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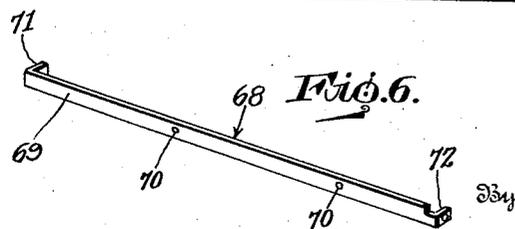
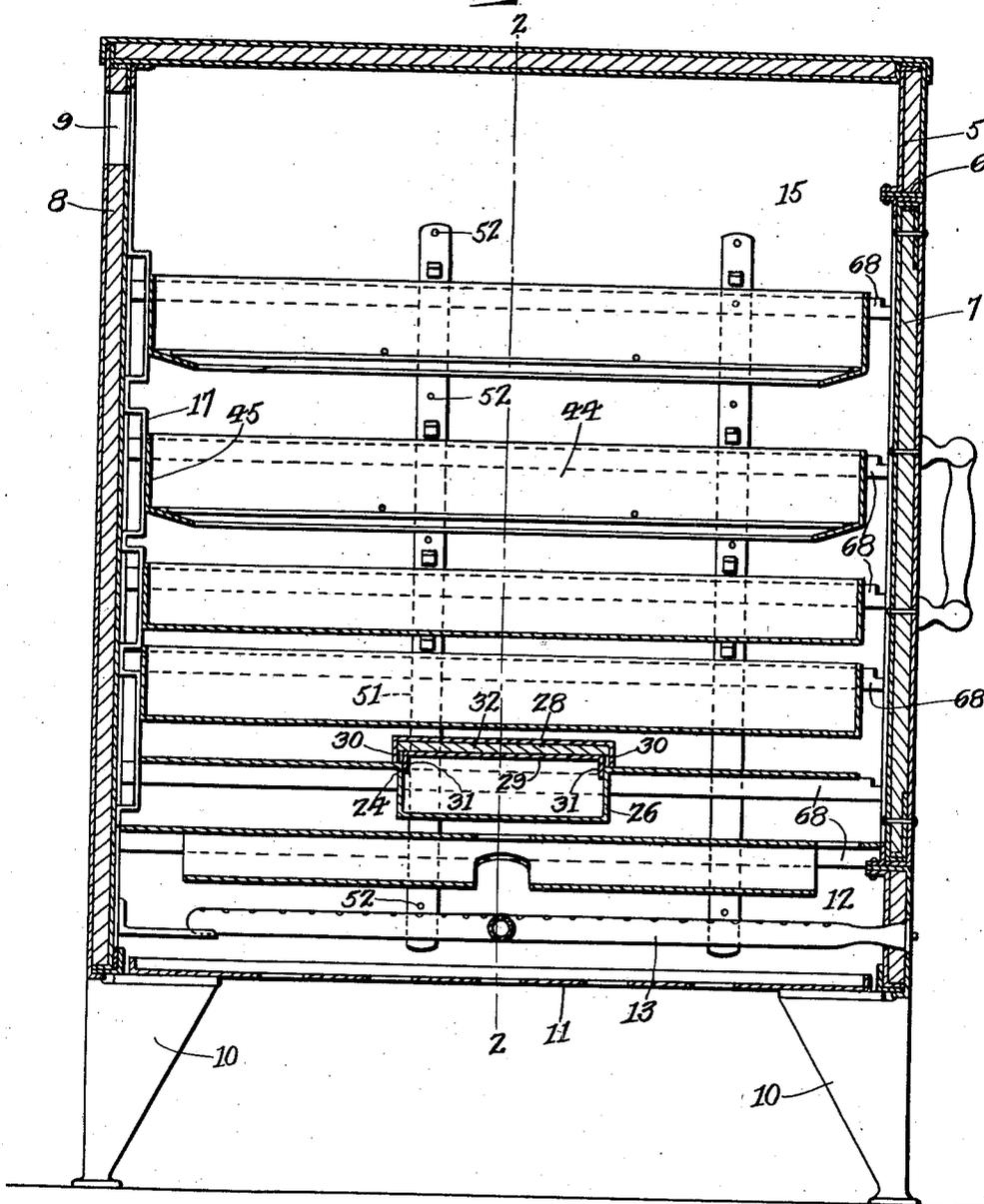
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2,004,025

COMBINED TRACK FORMING, SPACING, AND RETAINING STRUCTURE

Original Filed June 15, 1933 3 Sheets-Sheet 1

Fig. 1.



