

No. 773,379.

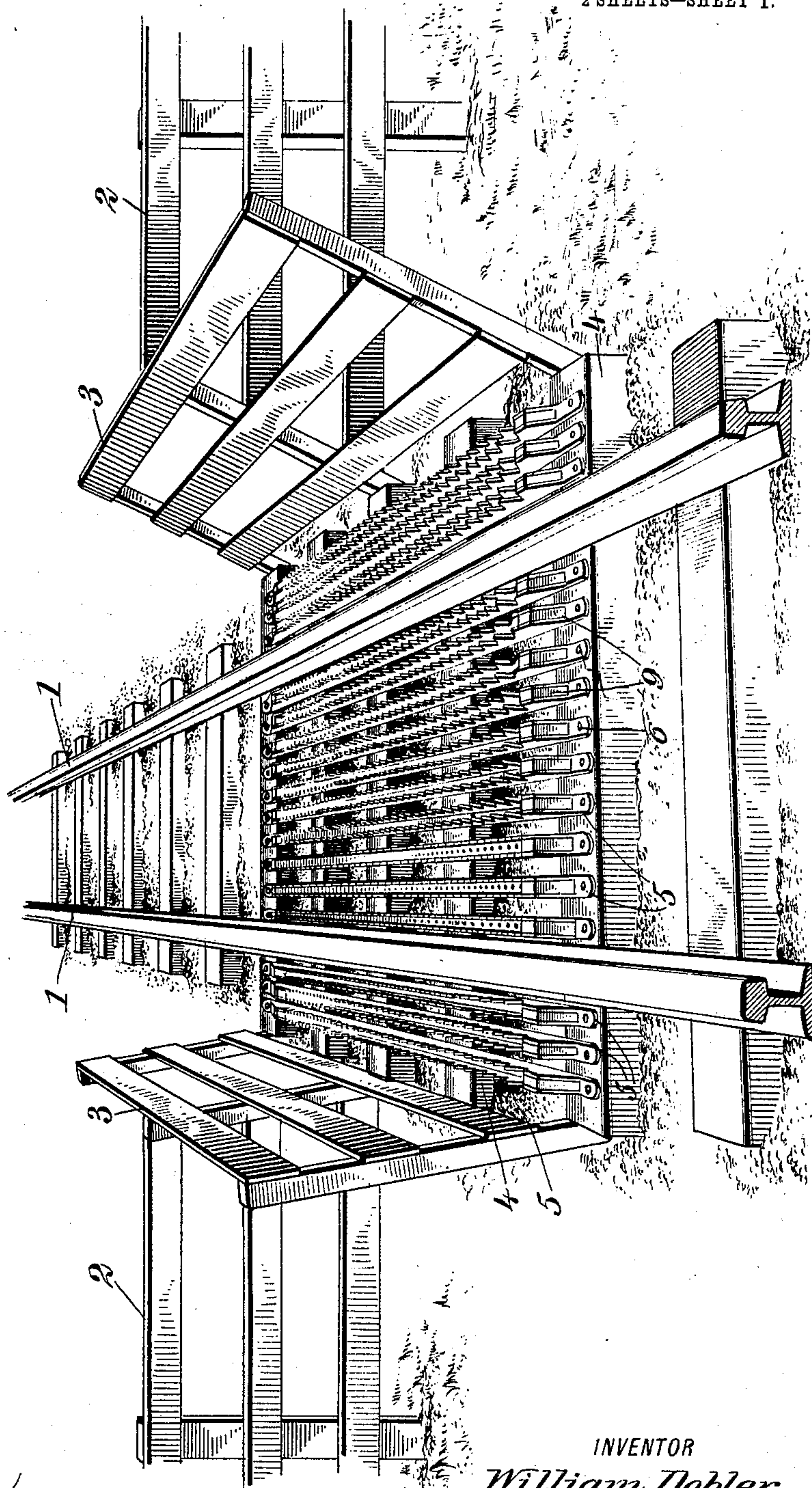
PATENTED OCT. 25, 1904.

W. DOBLER.
CATTLE GUARD.

APPLICATION FILED MAY 27, 1904.

