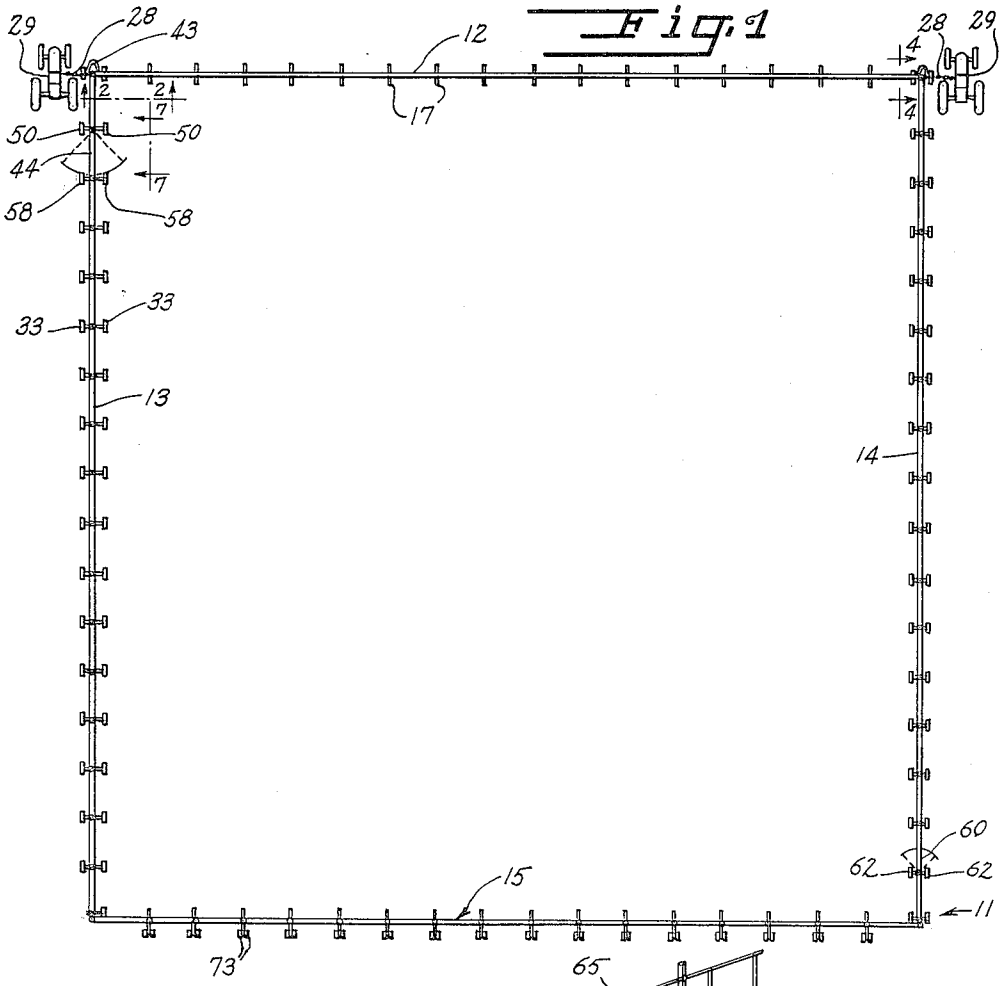
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MOBILE FENCE