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Fig. 2.

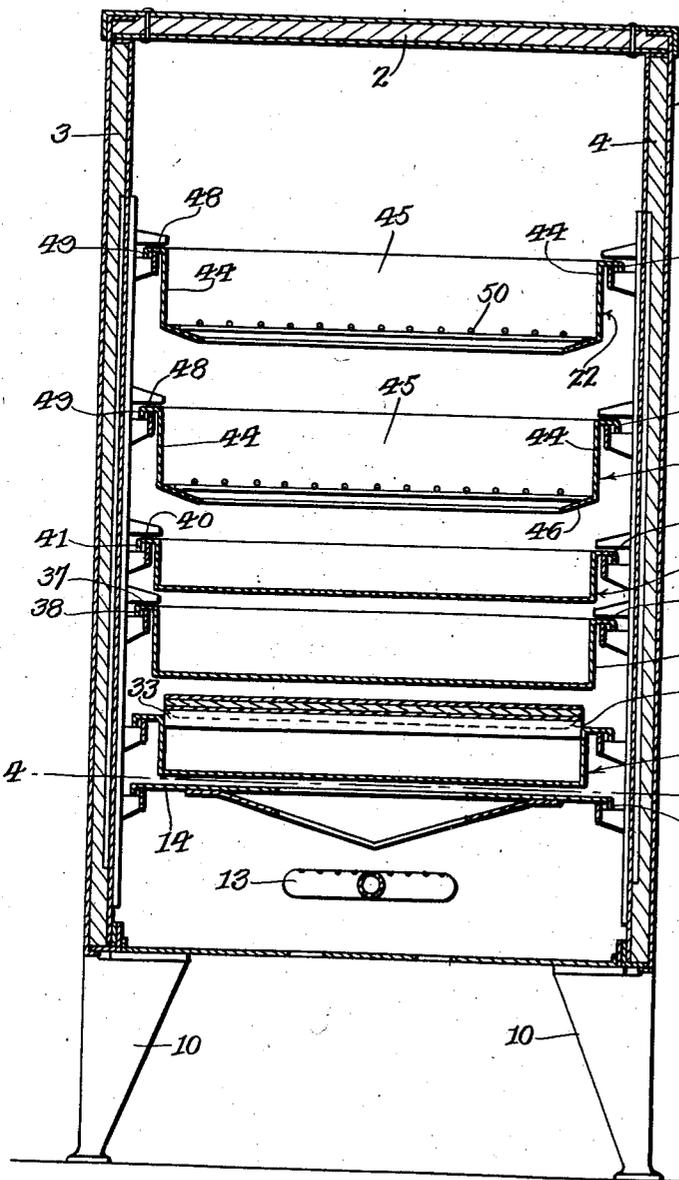
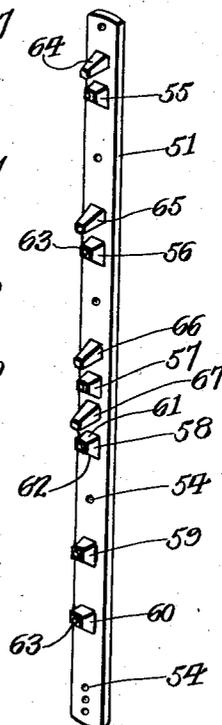


Fig. 3.



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Fig. 4.

