R. V. JONES.

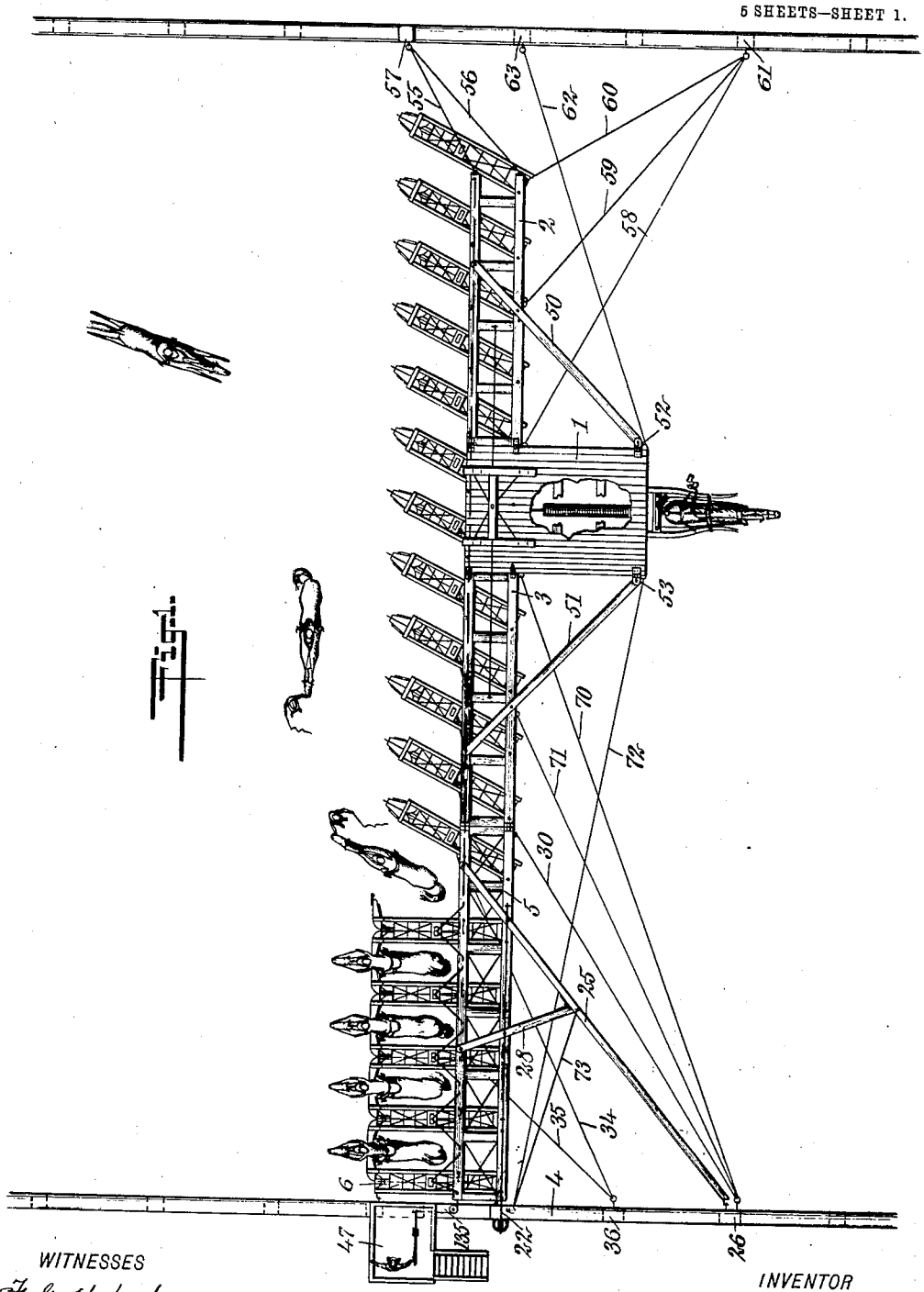
STARTING AND SEPARATING GATE.

APPLICATION FILED DEC. 29, 1908.

939,703.

Patented Nov. 9, 1909.

5 SHEETS—SHEET 1.



WITNESSES

F. G. Hackenberg.

Wm. J. Sperl.

