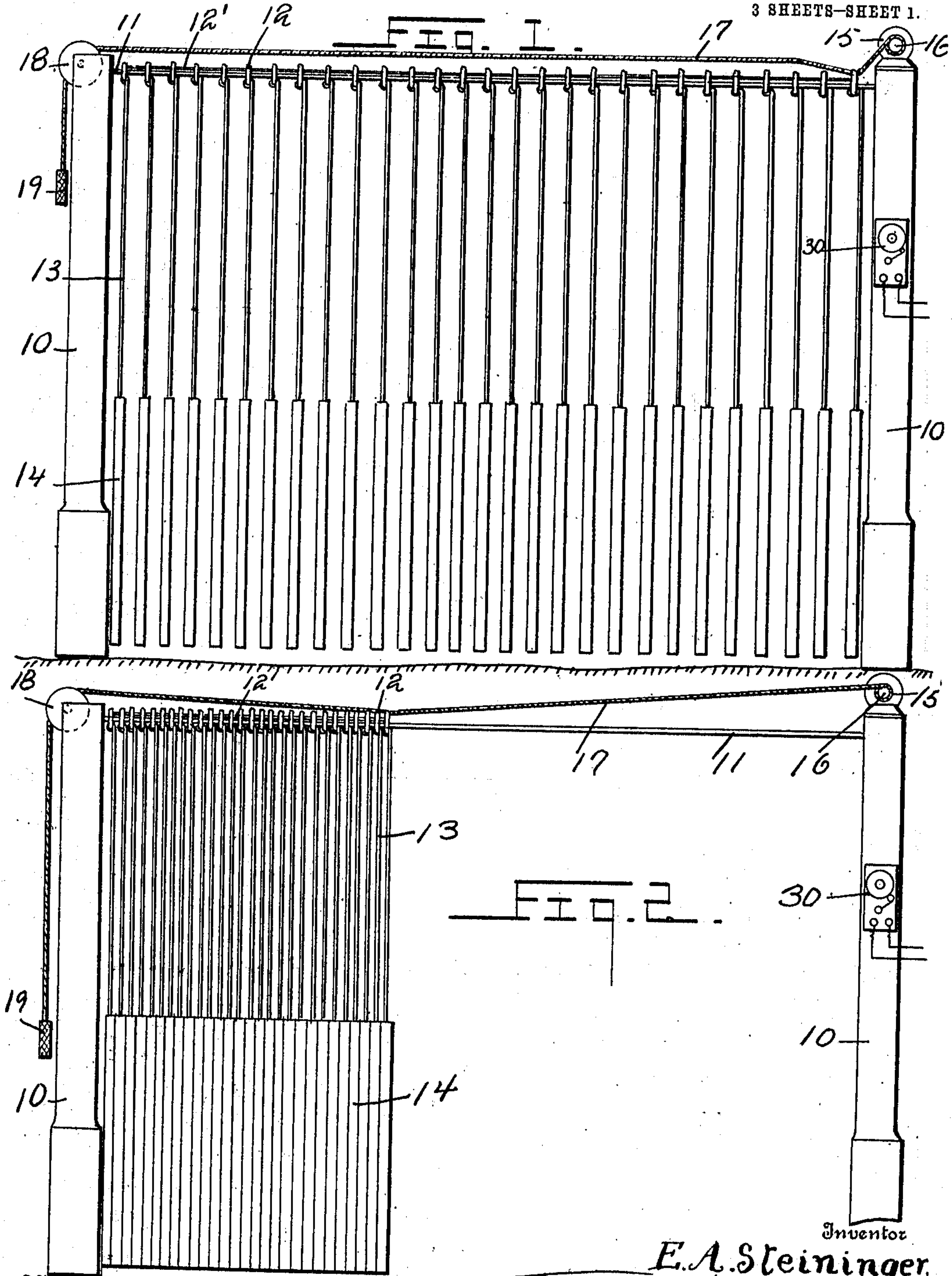


E. A. STEININGER.
RAILWAY CROSSING GUARD.
APPLICATION FILED JAN. 6, 1909.

993,729.