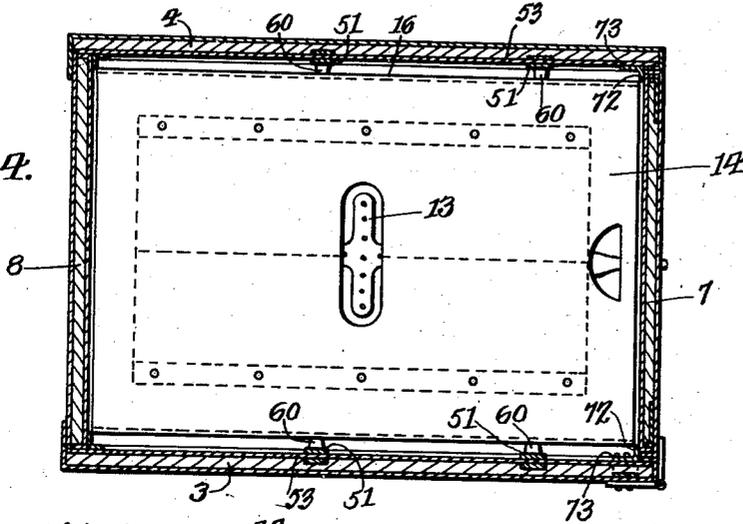
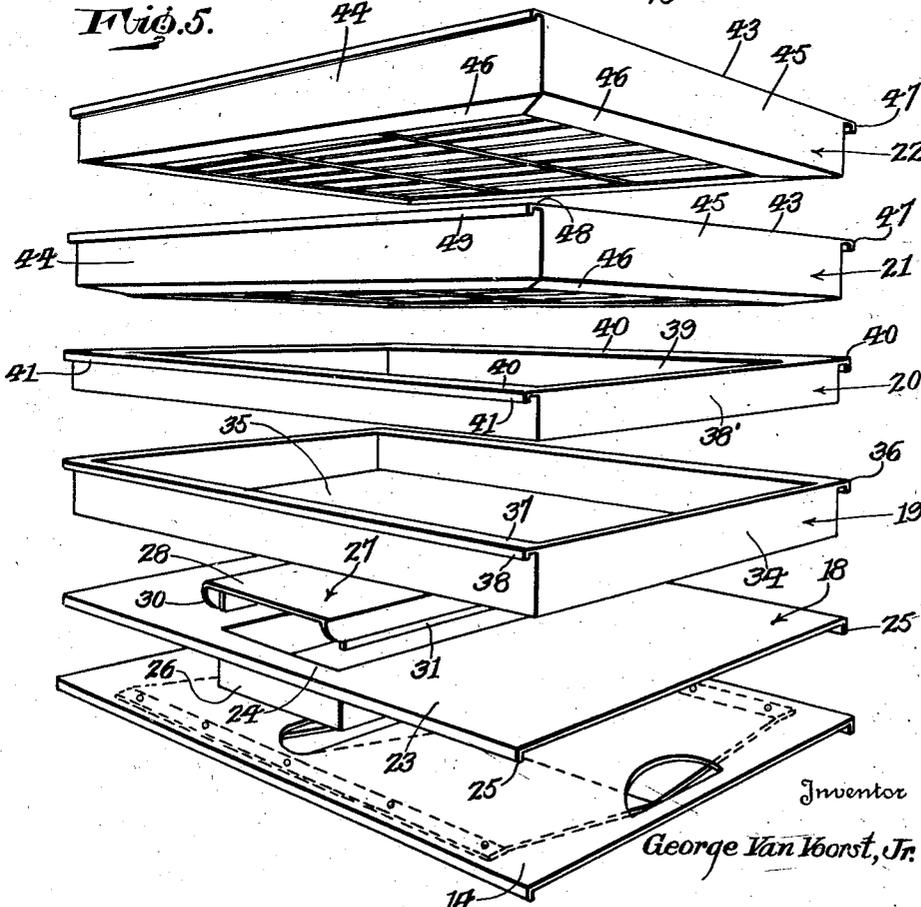


Fig. 5.