INVENTOR

Robert V. Jones

BY Munn & Co.

ATTORNEYS

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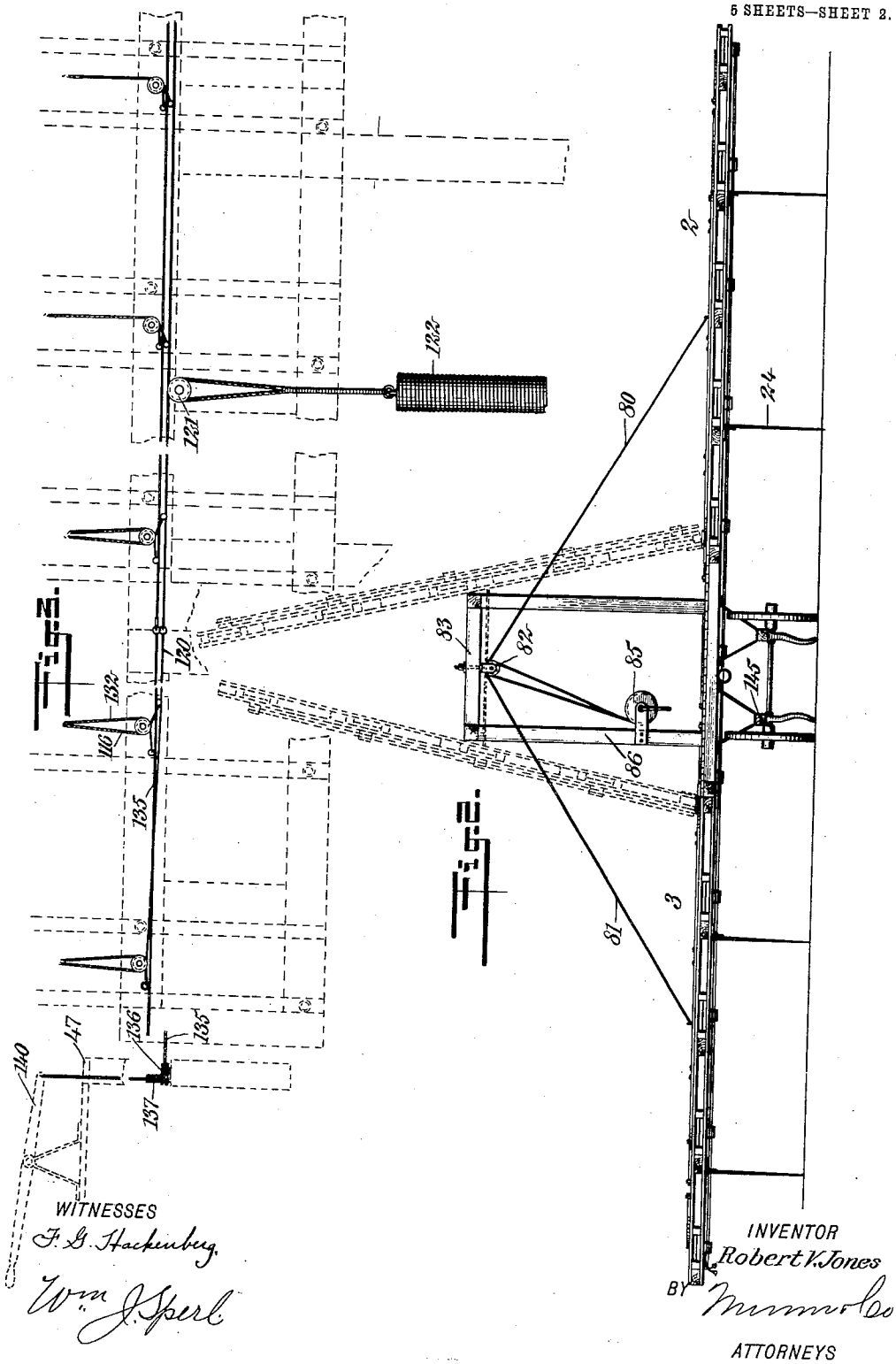

Fig. 3.

Fig. 2.