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Fig. 1



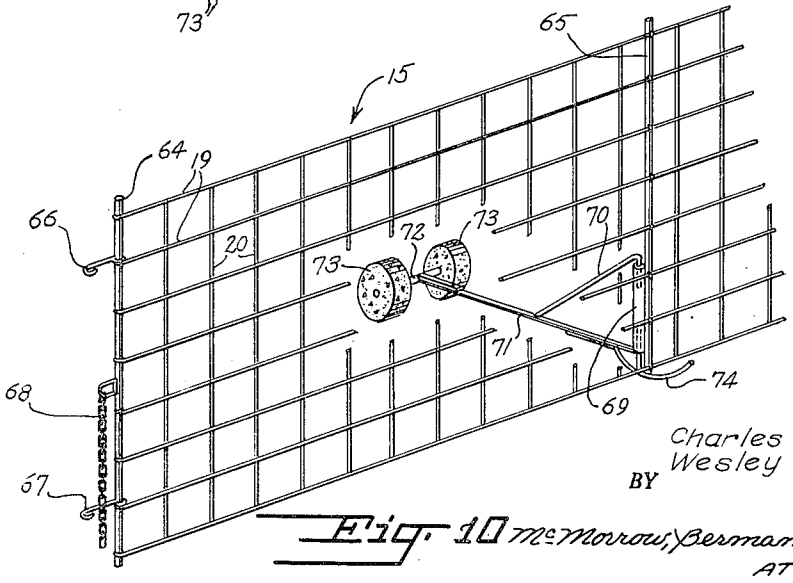


Fig. 10

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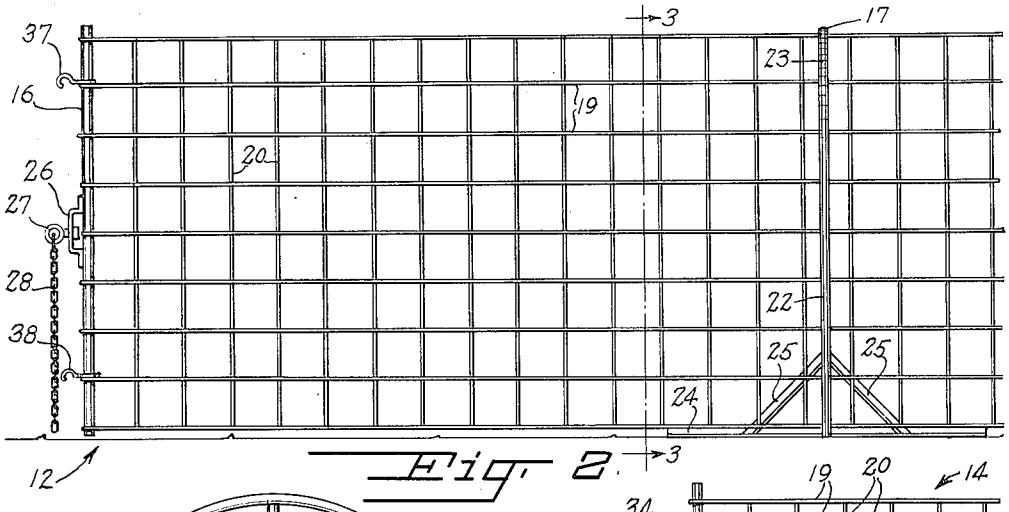


Fig. 2.