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# UNITED STATES PATENT OFFICE

2,004,025

## COMBINED TRACK-FORMING, SPACING, AND RETAINING STRUCTURE

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Original application June 15, 1933, Serial No. 676,004. Divided and this application December 9, 1933, Serial No. 701,693

4 Claims. (Cl. 312-150)

This invention relates to a cooking apparatus, more particularly to a combined track forming, spacing and retaining structure for positioning within the oven of the apparatus, and is a division of my application, Serial Number 676,004 filed June 15, 1933.

The invention has for its object to provide, in a manner as hereinafter set forth, a structure of the class referred to for slidably suspending, spacing and retaining container elements in superposed spaced relation with respect to opposed walls of an oven, as well as to provide for expeditiously mounting the container elements in and removing them from suspended position.

To the above ends, and to others which may hereinafter appear, the invention consists of such parts, and such combination of parts which fall within the scope of the invention as claimed.

In the drawings:

Figure 1 is a longitudinal sectional view of a cooking apparatus showing the adaptation of the structure, in accordance with this invention with respect to the oven.

Figure 2 is a section on line 2-2 Figure 1.

Figure 3 is a perspective view of the form of each of the retaining elements of the structure.

Figure 4 is a section on line 4-4 Figure 2.

Figure 5 is a perspective view illustrating the container elements and further showing a flame spreader arranged below and which is supported from the combined shelf, retaining and spacing structure.

Figure 6 is a perspective view illustrating the construction of the track members.

The drawings illustrate an open bottom and closed housing 1 formed with a top wall 2, a pair of side walls 3, 4, a front wall 5 having a door opening 6 closed by a door 7 and a rear wall 8 provided near its upper end with a flue opening 9. The housing 1 is mounted upon and secured with a set of supporting legs 10. Arranged within the open bottom of housing 1, as well as being secured to the side walls of the latter and to the legs, is an upwardly flanged apertured plate 11 which provides the floor of a fire box 12. A burner 13 is arranged in fire box 12. Positioned above the plate 11, as well as arranged in spaced relation with respect thereto, is an apertured combined partition and flame spreader element 14 which in connection with the housing 1 and plate 11 provides the fire box 12 and in connection with the housing 1 forms an oven 15. The element 14 is downwardly flanged at its sides, as at 16. Secured to the rear wall 8 and extending inwardly therefrom is a pair of parallel vertically disposed sets

of superposed spaced hollow abutments 17 for a purpose to be referred to. The foregoing structural features or elements will be constructed and arranged in a manner as referred to in my application aforesaid and are illustrated for the purpose of showing the adaptation therewith the structure in accordance with this invention.

There is illustrated by way of example a set of superposed spaced container elements capable of being slidably suspended in superposed spaced relation and retained in such position by the structure, in accordance with this invention. The elements of said set consist of a smudge box element 18, a water containing element 19, a drip collecting element 20, and a plurality of food cooker elements 21, 22. Element 18 is arranged directly over element 14; element 19 directly over element 18; element 20 directly over element 19 and element 21 directly over element 20. The said several elements are disposed in spaced relation with respect to each other, and are removably suspended in the oven 15.

The element 18 comprises a plate 23 provided centrally thereof with a rectangular opening 24 and at each side with a depending flange 25. The ends and side edges of opening 24 are spaced respectively from the side and end edges of plate 23. Integral with and depending from plate 23, as well as having its inner face flush with the edges of opening 24, is a closed bottom and open top container or receptacle 26. A cover 27 is provided for container 26 and which is formed of an upper and a lower section 28, 29 respectively formed with depending side flanges 30, 31 respectively. The section 29 is arranged within and spaced from the section 28. The side flanges of section 28 are spaced from the flanges 31 of section 29 and seat upon plate 23. The flanges 31 extend into the upper portion of container 26. An insulating median 32 is interposed between the sections 28, 29 above the flanges 31 and abut the inner faces of flanges 30. These latter maintain the top of section 29 above the ends of the container 26 to provide at each end of the latter a smoke outlet 33.