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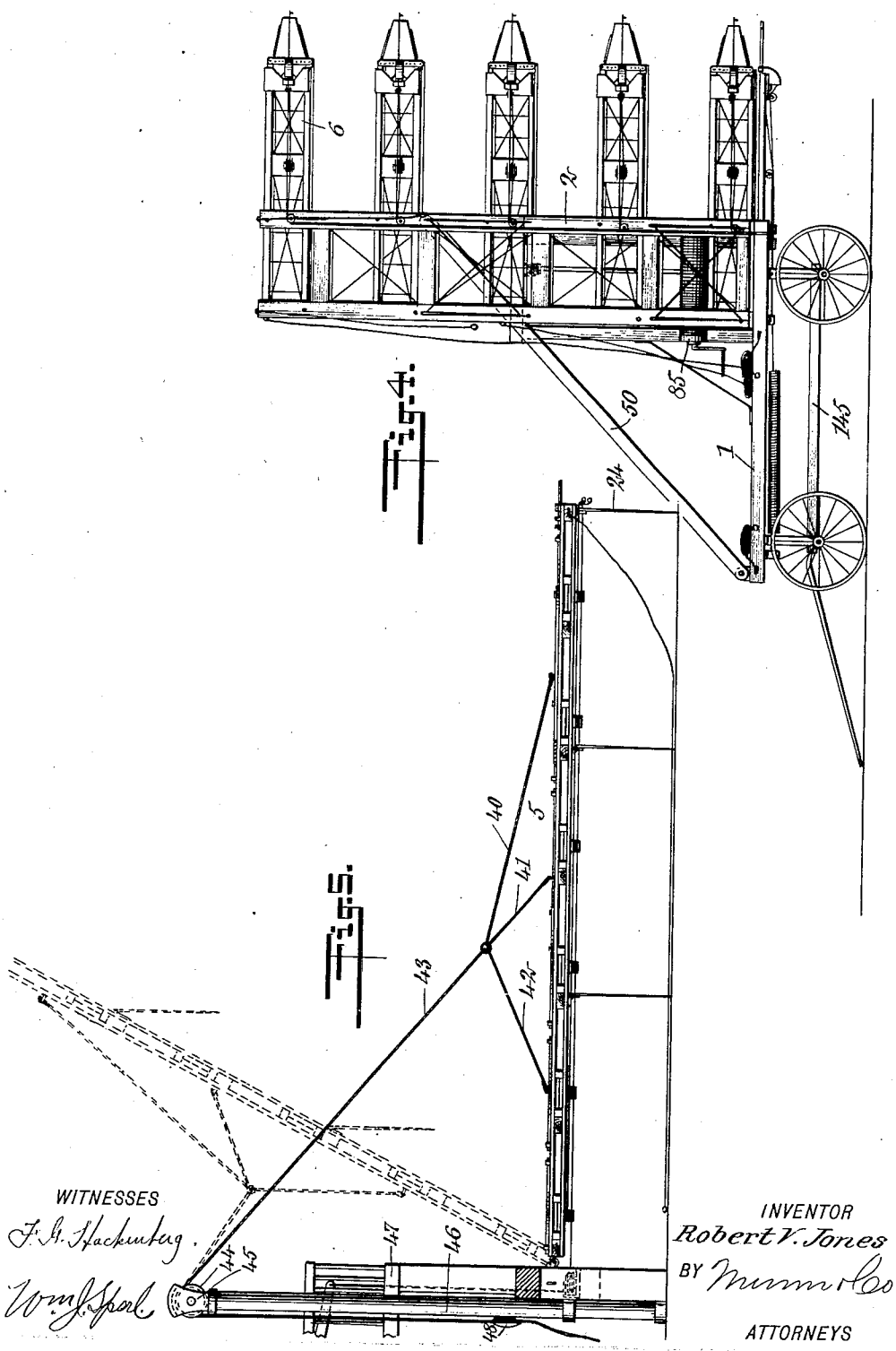

Fig. 4.

Fig. 5.

