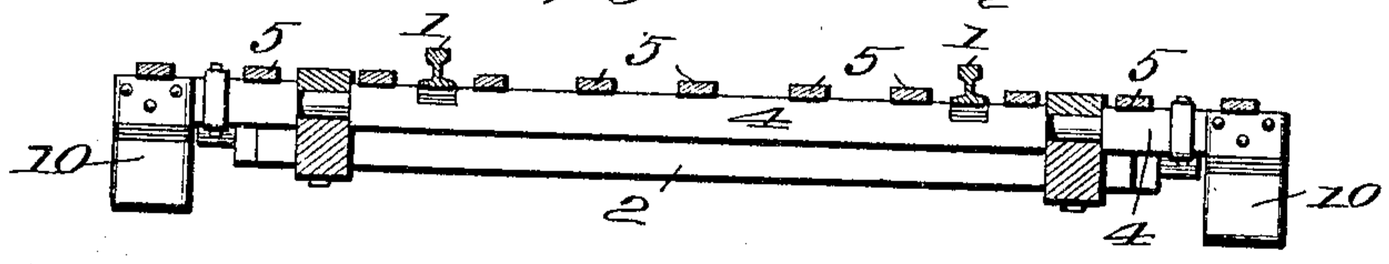
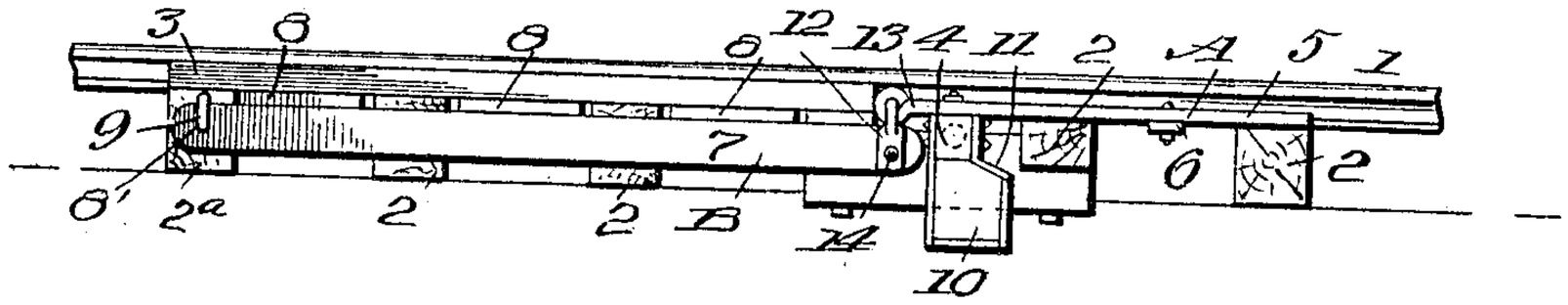


Fig. 3.



WITNESSES

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2 SHEETS—SHEET 2.

Fig. 4.