Patented May 30, 1911

3 SHEETS-SHEET 1.



Witnesses
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C. L. Chandler

By Woodward & Chandler

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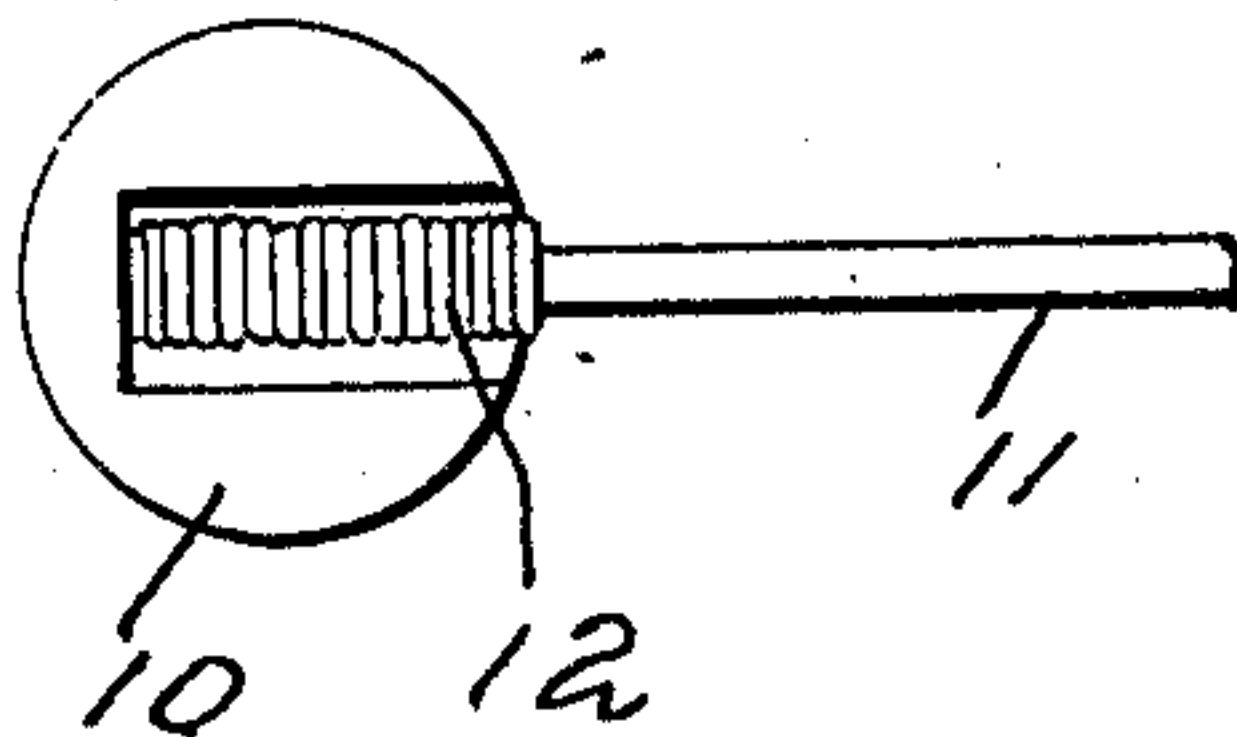
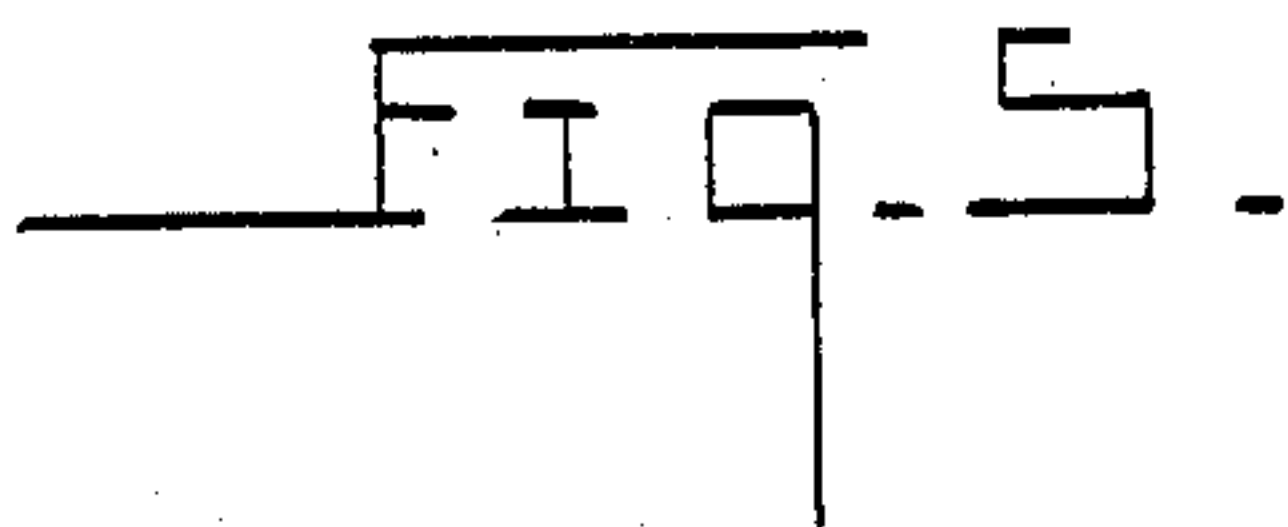
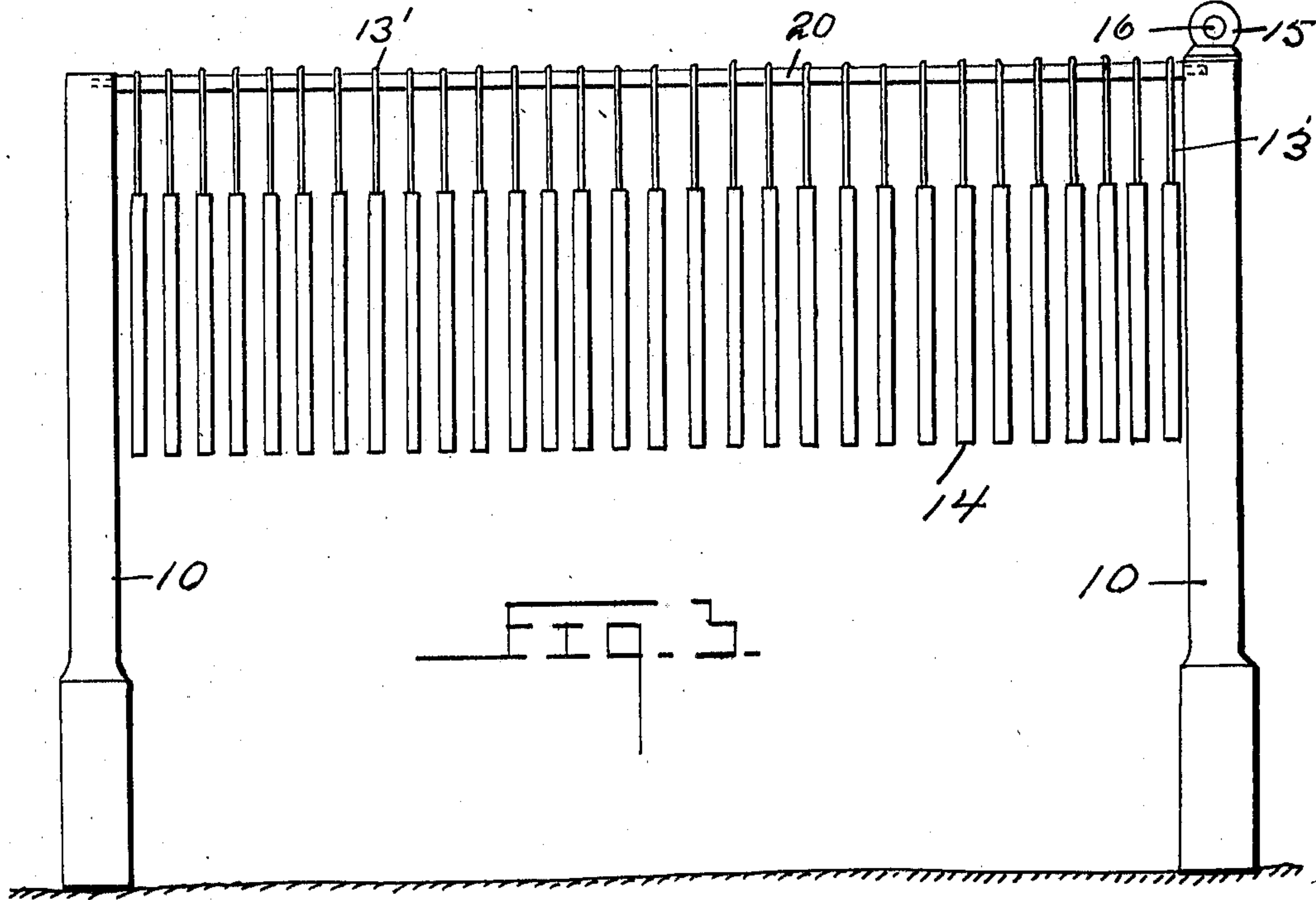
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3 SHEETS-SHEET 2.