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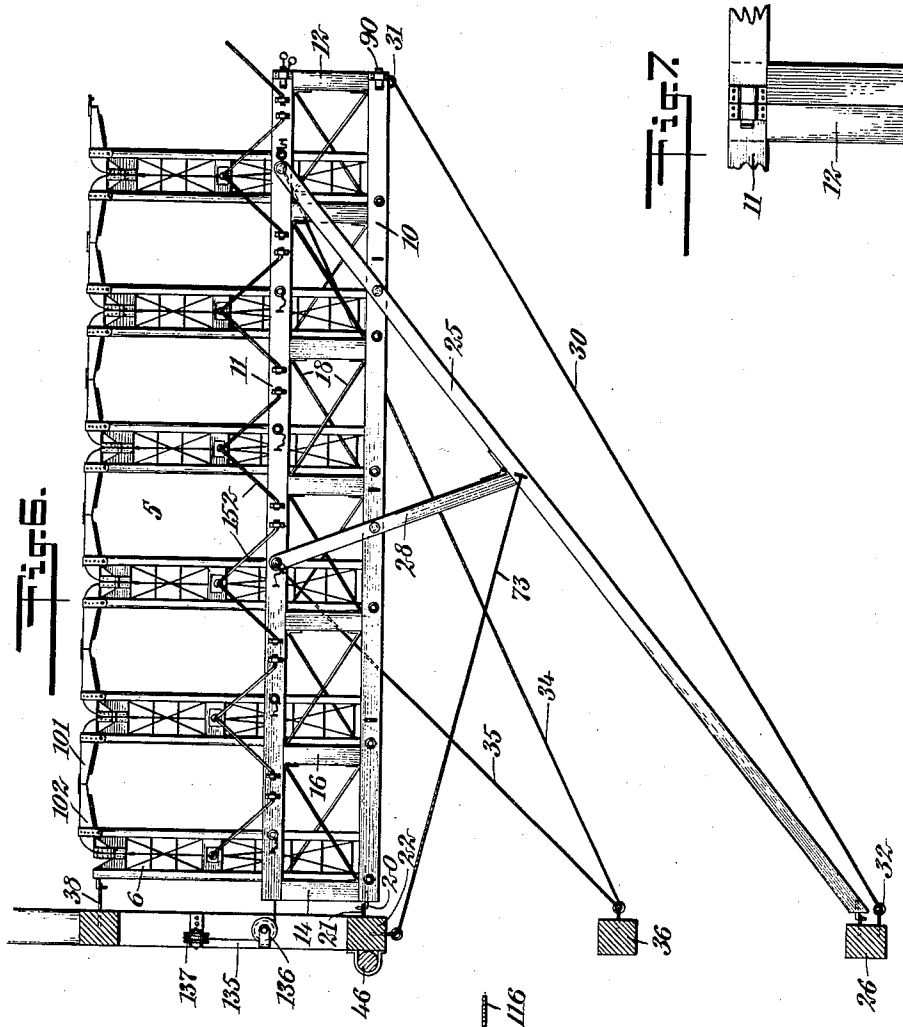

Fig. 6.

Fig. 7.

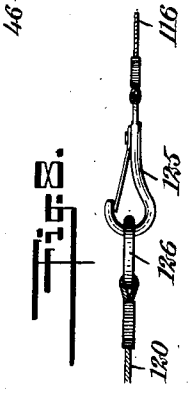

Fig. 8.

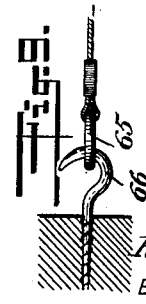

Fig. 9.