NO MODEL.

2 SHEETS—SHEET 1.



WITNESSES:

G. P. Kingsbury
Dexter, Boston

INVENTOR

William Dobler

BY *mmmm*

ATTORNEYS

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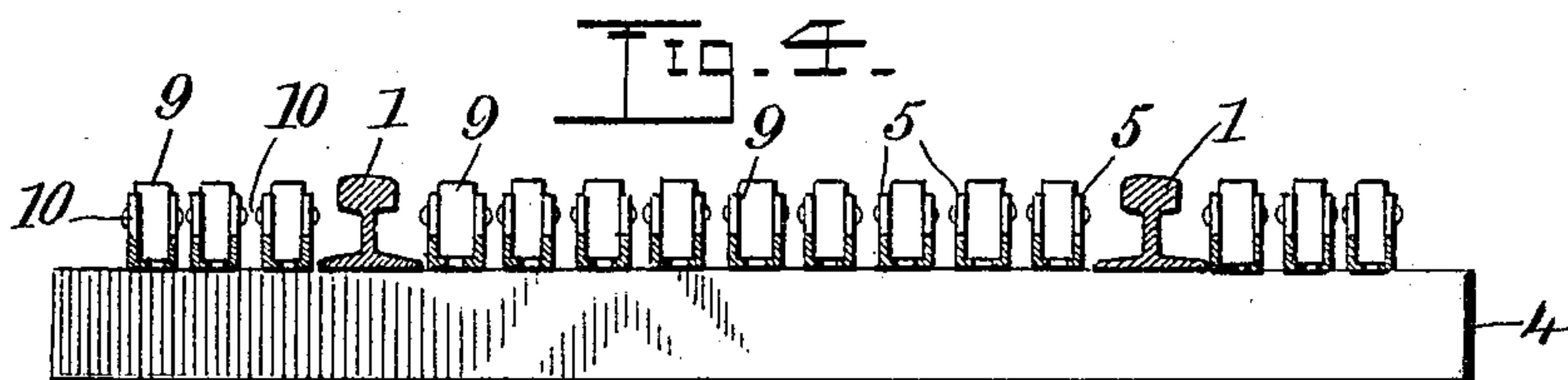
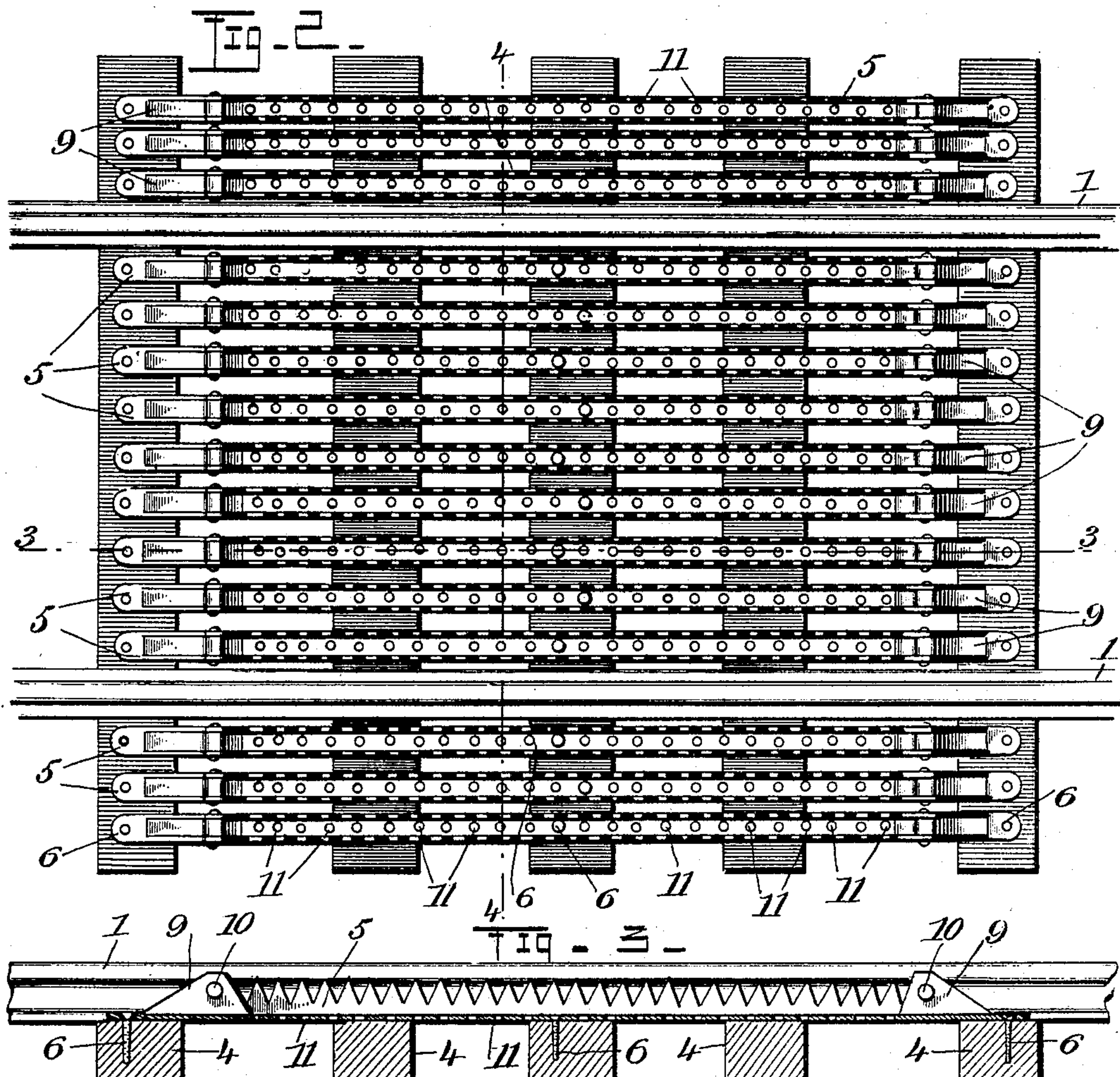
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WITNESSES:
G. P. Kingston
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Fig. 5
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UNITED STATES PATENT OFFICE.