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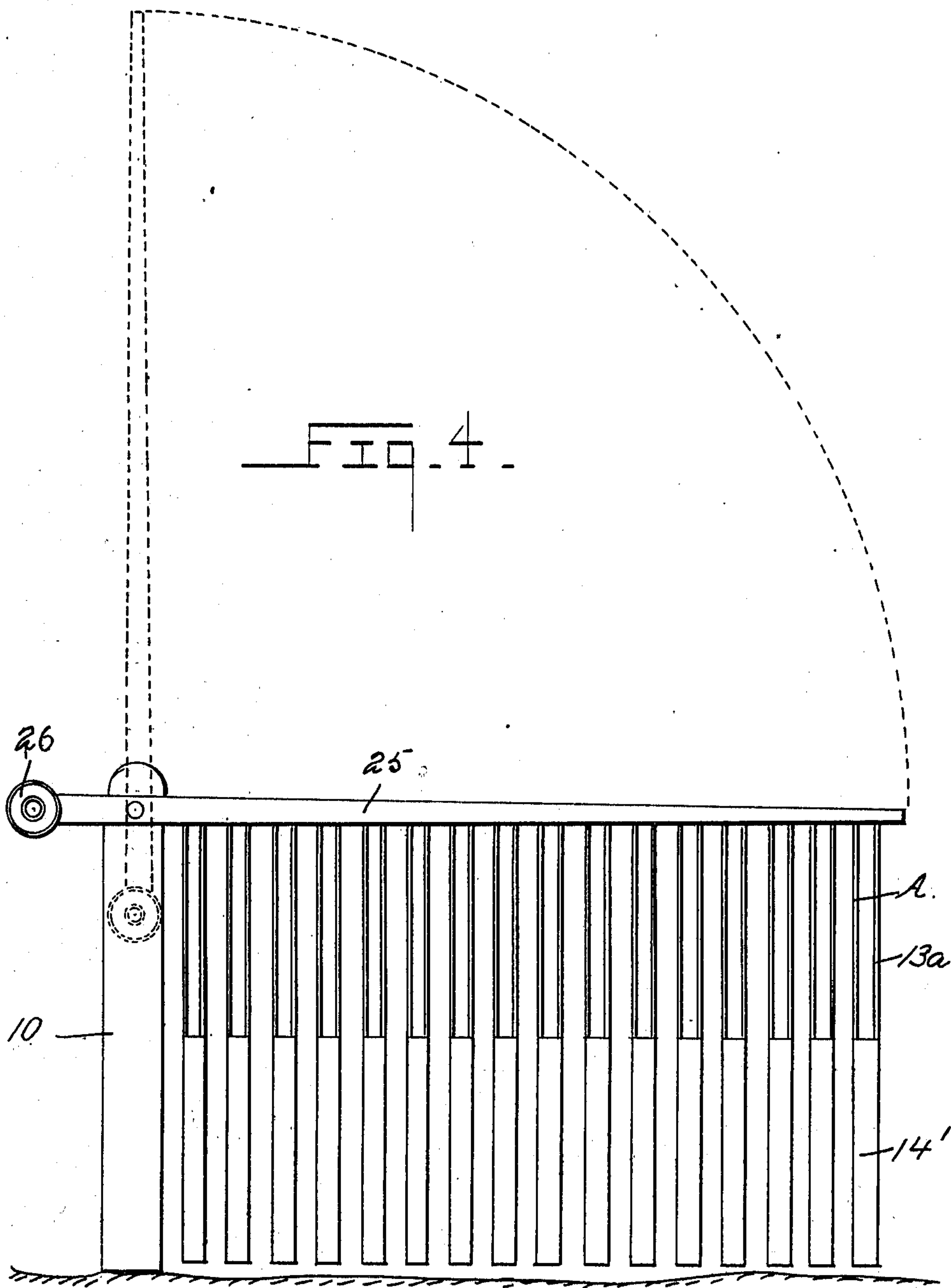
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3 SHEETS-SHEET 3.