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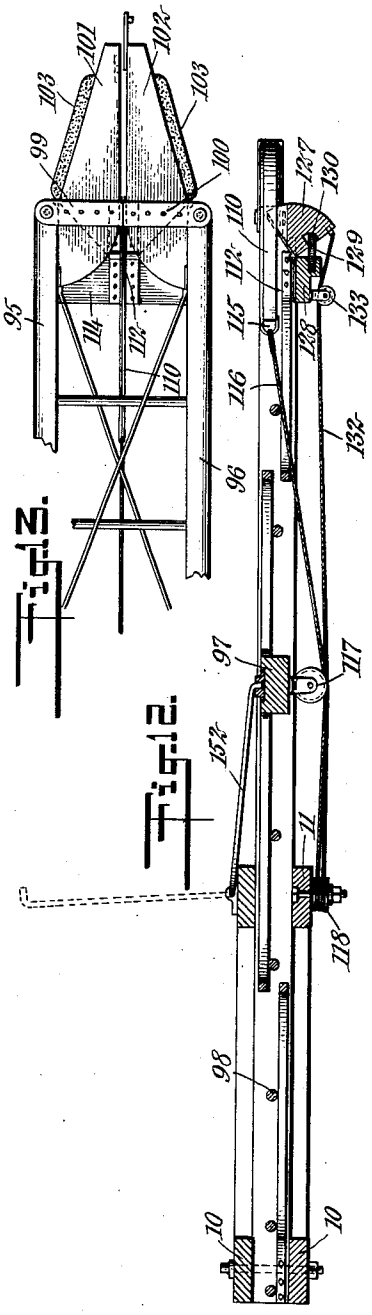

Fig. 12.

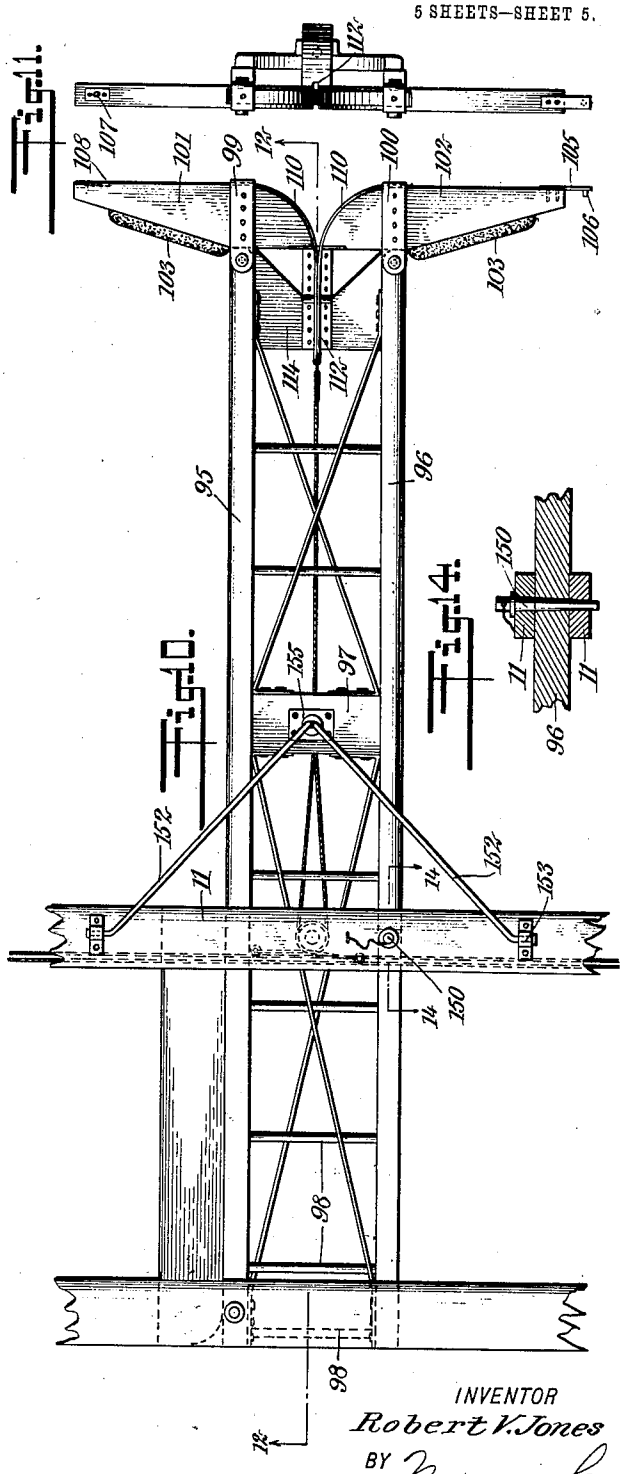

Fig. 11.

Fig. 10.

Fig. 14.

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INVENTOR

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ATTORNEYS

UNITED STATES PATENT OFFICE.

ROBERT VINTON JONES, OF SEATTLE, WASHINGTON.