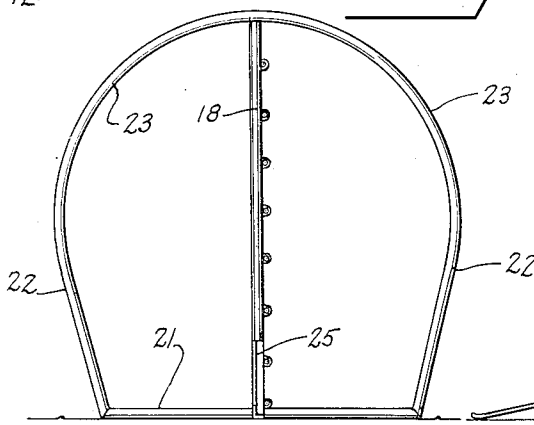


Fig. 3

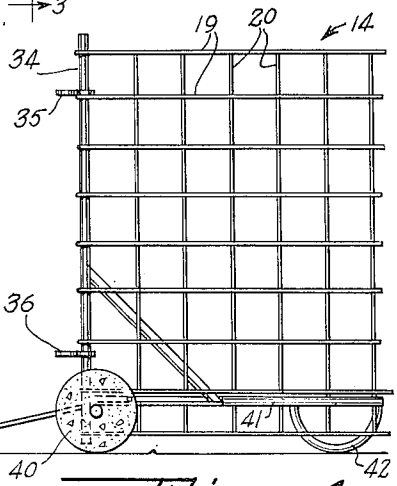


Fig. 4

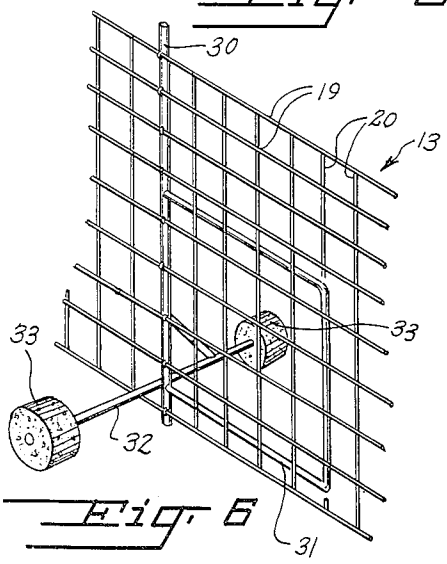


Fig. 6

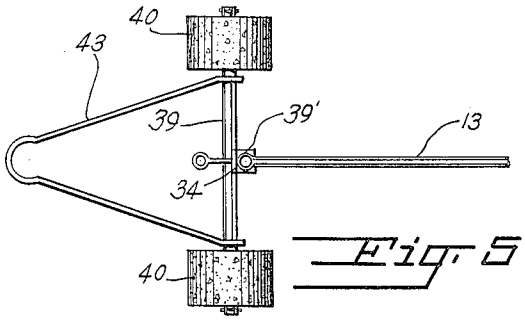


Fig. 5

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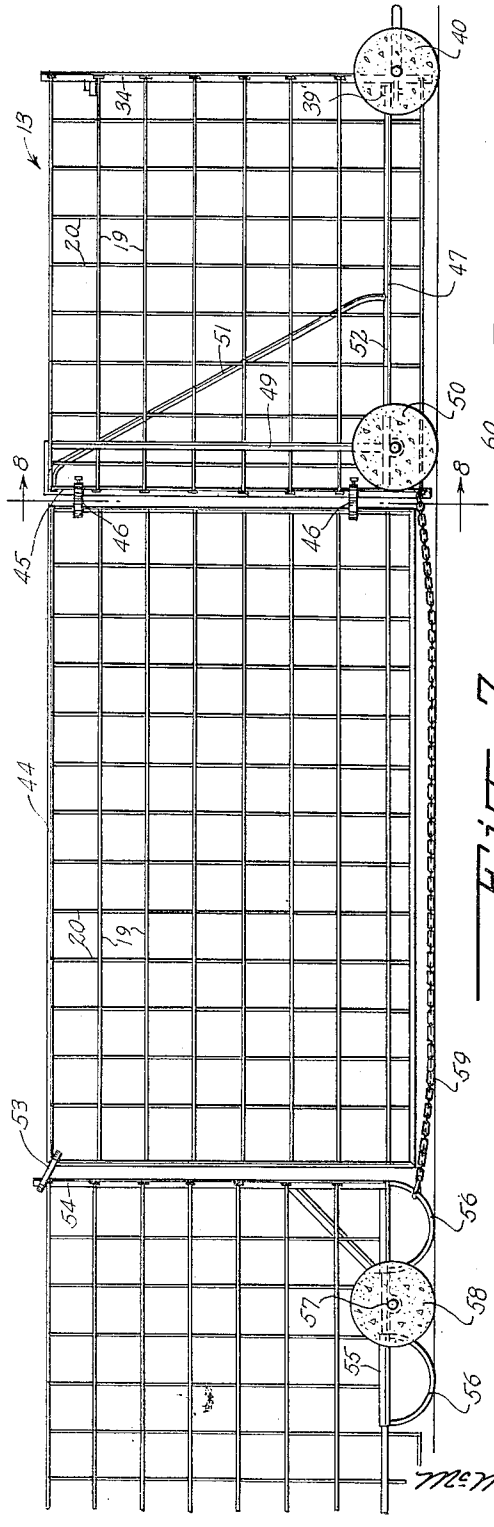


