Sept. 20, 1955 J. M. VERKUILEN 2,718,397

ADJUSTABLE TRACK HURDLES

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Fig. 2

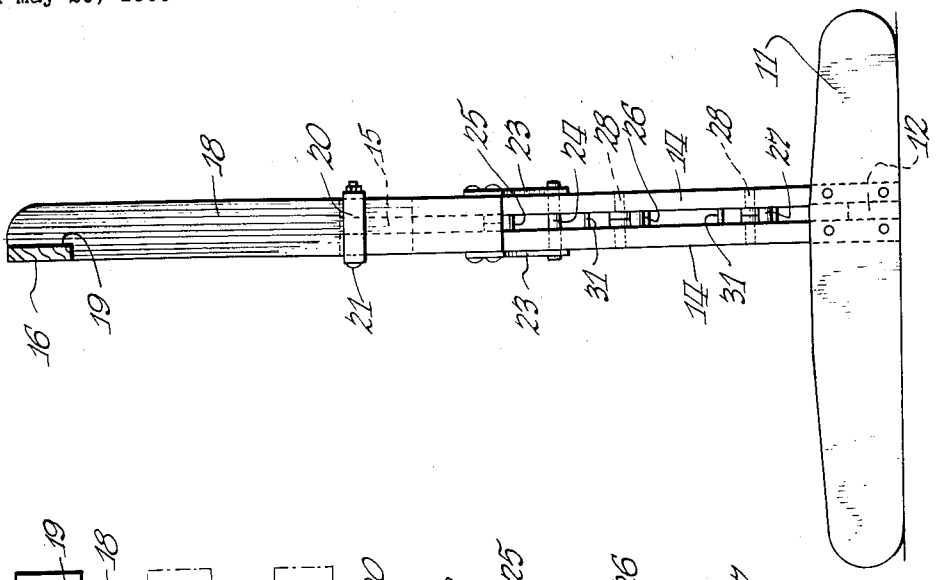

Fig. 1

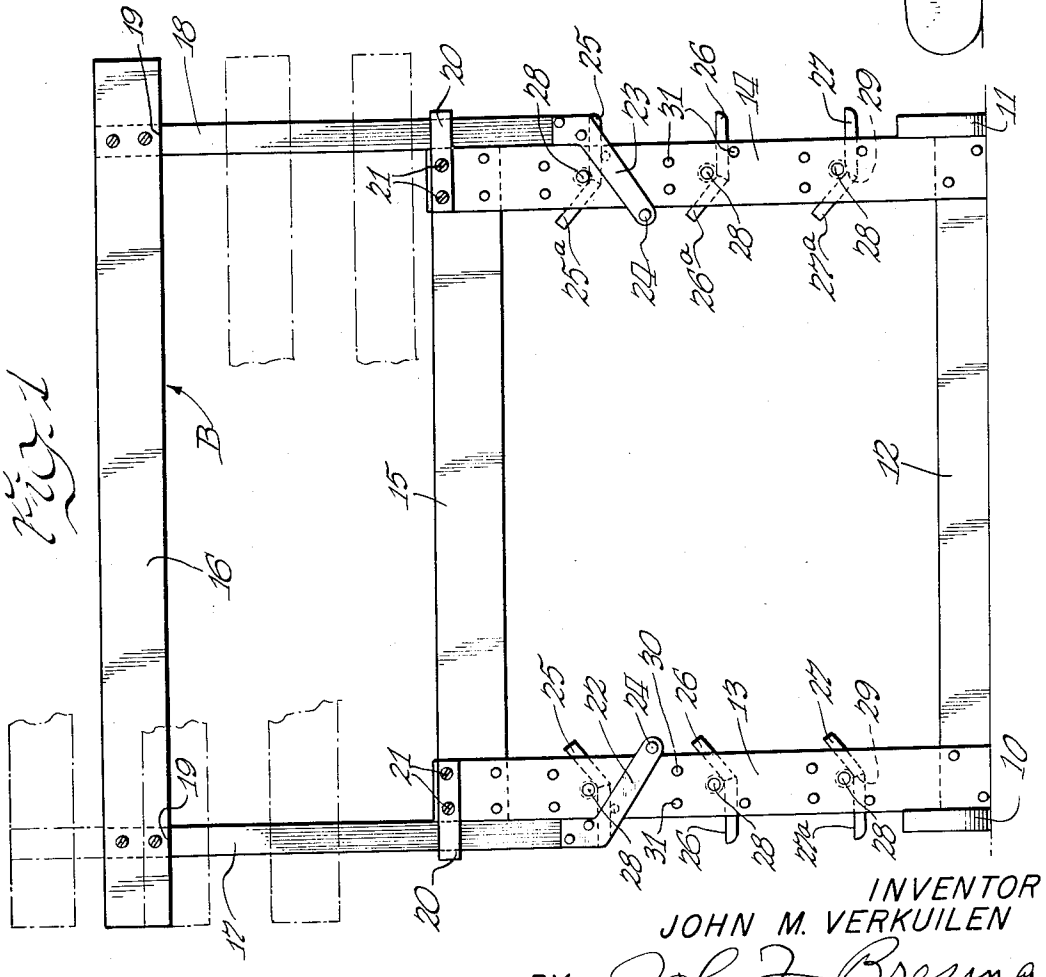

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Fig. 3

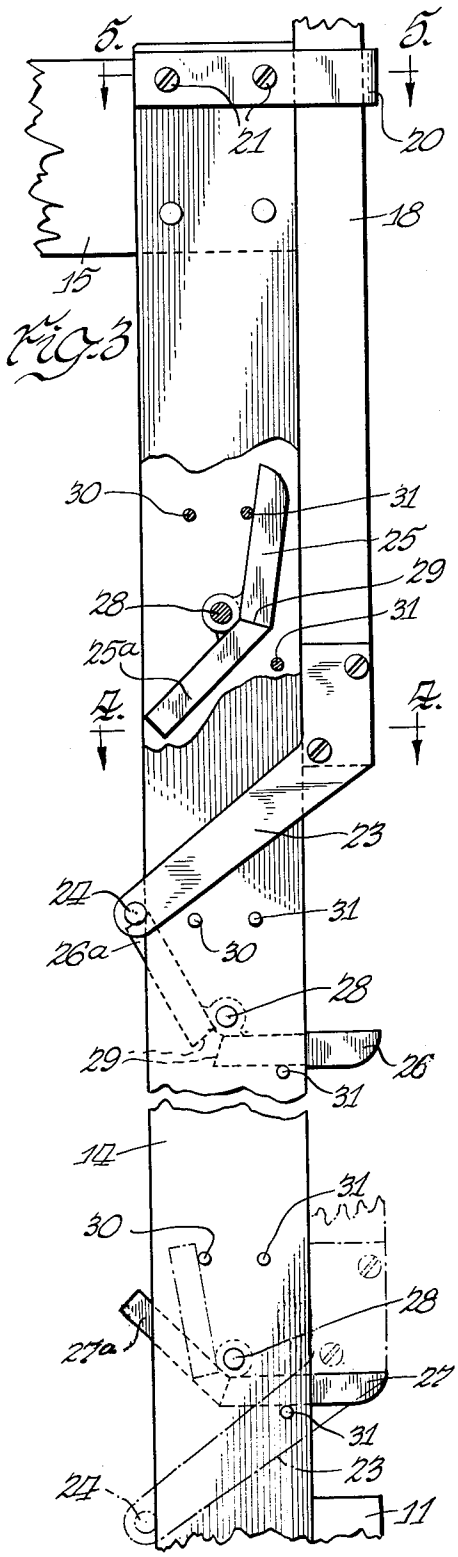


Fig. 5

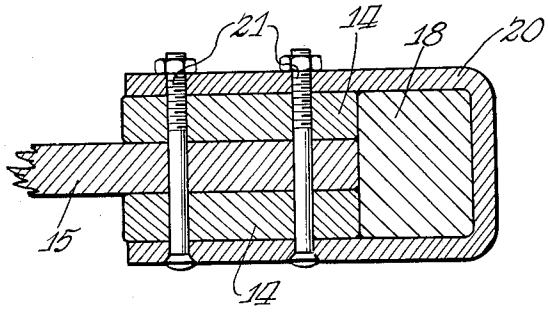
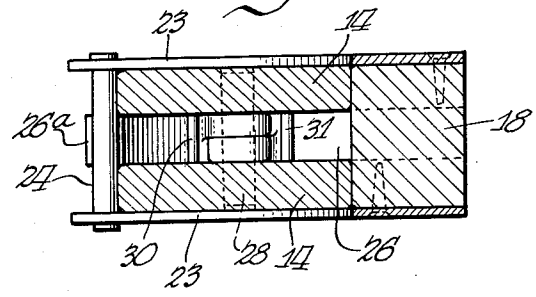


Fig. 4



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ADJUSTABLE TRACK HURDLES

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4 Claims. (Cl. 272—59)

This invention relates to hurdles, and particularly to improved track hurdles wherein quickly adjustable means are provided for selectively varying the position and height of the cross bar frame of the hurdle.