STARTING AND SEPARATING GATE.

939,703. Specification of Letters Patent. Patented Nov. 9, 1909.

Application filed December 29, 1908. Serial No. 469,806.

To all whom it may concern:

Be it known that I, ROBERT VINTON JONES, a citizen of the United States, and a resident of Seattle, in the county of King and State of Washington, have invented a new and Improved Starting and Separating Gate, of which the following is a full, clear, and exact description.

This invention relates to an improved device for separating running horses on a race track, to facilitate the correct starting of the horses in the race. With many of the starting gates and methods now employed, unfair starts are very frequent. The horses are frequently kicked by one another, and the jockeys injured by being thrown from the horses during this time.

It is the object of my invention to obviate all accidents of this class, by providing means for locking each horse in a separate inclosure and starting the horses a sufficient distance apart, in order that they may not trample upon each other, nor allow the jockeys to interfere with one another when the horses start upon the race.

It is a further object of my invention to so construct the spacing members and locking means that they shall all be on a line below the feet of the jockeys, so that they will not become entangled when starting out on the race.

A further object of the invention is to provide a portable gate which can be quickly set up and quickly removed after the start, in order to clear the track.

The invention consists in the construction and combination of parts to be more fully described hereinafter and particularly set forth in the claims.

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 figures.

Figure 1 is a plan view showing the separating gate in position upon a track with some of the horses in place; Fig. 2 is a front elevation of the supporting platform and connected sections; Fig. 3 is a partial diagrammatical view of the cords which control the locking means; Fig. 4 is a side elevation showing the sections raised ready for removal from the track; Fig. 5 is a rear elevation of the end section which is secured to a stationary structure at the starter's stand; Fig. 6 is a plan view of this end section; Fig. 7 is a detail of the catches for connecting the sections; Figs. 8 and 9 are details of the cord fasteners; Fig. 10 is an enlarged plan view of one of the spacing members, showing the barriers in locked position; Fig. 11 is an end elevation of the same; Fig. 12 is a vertical section taken on the line 12—12 of Fig. 10; Fig. 13 is a partial plan view of one of the spacing members showing the barriers thereof open; and Fig. 14 is a vertical section showing the locking pin, and taken on the line 14—14 of Fig. 10.

In said drawings I have conveniently shown a supporting platform 1, to the opposite sides of which are hinged the frames 2 and 3. Secured to one side of the race track fence 4, is a section 5 similar to sections 2 and 3, and connected to section 3 in such a manner that the entire structure extends substantially across the entire race track.

In order to confine the horses in their proper positions, I provide spacing members 6 which are pivotally attached to the main frames 2, 3 and 5, and may be locked in position, as shown in the left-hand side of Fig. 1, after the horse has been placed within the proper inclosure.

I will next describe the detail construction of the frame 5, which is substantially the same as the frames 2 and 3. The frame 5 comprises side beams 10 and 11, to which are fastened end beams 12 and 14. In order to properly brace the frame, I provide intermediate struts 16 and iron cross ties 18. The side beams 10 and 11 are spaced apart by the beams 12, 14 and struts 16 in order to receive the spacing members 6, the construction of which will be described farther on.

Secured to the left-hand end of the frame 5, is a hook 20 engaging an eye-bolt 21 which is fastened to the vertical post 22 of the race track fence. Pivotally attached to the under side of the frame 5 are a series of legs 24 which rest upon the ground and thereby support the framework in a proper horizontal position. As a further means for

properly staying the frame 5, I secure a beam 25 to the upper side of the side beams 10 and 11, and attach the other end of the beam 25 to a post 26 of the race track fence, by means of a hook and eye, as described above. A strut 28 is also provided, and hinged to the beam 25 at substantially the middle of its length, said strut being also fastened to the frame. As shown in Fig. 6, as a further means for steadying the framework, I attach a cord 30 to the eye-bolt 31 of the frame 5, and also to an eye-bolt 32 on the post 26. Additional steadying means are provided by means of cords 34 and 35 attached at one end of the frame 5, and at the other end to a post 36. The left-hand spacing member 6 is also connected to the race track fence by means of a hook and eye connection 38.