Fig. 7

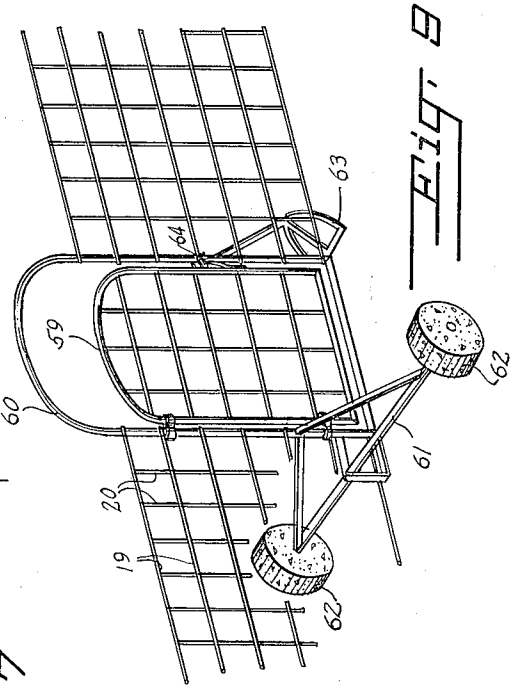


Fig. 9

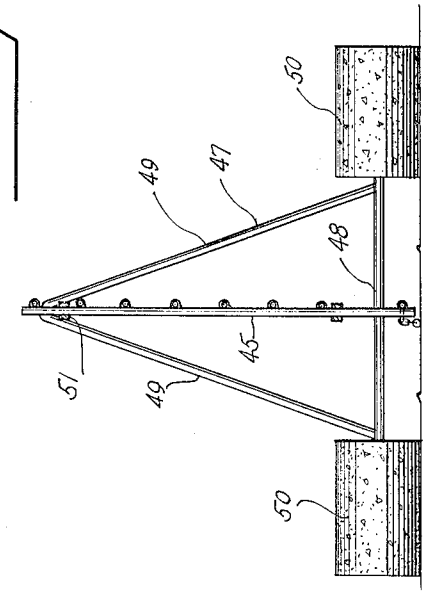


Fig. 8

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MOBILE FENCE

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Application January 25, 1955, Serial No. 483,888

3 Claims. (Cl. 256—21)

This invention relates to enclosures, and more specifically to a portable fence arranged so that it can be moved or transported in an assembled position to new locations.

The main object of the invention is to provide a novel and improved mobile fence which is simple in construction, which may be readily moved by conventional hauling means, such as tractors or the like, and which provides a considerable saving in time and labor in the transportation of an enclosure, for example, a livestock or poultry enclosure, whereby the expense and time required to move the enclosure is considerably reduced as over conventional methods heretofore employed for this purpose, and whereby disease control and sanitation are facilitated.

A further object of the invention is to provide an improved mobile fence especially suitable for use as an enclosure for livestock, such as poultry or the like, the improved enclosure involving relatively inexpensive components, being durable in construction, being easily maneuverable, being readily movable over relatively irregular terrain, and greatly reducing the amount of human effort involved in transporting the enclosure from one location to a new location whenever the need for such transportation arises, for reasons such as improving sanitary conditions, control of disease, improving feeding conditions, or the like.

Further objects and advantages of the invention will become apparent from the following description and claims, and from the accompanying drawings, wherein:

Figure 1 is a top plan view of a mobile enclosure constructed in accordance with the present invention.