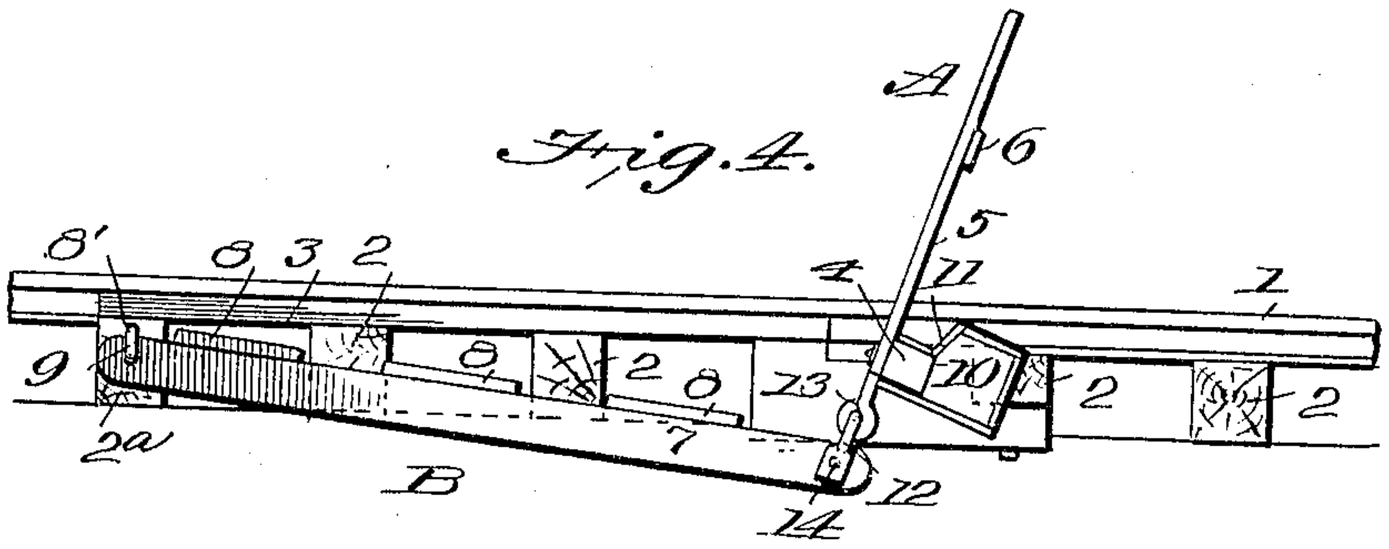
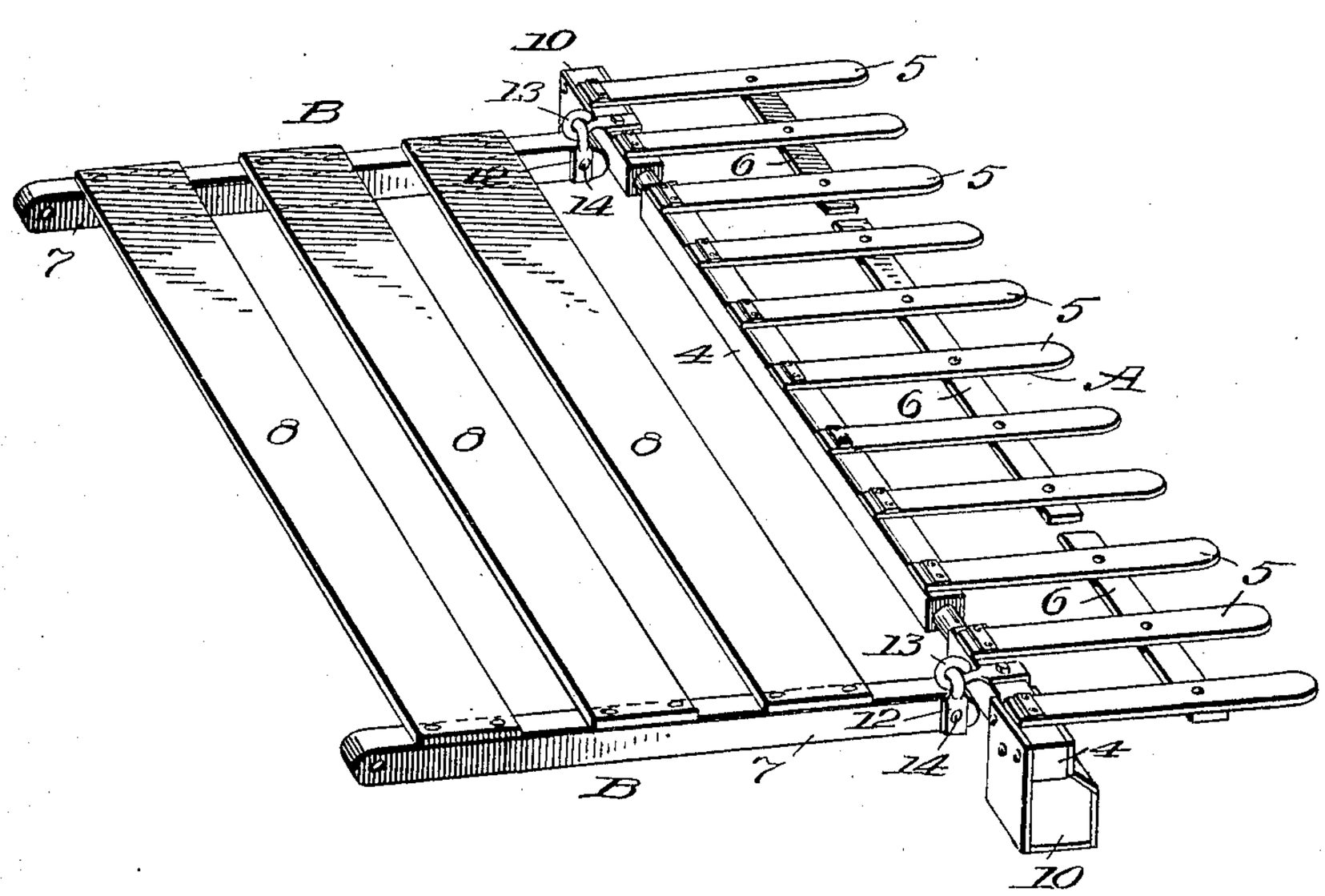


Fig. 5.