WILLIAM DOBLER, OF SUMNER, WASHINGTON.

CATTLE-GUARD.

SPECIFICATION forming part of Letters Patent No. 773,379, dated October 25, 1904.

Application filed May 27, 1904. Serial No. 210,046. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM DOBLER, a citizen of the United States, and a resident of Sumner, in the county of Pierce and State of Washington, have invented a new and Improved Cattle-Guard, of which the following is a full, clear, and exact description.

This invention relates to cattle-guards; and the object of the invention is to provide an improved cattle-guard which will be effective to prevent the passage of cattle or other animals thereover, which will not present an obstruction to the passage of any pendent members beneath the railway-cars, which will not be easily damaged, and which if injured may be conveniently and quickly repaired.

As is well known to persons skilled in the art to which the invention relates, one of the principal objections to the cattle-guards in general use is that they are apt to present some obstruction to the passage of a chain or other member which may be hanging beneath a railway-car, and when such a pendent member catches upon a portion of the cattle-guard the cattle-guard is almost certain to be greatly damaged thereby. Furthermore, in cattle-guards as commonly constructed the parts are so connected that if any extensive damage is done which would impair the utility of the cattle-guard to any considerable extent it is necessary to remove practically the entire guard structure to repair it.

In the cattle-guard which forms the present invention and which is hereinafter described in a preferred form of embodiment the defects above noted are overcome.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a perspective view showing the cattle-guard in operative relation to a railway-track. Fig. 2 is a plan view of the guard and the adjacent portion of the railway-track. Fig. 3 is a sectional view upon the line 3 3 of Fig. 2. Fig. 4 is a sectional view on the line 4 4 of Fig. 2, and Fig. 5 is a detail perspective view of one of the channel-bars which form the guard.

Referring to the drawings by the reference characters marked thereon, 1 1 designate the

rails of a railway-track, which are laid, as usual, upon the cross-ties of any preferred structure.