Figure 2 is an enlarged fragmentary front elevational view taken on the line 2—2 of Figure 1 and showing a portion of the forward section of the enclosure.

Figure 3 is a cross sectional view taken on the line 3—3 of Figure 2.

Figure 4 is an enlarged vertical cross sectional view taken on the line 4—4 of Figure 1.

Figure 5 is a top view of the forward end post of a side section of the mobile enclosure.

Figure 6 is a fragmentary perspective view of a portion of one of the side sections of the enclosure of Figure 1.

Figure 7 is an enlarged elevational view taken on the line 7—7 of Figure 1.

Figure 8 is a transverse cross sectional view taken on the line 8—8 of Figure 7.

Figure 9 is a fragmentary enlarged perspective view of the portion of a side section of the enclosure of Figure 1 adjacent a gate.

Figure 10 is an enlarged fragmentary perspective view of an end portion of the rear section of the enclosure of Figure 1.

Referring to the drawings, the improved mobile enclosure is designated generally at 11 and comprises a plurality of sections detachably connected together to define an enclosure, for example, a forward section 12, side sections 13 and 14, and a rear section 15 connected together to define a rectangular enclosure, as shown.

The forward section 12 comprises the respective opposite end posts 16 and the spaced intermediate hoop elements 17, said hoop elements having normally vertical upstanding axial post elements 18 which are arranged parallel to the end posts 16 and to which are connected the horizontal wires 19 of the fence section. As shown in Figure 2, the horizontal wires 19 are connected in the usual manner by vertical wires 20 to define a mesh-like barrier.

Each hoop section 17 comprises a ground-engaging horizontal bottom bar 21 arranged transverse to the barrier defined by the mesh elements 19, 20, the ends of the bottom bar 21 being rigidly connected to upwardly and outwardly inclined bar elements 22, 22, said bar elements being rigidly connected at their top ends to a substantially semicircular top bar 23 which is secured at its intermediate portion to the top end of the upstanding member 18.

Rigidly secured to the bottom end of the upstanding member 18 is the bar member 24 extending perpendicular to the bar member 21 and braced to the upstanding member 18 by the inclined strut elements 25, 25, as shown in Figure 2. The member 24 underlies the mesh-like barrier defined by the wire elements 19, 20.

From Figure 3 it will be seen that each hoop element 17 is generally circular in shape, although the hoop elements have the base portions defined by the transversely connected bars 21 and 24, so as to be supported in a normally stable position, as illustrated in Figures 2 and 3. However, the hoop member 17 may be readily tilted and rolled in response to movement of the forward section 12 in a direction normal thereto, for example, in a forward direction as viewed in Figure 1.

Secured to the intermediate portion of each end post 16 is a laterally projecting bracket 26 to which is swivelly connected an eye member 27. Secured to the eye member 27 is a chain 28. As illustrated in Figure 1, the respective chains 28 may be connected to respective tractors 29 located adjacent the respective opposite ends of the forward section 12, so that the forward section may be moved forwardly by said tractors 29. The forward movement of the tractors causes the forward section 12 to roll on the hoop elements 17, the forward fence section 12 being free to rotate by the provision of the swivel connections between the eye members 27 and the brackets 26, as above described.

The respective side sections 13 and 14 each comprises barriers defined by horizontal, spaced wires 19 and vertical spaced wires 20, the horizontal wires 19 being secured to spaced post elements 30. The post elements 30 are braced by respective U-shaped frame members 31 which are secured to the lower portions of the post members, as shown in Figure 6, and which are suitably secured to the fence wires 19, 20. Rigidly secured to the lower portion of each post member 30 is a transversely extending axle 32 on the ends of which are journaled the concrete rollers 33, 33, as shown in Figure 6. Each of the side sections 13 and 14 has the end post 34, as shown in Figure 4. The end posts 34 are provided with the eye members 35 and 36 at their upper and lower portions which are adapted to be connected in any suitable manner to hook members 37 and 38 provided on the upper and lower portions of the end post 16 of forward section 12.