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AUTOMATIC CATTLE-GUARD FOR RAILWAYS.

No. 885,552. Specification of Letters Patent. Patented April 21, 1908.

Application filed September 11, 1907. Serial No. 392,306.

To all whom it may concern:

Be it known that I, ROBERT M. WARK, a citizen of the United States, and residing at Spokane, in the county of Spokane and State of Washington, have invented an Improvement in Automatic Cattle-Guards for Railways, of which the following is a specification.

My invention is an improvement in that class of vertically swinging gates arranged across railway tracks and adapted to be thrown upward for preventing cattle passing along the tracks.

The invention is embodied in the construction, arrangement, and combination of parts hereinafter described, and shown in the accompanying drawings, in which

Figure 1 is a plan view of a portion of a railroad track with my improved cattle-guard applied thereto and in a lowered position. Fig. 2 is a cross section on the line 2—2 of Fig. 1. Fig. 3 is a side view of the parts shown in Fig. 1, the guard being in the lowered or inoperative position. Fig. 4 is a similar view save that the guard is in the elevated or raised position. Fig. 5 is a perspective view of the parts constituting my invention, the same being detached from the rails and ties.

1 indicates the rails, and 2, 2^a, the ties, of a railway track. The ends of the ties, which project laterally beyond the rails, are connected by metal tie bars 3 for holding them rigidly in position and equidistant. The gate proper is indicated by A and the platform by which it is operated by B. The gate comprises a rotary shaft 4 supported in bearings between the ties and beneath the rails 1, and a series of bars or palings 5, which are attached to the shaft and arranged parallel and connected by transverse bar 6. The platform B comprises side bars 7 and planks 8 connecting them, the bars being arranged outside of and parallel to the rails 1 and pivoted at one end to the ties 2^a by means of a staple 9 and their forward ends are connected by a loose swinging joint with the rock-shaft 4 of the guard. The planks 8 extend beneath the rails 1 and lie between the parallel ties 2 and 2^a, there being sufficient space between these parts to allow the planks to swing up and down with the side bars 7. The normal position of the guard and platform is indicated in Figs. 1, 2, and 3, and the operative or raised position is indicated in Fig. 4.

It will be apparent that in order to hold the guard and platform in the inoperative position, the weight of the platform must be counterbalanced. For this purpose I employ weight-boxes 10, the same being wooden boxes attached to and pendent from the rock-shaft 4 and having a removable top portion 11 to permit stone or other weights to be placed in the receptacles. It is apparent that the weight may thus be varied as required to counterbalance the platform at all times and under varied conditions. When cattle attempt to pass along the track they naturally step on the broad planks 8, and, by their weight, depress the platform to the position indicated in Fig. 4, whereby the guard A is thrown up in nearly vertical position and effectually obstructs their further passage. Upon their retiring from the platform, the weight-boxes restore the platform and guard to the normal position shown in Figs. 1 and 3. The spaces between the planks 8 and the ties are not sufficient to allow the feet or legs of the cattle to become wedged or fastened between them, the vertical depth of the ties being such that the planks never pass below their lower edges; see Fig. 4.

The joint before referred to between the guard A and platform B is formed by a clevis, or U-shaped, link 12 and eye-bar 13 which are pivoted together. The clevises or links are pivoted at 14 to the ends of the platform, as shown in Fig. 4. When the platform is depressed the eye-bars 13, which form a loose pivot joint with the links 12, are bolted to the upper sides of the rock-shaft 4. By this means the platform and guard are connected directly, or without aid of any parts supplemental to the links 12 and eye-bars 13, and besides being an exceedingly strong and durable connection, it is a very inexpensive one.

What I claim is:

The combination, with railway rails and ties, of the improved cattle-guard comprising a platform formed of side bars 7, arranged outside of the rails, and planks 8 connecting the said bars, the guard proper

formed of parallel bars and a rock-shaft to which they are secured, and couplings between the side bars 7 and said guard, consisting of links 12 which are pivoted to, swing vertically on, the adjacent ends of bars 7, and eye-bars 13 jointed with the said links and secured to the rock shaft, and the weight-receiving boxes 10 attached to, and pendent from, the rock-shaft and arranged on the ends thereof exterior to the track-rails, as shown and described.

In testimony whereof, I have affixed my signature in the presence of two witnesses.

ROBT. M. WARK.

Witnesses:
M. P. MORSE,
D. E. TWITCHELL.