2 2 designate sections of a fence arranged at right angles to the track, and 3 3 designate the usual sections of fencing arranged parallel to the track at the ends of the sections 2 2, which abut upon the track.

Between the sections 3 3 of fencing ties 4 of somewhat greater length than the ordinary cross-ties are employed to afford support for the bars which form the cattle-guard. The guard is formed wholly of a series of channel-bars 5, which are independently secured to the ties 4, as by spikes or other suitable fastenings 6, which extend through openings provided for that purpose in the bars. Each of the channel-bars is formed with a bevel 7 near each end, and between the beveled portions each flange of every bar is formed into teeth 8, as shown. To brace the flanges of the bar and prevent them from being easily bent over, blocks 9 are provided at the ends of the bars, between the flanges thereof, and these blocks 9 are formed with bevels corresponding to the bevels 7 of the channel-bars. The blocks are secured in position by means of transverse rivets 10 or other suitable fastenings.

The bars 5 are arranged parallel to the rails 1 1 of the railway-track and are spaced apart at short intervals to prevent the cattle or other animals from passing over the guard by introducing their feet between the bars. Each of the bars 5 is secured independently of all the others, as clearly shown in the drawings, and if any injury to the guard occurs the bars which have been injured may be taken up, restored to their original condition, and relaid without its being necessary to remove the uninjured bars from their position.

When the guard constructed as above described is in position, the beveled ends of the several channel-bars 5 and the beveled ends of the blocks 9, fitted in the ends of the channel-bars, present inclined surfaces, against which any pendent member beneath a passing railway-car will strike and be caused to pass over the ends of the bars without hanging thereon. Consequently the tendency of a hanging rod or chain beneath a car to tear up a part of the guard is almost wholly obviated.

A further advantage of the guard structure above described is found in the strengthening effect of the blocks 9 upon the channel-bars. Each side flange is braced by the end blocks 5 9, so that it is impossible for an animal to press the flange over to either side and so render the teeth of the flange ineffective, as is not infrequent when the guards are constructed of the serrated plates commonly employed. 10

In the form of the invention illustrated each channel-bar is provided throughout the space between the blocks 9 at the ends thereof with small openings 11 in the bottom of the 15 bar. These openings serve the double purpose of affording means for introducing spikes for securing the channel-bars in position and of providing for the drainage of the channels, which would otherwise be prevented by the 20 blocks at the ends. The provision of means for drainage is important, especially in the winter season, because the accumulation of water in the channels of the bars would lead to the formation of ice therein. As soon as 25 the bars became filled with the ice the guard would be ineffective.

While I have described and illustrated the invention in the preferred form of embodiment, it is to be understood that the dimensions of the channel-bars and of the teeth 30 thereof may be varied without departing from the spirit of the invention, and the bars may be spaced at different intervals or secured in position by different fastening means.

35 Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A cattle-guard bar comprising a channel-

bar having its sides extending upwardly in vertical parallelism with each other, said sides stopping short of the ends of the bottom section of the bar and being beveled at their ends 40 and beveled blocks secured between said beveled ends of the sides flush therewith, the top edges of said sides being provided with V-shaped notches between said blocks, the bottom 45 section of the bar between said blocks being provided with drainage-openings.

2. A cattle-guard comprising a plurality of channel-bars, each of which is provided near its ends with a block disposed between the 50 side flanges of the bar to brace the flanges, said sides being provided on their top edges, between said blocks, with V-shaped notches, and the bottom of the bar having a series of apertures formed therein. 55

3. A cattle-guard, comprising a plurality of channel-bars disposed parallel to the rails of a railway-track, and each provided throughout the greater portion of its length with apertures in the bottom thereof to facilitate 60 drainage from said bars.

4. A cattle-guard, comprising a plurality of channel-bars, each of which is provided near its ends with a block disposed between the side flanges of the bar to brace the flanges, 65 and which has a series of apertures formed in the bottom thereof, to facilitate drainage.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM DOBLER.

Witnesses:

CHRIS LOCK,

A. T. MARSHALL.