It is an important object of my invention to provide an adjustable hurdle having a base including uprights which have pivotally mounted thereon in vertically spaced positions a plurality of manually adjustable stops or hinge-like members whose end portions are positionable to temporarily hold the movable cross bar frame at varying heights.

A further object of my invention is the provision of track hurdles having a plurality of automatic hinge-like stops pivotally mounted in vertically spaced positions on the uprights of the base which are adapted to engage the lower portions of the vertically movable and slidably mounted frame, said frame having angular brackets on the opposite ends thereof which slide along the uprights of the base and which maintain the cross bar frame in vertical position in relation to the base uprights.

Other and further objects of my invention will be apparent from the following description and claims.

On the drawings:

Fig. 1 is a front elevational view of my novel adjustable track hurdle embodying the feature of my invention.

Fig. 2 is an end elevation thereof.

Fig. 3 is an enlarged elevation looking at the right hand portion of said hurdle and illustrating the adjustable stop means and different positions of the legs and brackets of the movable cross bar frame.

Fig. 4 is an enlarged cross section taken on line 4—4 of Fig. 3.

Fig. 5 is an enlarged fragmentary cross sectional view taken on line 5—5 of Fig. 1.

As shown on the drawing:

The base of my hurdle comprises a pair of wood bars or strips **10** and **11**, connected at intermediate points by a lower wood link or connecting bar **12** which is secured by nails or screws to said bars **10** and **11**.

Numerals **13** designate a pair of wood spaced apart standards and numerals **14** designate a second pair of wood parallel standards or uprights. The lower ends of said two pairs of uprights are secured to the opposite ends of link **12** respectively and on the opposite sides of bar **12** by nails or the like. The base strips **10** and **11** are preferably also secured by nails or the like to said uprights **13** and **14**. The upper ends of the uprights **13** and **14** are connected by a wood cross bar or strip **15** whose ends are mounted between the upper ends of each pair of said uprights and said cross bar **15** is preferably nailed to the upper ends of said uprights.

It will be noted that each of the two uprights at each side and at each end of cross bar **15** are parallel to each other and are spaced apart to provide side opening slots and sufficient to provide for the insertion and mounting therebetween of the ends of cross bar **15** and of other parts hereinafter described.

The adjustable cross bar frame generally designated as B comprises an upper cross bar **16** whose opposite ends are secured to and connect a pair of normally depending parallel arms or members **17** and **18**, said cross bar **16** being preferably secured by nails. Said arms **17** and **18** are of a length so as to provide for elevation of cross bar **16** to the maximum normally desired height, and said arms **17** and **18** are spaced so that the inner faces thereof will be adjacent and normally slidably engage the outer edges of the uprights **13** and **14** respectively, as shown in Fig. 1.

As illustrated in Fig. 2, the upper ends of the arms **17** and **18** are recessed, as at **19**, to provide a seat for the cross bar **16**.

As shown in Figs. 1, 2 and 5, two apertured, U-shaped brackets or yokes **20** are secured by cross bolts **21** on the upper end portions of the uprights **13** and **14** respectively, and in a position to extend outwardly and horizontally. The extending portions of yokes **20** are of a size to permit sliding up and down movement therein of rails or arms **17** and **18** respectively.

The lower end of the depending arm **17** has suitably secured therein, preferably by screws, a pair of apertured, angular metal brackets **22**, as illustrated in Figs. 1 and 2.

Depending arms **18** have a pair of similar angular brackets **23** similarly mounted on their adjacent lower ends. Said brackets **22** and **23** each have a hole in their innermost end to provide for mounting of a cross bolt or pin **24** whose face normally slidably engages the inner face of the adjacent uprights **14** and **13** respectively, to thereby provide a slidable mounting means for the arms of the adjustable frame.