Rigidly secured to the lower portion of each forward end post 34 of the respective side sections 13 and 14 is a transverse axle 39 on the ends of which are journaled the respective concrete rollers 40, 40, as shown in Figure 5. Side section 13 is provided with a vertical hinge joint 39' at the forward end post 34 thereof, as shown in Figure 5, to provide additional flexibility in turning section 13. Rigidly secured to the intermediate portion of the

axle 39 is the rearwardly extending, horizontal bar 41, and rigidly secured to the rear end portion of the bar 41 is the arcuate, ground-engaging skid 42, as shown in Figure 4. Secured to each axle 39 inwardly adjacent the respective rollers 40, 40 is the generally V-shaped, forwardly projecting hitch tongue 43 adapted to be connected to a suitable hauling means, such as a tractor or the like, whereby the respective side sections 13 and 14 may be hauled individually, if so desired, by means of a tractor 29 connected to the hitch tongue 43 of the side section.

The side sections are provided with gates, for example, with gates 44 shown in Figure 7.

Each gate 44 may be hinged to a post element 45, by suitable hinge members 46, 46 shown in Figure 7, the post 45 being suitably braced to the portion of the section 13 associated therewith by the provision of a suitable rigid frame 47 which may comprise a transversely extending axle 48 rigidly secured at its intermediate portion to the lower portion of the post 45, said axle being braced by inclined strut members 49, 49 connecting the portions of the axle 48 inwardly adjacent rollers 50 journaled on the ends of the axle to the top end of the post 45, as shown in Figure 8. The frame 47 further comprises an inclined strut element 51 connecting the top end of the post member 45 to the intermediate portion of a horizontal bottom member 52 arranged substantially in the plane of the fence section and suitably secured to the fence wires thereof. As shown in Figures 7 and 8, the strut elements 49, 49 may comprise respective sides of an inverted V-shaped bar which is arranged over the upper portion of the inclined strut member 51 and which is suitably secured to said inclined strut member 51 at the upper portion thereof.

The gate 44 is provided with the catch loop 53 at its free upper corner which is engageable over the top end of the post element 54 of the remaining section of the side of the enclosure, said post element 54 being provided with a suitable bottom frame 55 having the generally semicircular, arcuate skids 56 disposed on opposite sides of a transverse axle 57 on the ends of which are journaled suitable concrete rollers 58. A chain 59 is provided which connects the skid 56 adjacent the gate 44 with the hinge post 45 so as to provide a positive connection between the respective portions of the side section 13 at the opposite sides of the gate 44, thus enabling the side section to be moved forwardly with the remainder of the enclosure, or to be moved forwardly individually by a tractor 29, as above described.

The gate 44 as shown in Figure 1 is relatively wide, for use by livestock and large equipment, such as tractors. Figure 9 illustrates a smaller gate 59 which may be employed in either of the side sections, said smaller gate being hinged in a frame 60 provided at one side with the transverse axle 61 having the concrete rollers 62, 62 journaled on its opposite ends and provided on its opposite side with the ground-engaging skid 63 which is inclined upwardly and forwardly, namely, in the direction of the forward section 12. The frame 60 is secured to the fence wires 19, 20 of the fence section in any suitable manner, whereby the frame 60 is incorporated in the fence section and is movable therewith. As shown in Figure 9, the gate 59 may be hinged to one side of the generally doorway-shaped main element of the frame 60 and may be provided with a releasable catch 64 engageable with the other side of said doorway-like main element.

The rear fence section is provided with the vertical end posts 64 to which the horizontal fence wires 19 are secured, the vertical fence wires 20 being secured to the horizontal fence wires 19 in the same manner as described in connection with the sections of the fence above described. The rear section 15 includes the spaced vertical post elements 65 to which the horizontal fence wires 19 are suitably secured.