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UNITED STATES PATENT OFFICE.

EDWARD ANDREW STEININGER, OF PALO ALTO, CALIFORNIA.

RAILWAY-CROSSING GUARD.

993,729.

Specification of Letters Patent.

Patented May 30, 1911.

Application filed January 6, 1909. Serial No. 470,997.

To all whom it may concern:

Be it known that I, EDWARD ANDREW STEININGER, a citizen of the United States, residing at Palo Alto, in the county of Santa Clara and State of California, have invented certain new and useful Improvements in Railway-Crossing Guards, of which the following is a specification.

This invention relates to crossing signals, and more particularly to movable guards, and has for its object to provide such a device which will present a yieldable obstruction to the passage of traffic when in operative position.

A further object of the device is to provide such a guard which will present a tangible and clearly discernible barrier across a crossing, yet which will allow the passage of vehicles or persons, if necessary, while the gate is in operative position.

Another object is to provide such a device which will warn persons of proximity to a dangerous crossing without danger of accident or injury.

Another object is to provide such a device which will check the passage of a blind or a deaf person without liability of injury.

Other objects and advantages will be apparent from the following description, and it will be understood that changes in the specific structure shown and described may be made within the scope of the claims and that any suitable materials may be used without departing from the spirit of the invention.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a side view of the device in operative position, Fig. 2 is a similar view of the device in inoperative position, Fig. 3 is a side view of a modified form of the device, in inoperative position, Fig. 4 is a similar view of a further modification of the device, Fig. 5 is a top view of the form of the device illustrated in Fig. 1, in open position.

Referring to the drawings, there is shown a guard comprising spaced uprights 10 disposed at opposite sides of the roadway, and carrying therebetween a wire or rod 11 spaced a sufficient distance above the roadway to allow the passage thereunder of vehicles of various types. Disposed slidably upon the rod 11 there are a plurality of rings 12, each having suspended therefrom

a cord or wire 13 carrying at its lower end a band or broad strip of canvas or other suitable flexible material 14. One of the posts carries at its upper end a small motor 15 of a suitable type having a drum 16 thereon carrying a line 17 connected centrally to the outer ring 12 extending over a pulley 18 on the opposite post and carrying a weight 19 therebelow. Each of the rings 12 is connected to the adjacent ring by a flexible connection 12' and it will be seen that upon operation of the motor, the line 13 may be drawn across the roadway and provide a barrier which will serve effectively to warn all persons of their proximity to the railway.

As shown in Fig. 2, the barrier will occupy but little space when in inoperative position leaving the roadway entirely clear.

It will be understood that suitable connections may be made between the motor 15 and distant points on the railway, so that the operation of the device may be automatic, after the manner customary with electrically operated means on signal devices of various kinds.

In Fig. 3, there is shown a modification of the idea, in which the posts carry therebetween a roller 20, to which the supporting members 13' are secured, and which is adapted to be operated after the manner of a curtain. This device is adapted to be operated similarly to the first described form.

In Fig. 4, there is shown a further modification of the device, in which there is provided a pivoted mast 25, upon which there are suspended members 13^a similar to those 13 and 14 in the first described form, with the exception that each piece of canvas 14' is suspended by two members A, similar to those 13 which serve to retain the members 14 in a common plane, so that they present their broadest dimension at right angles to the roadway. The mast is pivoted upon a post 10, at a sufficient height to allow the passage thereunder of vehicles when in inoperative position, and is adaptable to be operated in the same manner that is used in the usual form of tilting gate. The mast 25 is extended beyond its pivoted point oppositely of the roadway and carries a counterbalancing weight 26 thereon. Any of the usual forms of automatic operating means employed for the operation of similar gates in connection with railway crossings, may be combined with this device readily.

It will appear from the foregoing that an effective crossing guard is provided which provides a maximum efficiency with a minimum of danger to persons approaching the crossing, and is designed especially to meet the need presented by the laws of California which provide that only an effective warning shall be given at grade crossings and no obstacle placed across the roadway.

The present device will serve effectively to divert an undriven animal from passing the crossing, as the hanging broad strips tend to give the animal the impression of a formidable barrier, and will prevent the passage of small animals beneath the gate, thus having an advantage over the usual form of tilting gate. In the figures there appears on one of the posts a bell 30 which may be arranged in series with the electrical operating means or if the device is operated by hand may be provided with a clock operating means, releasable by the gate when in operative position. It is not deemed essential to illustrate the details of the operating means for the bell, as this is a mechanical feature not involved in the present invention.

It will be understood that elements in the various forms shown may be combined in one form if desirable to provide a guard of maximum efficiency.

What is claimed is:—

1. A railway cross guard, comprising vertical supports disposed a suitable distance from a crossing and having a longitudinal member, a plurality of narrow and flexible

cords suspended from said member, said cords covering approximately the upper half of the barrier formed thereby and permitting vision therethrough, broad strips of flexible material suspended from the lower ends of the cords and covering approximately the lower half of the barrier, said strips and connected cords being adapted for independent movement to permit the passage of an object but being adapted to present the appearance of a rigid barrier to divert the passage thereof and means for moving said barrier forming members into and out of operative position.

2. A railway crossing guard comprising supporting standards, a supporting member carried therebetween, a plurality of flexible members suspended from the supporting member and slidable thereon, a drum carried by one of said standards, a pulley mounted upon the opposite standard, a weighted cable connected to the drum and movable over the pulley, said suspending members being connected with the cable, means for winding the drum to move the suspending members into operative position and means for releasing the drum to allow the return of the suspending members to inoperative position under the influence of the weight.

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

EDWARD ANDREW STEININGER.

Witnesses:

J. J. MORRIS,

W. E. SOUTHWOOD.