Pivotally mounted between each pair of uprights **14** and between each pair of uprights **13** are a plurality of adjustable stops, pawls or hinge-like arms **25**, **26** and **27** and **25***a*, **26***a* and **27***a*, each of whose inner end knuckle portions are reduced and apertured and pivoted on cross pins **28** which pins are mounted in vertically spaced apart holes formed in the two pairs of adjacent uprights. It will be noted that there are two pawls or stops pivoted on each of the 6 spaced apart pins **28**, and these are mounted for limited pivoting in the two respective slots between the uprights **14** and **13**, as shown in Figs. 2 and 4. Each pair of said adjacent pawls or stops have their adjacent end faces opposed and angular as at **29**, and in non-alignment with the passaged adjacent knuckle, so that when one of the pawls are moved from an upper position to a maximum lower position, the end face of the pawl being moved will contact the opposed end face of the adjacent pawl to move the latter partially upward to cause the latter pawl to be projected outwardly, for example as illustrated at the lower left of Fig. 3 in full lines.

The upper faces of the pawls **25**, **26** and **27** are adapted to contact and hold the under face of the arms **17** and **18** to hold the cross bar frame at the desired height. The outer end faces of the pawls or stops **25***a*, **26***a* and **27***a* are adapted to engage the cross bolts **24** to thereby hold the yokes and cross bar frame at elevated positions which are intermediate the positions in which the other 3 pawls would hold same. Accordingly, where 3 pairs of pawls or stops are provided at each side of the base frame, six different positions are attainable for the adjustable cross bar. As shown in Fig. 3, I provide pins or nails **30** and **31** at spaced apart points which are mounted in the uprights substantially at the positions illustrated. Certain of pins **31** limit the downward arcuate movement of pawls **25**, **26** and **27** to a horizontal position, and the inner of the pins **31** limit the inward movement of said pawls into the slot between the adjacent uprights.

Pins **30** are positioned to limit the inward movement

of pawls 25*a*, 26*a* and 27*a* into the slot between the adjacent uprights.

It will be understood that in inoperative and normally storage positions, the adjustable cross bar frames will be in their lowermost position, partially illustrated in dotted lines in Fig. 3. The desired elevated position of said cross bar may be attained by projecting the particular and applicable pawls or stop according to height of cross bar desired, and the particular pair of projected pawls, stops or arms will releasably hold the cross bar frame at the desired height.

As many changes could be made in the above construction, and as many apparently widely different embodiments of my invention within the scope of the claims could be constructed without departing from the spirit and scope thereof, it is intended that all matter contained in the accompanying specification shall be interpreted as illustrative and not in a limiting sense.

I claim:

1. In a track hurdle a base having a pair of spaced apart uprights extending inwardly at each side of said base and providing side opening slots; a movable cross bar frame having a pair of depending side arms normally slidable adjacent said uprights; a pair of upper brackets on the upper ends of said uprights and through which said arms are slidable; an angular metal bracket secured on the lower end of each of said depending arms and extending inwardly beyond the inner end of each of said arms; a cross pin on the inner end of each of said last mentioned metal brackets; a plurality of hinge like arms pivoted at vertically spaced points on each of said uprights and within said slots respectively, and adapted to be selectively projected or retracted to engage the pins of said last mentioned metal brackets to releasably hold the cross bar frame at the desired height.

2. In a portable track hurdle, a base having a pair of parallel uprights at each side thereof; a movable cross bar frame having a pair of depending substantially parallel legs; said frame being vertically slidable with respect

to said uprights; angular metal brackets on the lower end of said legs respectively, each of said brackets extending about the adjacent upright and slidable in relation thereto; a plurality of arms pivoted to each of said uprights at vertically spaced apart points; said arms being adapted, when projected to engage said metal brackets to releasably brace said cross bar frame in the desired elevated position.

3. An adjustable track hurdle as recited in claim 2 and wherein said arms are pivoted at spaced apart points on each of said uprights and are of a size so that when partially projected beyond the lateral edges of said uprights, any one thereof being adapted to engage and brace against gravity the adjacent leg of the cross bar frame.

4. In a track hurdle, a base having a pair of spaced parallel uprights, each of said uprights being composed of two vertical members spaced to provide a vertical slot therebetween; a pair of depending legs slidably mounted adjacent said uprights; a U-shaped member secured at the upper ends of said uprights, said legs being slidable therethrough; an inwardly extending angular bracket on the lower end of each of said legs and having a portion enveloping the adjacent upright; a plurality of pins mounted in each of said uprights at vertically spaced points; and adjustable lever arms pivoted on each of said pins and between the members of each upright and extendable beyond the edges of said uprights, any one of said lever arms being positionable to project a portion thereof outwardly and to engage one of said pins and to thereby stop and brace the adjacent depending legs of the cross bar frame.

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