The top and bottom portions of the end posts 64 are provided with the connecting hook members 66 and 67 adapted to be suitably fastened to cooperating connecting eye members provided on the rear end posts of the respective side sections 13 and 14. Connected to the intermediate portions of the end posts 64 are chains 68 which may be connected to tractors 29, 29 for moving the rear fence section 15 forwardly, when so desired.

The vertical post elements 65 are provided with vertical hinge sleeves 69 at their lower portions in which are swivelly engaged the hinge loops 70 of rearwardly extending caster frames 71, which may each comprise a rearwardly extending horizontal bar having a transverse axle 72 secured to its free end. Journaled on the end portions of each axle 72 are the concrete rollers 73, 73. Each caster frame 71 further comprises an arcuate, depending skid element 74 rigidly secured thereto and underlying the associated post member 65, as is clearly shown in Figure 10. As illustrated, the skid elements 74 are in the same vertical planes as the swivel loops 70 of their associated caster frames 71.

When the rear fence section 15 is moved forwardly, individually, as when the chains 68 are connected to respective tractors 29, 29 the caster frames 71 assume directions directed rearwardly with respect to the path of movement of the rear section 15, allowing said rear section to bend into a U shape as the end portions of the rear section are pulled forwardly, whereby the caster brackets 71 may be allowed to move to positions adjacent the fence in accordance with the curvature of the fence as it is pulled and will at the same time provide a stable support for the fence section.

As is clearly shown in Figure 10, the rollers 73, 73 are more closely spaced than the respective pairs of rollers provided on the other portions of the enclosure, such as the rollers 40, 40 and 33, 33, allowing the rollers 73, 73 to be swung more closely adjacent to the rear section of the fence 15 when said rear section is pulled into a U shape by the forward movement of the portions of the fence adjacent to the end posts 64 thereof.

While a specific embodiment of an improved mobile fence has been disclosed in the foregoing description, it will be understood that various modifications within the spirit of the invention may occur to those skilled in the art. Therefore, it is intended that no limitations be placed on the invention except as defined by the scope of the appended claims.

What is claimed is:

1. A portable fence comprising a rollable forward section, respective side sections detachably connected at their forward portions to the ends of said forward section, a plurality of axle elements secured to the lower portion of each side section and projecting laterally on opposite sides thereof, respective rollers journaled on the end portions of the axle elements, a rear section detachably connected to the rear ends of said side sections, and a plurality of roller supports connected to the lower portion of said rear section.

2. A portable fence comprising a rollable forward section, respective side sections detachably connected at their forward portions to the ends of said forward section, a plurality of axle elements secured to the lower portion of each side section and projecting laterally on opposite sides thereof, respective rollers journaled on the end portions of the axle elements, a rear section detachably connected to the rear ends of said side sections, spaced rearwardly extending caster brackets swivelly connected to the rear section, a pair of spaced rollers journaled on each caster bracket, and respective ground-engaging skids secured to the caster brackets forwardly of the pairs of spaced rollers.

3. A portable fence comprising a forward section including a plurality of spaced transverse hoop elements, whereby said forward section may be rolled on said hoop elements, respective hitch elements swivelly connected to the opposite ends of said forward section, said hitch ele-

ment being adapted to be connected to respective hauling means at said opposite ends, respective side sections detachably connected at their forward portions to the ends of said forward section, respective hitch tongues at the forward ends of said side sections, a plurality of axle elements secured to the lower portion of each side section and projecting laterally at opposite sides thereof, respective rollers journaled on the end portions of the axle elements, a rear section detachably secured to the rear ends of said side sections, spaced rearwardly extending caster brackets swivelly connected to the rear section, a pair of spaced rollers journaled on each caster bracket, respective ground-engaging skids secured to the caster

brackets forwardly of the pairs of spaced rollers thereon, and respective hitch elements on the opposite ends of said rear section.

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