In order to raise the framework 5 away from the track I provide cords 40, 41 and 42, which are attached to the framework and also to a single cord 43 which passes over a sheave 44 journaled in a frame 45, which is mounted upon the top of a post 46 near the starter's stand 47. The cord 43 after passing over the sheave 44, is wound around a cleat 48 upon the post 46. By referring to Fig. 5 it will be seen how the device operates, since its raised position is shown in dotted lines.

The frames 2 and 3 are connected to the platform 1 by means of hinges and also by means of beams 50 and 51 respectively, which are secured at one end to said frames, and at their other end to hinges 52 and 53 fastened to said platform. The frame 2 is provided with additional stays in the form of cords 55 and 56, secured thereto, and also to a post 57, together with cords 58, 59 and 60 secured to said frame and also to a post 61. A cord 62 is also provided, extending from a post 63 to the platform 1. These cords may be secured to the posts by means of rings 65 attached to the cords, and hooks 66 secured in the posts, as clearly shown in Fig. 9. Obviously any other form of connection may be provided whereby the cords may be readily unfastened in order to allow the gate to be quickly removed from the track.

The frame 3 is provided with cords 70 and 71 which are secured at one end to said frame, and at the other end to the post 26. Additional staying means are provided by means of a cord 72 secured at one end to the platform 1, and at the other end to the post 22. The beam 25 is also stayed by means of a cord 73 attached thereto, and also to the post 22.

In order to raise the frames 2 and 3 into the position shown in Fig. 4, I provide cords 80 and 81 secured to said frames 2 and 3 respectively, and passing around a double sheave 82 supported by a horizontal cross beam 83. Said cords then pass around a winding drum 85 suitably supported by a vertical beam 86.

In order to connect the frames 3 and 5 together rigidly, I provide bolts 90 which slide in bearings 92 secured to the upper sides of said frames, as clearly shown in Fig. 7. When it is desired to remove the gate from the track said bolts 90 are removed sufficiently to allow the frame to come apart.

I will next describe one of the spacing members 6, and it will be understood that they are all of the same construction, and their number may be varied to suit the requirement. Each spacing member comprises side beams 95 and 96 secured to opposite ends of a central beam 97. Located at intervals along the length of the beams 95 and 96 are rods 98 which connect the beams and maintain them a proper distance apart. Pivotally connected with the outer ends of the beams 95 and 96 are U-shaped straps 99 and 100, to which are fastened the barriers 101 and 102 respectively. The inner faces of the barriers are provided with pads 103 which are rounded so that the animal may not become injured by contact therewith previous to starting the race. Secured to the outer free end of the barrier 102 is a locking plate 105 provided with a pin 106 which is adapted to enter a hole 107 in a plate similar to the plate 108 which is attached to the outer free end of the barrier 101. The member 6 is pivoted between the beams 10 and may be locked in position by a pin 150 passing through the beams 11 and 96, as shown in Fig. 14. After the member is in its locked position it is further braced by the rods 152 mounted in bearings 153 on the upper beam 11 and having their free ends entering a plate 155 upon the beam 97.

In order to control the movement of the barriers, a strap 110 is attached to each barrier and passes through the guide 112 secured to a beam 114 extending between the beams 95 and 96. Said straps 110 are united and connected by means of an eye 115 to a cord 116 which passes under a guiding pulley 117 mounted upon the under side of the beam 97. Said cord 116 then passes around one portion of a double sheave 118 which is rotatably mounted upon the under side of one of the beams 11. The cord 116 is then connected to a cord 120 which passes around one portion of a double sheave 121 and is connected to a coiled spring 122 secured to the under side of the platform 1. A convenient form of securing means for connecting the cords 116 and 120 is shown in Fig. 8, which comprises a spring catch 125

carried by the cord 116 engaging an eye 126 carried by the cord 120. It will be understood that each of the spacing members 6 is provided with a cord similar to the cord 116 and connected to the cord 120 which extends longitudinally along the gate, as shown diagrammatically in Fig. 3. In Fig. 3 two cords are shown passing around the sheave 121, but it will be understood that the right-hand cord is similar to the cord 120, and wound around the sheave in an opposite direction from said cord 120 in order to control the spacing members on both sides of the platform 1. The spring 122 is under tension, thus acting equally to open all the barriers simultaneously when released from their locking means.

In order to lock the barriers 101 and 102 in the position shown in Fig. 10, I provide a pivoted catch 127 secured to a support 128 mounted upon the under side of the guide 112. In order to maintain the catch 127 in its upper position, as shown in Fig. 12, I provide a spring plunger 129 which is supported on the member 128 and engages a notch 130 formed in the under side of the catch 127. In order to remove the catch from locking position, I provide a cord 132 secured to said catch and passing over a sheave 133 supported by the member 128. Said cord then passes over the sheaves 117 and 118 and is then connected to a cord 135 which passes over the sheaves 136 and 137 to a handle 140 mounted upon the starter's platform 47. It will be evident that all the controlling cords 132 of the various separating members 6 are connected to the cord 135 so that they may all simultaneously operate when the starter moves the handle 140. As soon as the locking catches 127 are removed, the barriers 101 and 102 automatically and simultaneously assume the position shown in Fig. 13.

From the construction above set forth, it will be noted that there are no obstructions above the lines of the stirrups of the jockeys, thus precluding any possibility of their becoming entangled or tripped when starting on a race. Furthermore, the barriers engage the horses along the line of the chest and all open evenly and simultaneously, thus insuring a fair and even start for the race. After the start, the cords connected to the posts 57, 61 and 63, together with those connected to the posts 22 and 26, may be unhitched, and the bolts 90 withdrawn, whereupon the frames 2 and 3 may be elevated by means of the drum 85 and the cords attached thereto. These frames may then be drawn aside by means of a horse attached to a running gear 145. The frame 5 may then be elevated by means of the cord 43, as clearly shown in Fig. 5.

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

1. A starting and separating gate, comprising a frame composed of upper and lower bars connected together in spaced relation and adapted to be arranged transversely of the track, a plurality of spacing members, each consisting of spaced parallel bars arranged in a horizontal plane and connected together, said members having one end pivoted between the first named bars, means for locking said members in a position perpendicular to the bars, a barrier hinged to the free end of each of the last named bars, and coöperating with the barrier of the bar of the adjacent member for closing the space between said members, springs connected with said barriers and normally acting to move them into a position in alinement with the corresponding spaced member, means for locking the barriers in a position transverse to the spacing members, and means for simultaneously releasing the locking means of all of the barriers.

2. A starting and separating gate, comprising a frame adapted to be arranged transversely of the track, spacing members having one end pivoted to the frame, means for locking said members perpendicular to the frame, a barrier pivoted to each corner of the end of the members remote from the frame, each barrier coöperating with the adjacent barrier of the adjacent member to close the space therebetween, springs connected with said barriers and normally acting to move them into a position in alinement with the corresponding spaced member, means for locking the barriers in a position transverse to the spacing members, and means for simultaneously releasing the locking means of all of the barriers.

3. A starting and separating gate, comprising a frame, adapted to be arranged transversely of the track, spacing members having one end pivoted to the frame, means for locking said members perpendicular to the frame, a barrier pivoted to each corner of the end of the members remote from the frame, each barrier coöperating with the adjacent barrier of the adjacent member to close the space therebetween, means for locking the barriers in a position transverse to the spacing members, and means for simultaneously releasing the locking means.

4. A starting and separating gate, comprising a frame, adapted to be arranged transversely of the track, spacing members having one end pivoted to the frame, means for locking said members perpendicular to the frame, a barrier pivoted to each corner of the end of the members remote from the frame, each barrier coöperating with the ad-

jacent barrier of the adjacent member to close the space therebetween, means for locking the barriers in a position transverse to the spacing members, and means for simultaneously releasing the locking means, and means for moving the frame away from the track.

5. A starting and separating device, comprising a frame arranged transversely of the track, spacing members pivoted thereto and in spaced relation, barriers pivoted to the members, springs connected thereto and normally acting to move the barriers into alinement with the spacing members, a locking means for each barrier to retain it transverse to the spacing members and means for simultaneously releasing the locking members.

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

ROBERT VINTON JONES.

Witnesses:
GEORGE W. SERGEANT,
NELSON H. JONES.