The element 19 comprises a body 34 in the form of a rectangular open top container 35 provided at the top of each side wall with an outwardly directed angle-shaped flange 36 corresponding in length to that of said side wall and formed of a horizontally disposed leg 37 and a vertically disposed leg 38 depending from the outer side of the leg 37. The latter has its in-

ner side terminating in and is flush with the top edge of that wall from which it extends.

The element 20 is of the same construction as element 19, but its body 38' which provides the open top rectangular container 20 is of less height than body 34. The side flanges of element 20 are designated 40, and the horizontal and vertical legs of each flange 40 are indicated 41, 42 respectively.

The cooker elements 21 and 22 are of like form and the description of one will apply to the other. Each cooker element comprises a rectangular frame 43 formed of a pair of side and a pair of end walls 44, 45 respectively. Each of said walls is formed at its bottom with an inturred flange 46 inclining downwardly from the wall. The flanges 46 may be set up from a single length of material or abut each other and are secured together. The flanges 46 provide what may be termed a hopper-like rim at the bottom of the frame 43. The side walls of the frame 43 at the top thereof are formed with outwardly directed angle-shaped flanges 47, each consisting of a horizontal leg 48 and a vertical leg 49 depending from the outer side of the leg 48. The latter has its inner side merging into and is flush with the top of the side wall of the frame. Mounted upon and spaced from the free edge of the rim formed by the flanges 46 is a removable reticulated panel 50 constituting an impermeate support for the food stuff or stuffs, such as meat arranged within element 21 or 22 which is to be cooked. The drippings from the meat in the upper cooker will precipitate in the lower cooker, and the drippings from the latter will fall into the element 20 and be collected by the latter.

In cross section, the width of the vertical legs of the flanges 36, 40 and 47 is less than the width of the horizontal legs of said flanges. The flanges 35 correspond in height to the vertical legs of the flanges 36, 40 and 47.

The combined track forming, spacing and retaining structure includes two opposed spaced parallel pairs of vertically disposed combined suspension and retaining devices for the elements 14 and 18 to 22. The said devices of each pair are arranged in parallel spaced relation. Each pair of said devices is anchored to and extends inwardly from a side wall of the housing 1. The said devices are of like construction and the description of one will apply to the other. Each device is of a length to extend from a point removed from the bottom of fire box 12 to a point removed from the top of oven 15 and consists of an elongated vertical bar 51 of rectangular transverse cross section which is secured by suitable holdfast devices 52 to a vertically disposed strap 53 positioned in a side wall of housing 1. Openings 54 are formed in bar 51 for the passage of the holdfast means 52. The bar 51 has projecting from one side face thereof and into the oven 15 a vertically disposed series of spaced laterally extending suspension lugs 55, 56, 57, 58, 59 and 60 having flat upper faces 61 and their lower faces 62 inclining downwardly in a direction towards the bar. The outer ends of the lugs are squared and formed centrally with a socket 63. The lugs 55, 56, 57 and 58 are arranged directly below and in close proximity to the lower faces of a vertically extending set of laterally disposed retainers 64, 65, 66 and 67 respectively of lug-like form extended from that side face of bar 51 from which the suspension lugs project. The retainers are of greater length than the suspension lugs

and extend beyond the free ends of the latter. The retainers have flat lower faces and their upper faces incline upwardly in a direction towards bar 51. The suspension lugs and retainers on one bar of each pair are arranged in sidewise parallel spaced relation to the suspension lugs and retainers on the other bar of the pair. The suspension lugs and retainers on the bars of one pair are arranged in parallelism to the suspension lugs and retainers on the bars of the other pair. The suspension lugs and retainers are disposed at right angles to the bars. Each series of suspension lugs is arranged to provide an upper pair, an intermediate and a lower pair. The distance between the lugs of the upper pair being greater than the distance between the lugs of each other pair. The distance between the upper and intermediate pairs of lugs is greater than the distance between the intermediate and lower pair of lugs.

Positioned against the outer ends of each pair of sidewise opposed lugs is a track member 68 standing upon its lower lengthwise edge and having its upper lengthwise edge arranged above the upper faces of the lugs. The track members are arranged in pairs. The track members of each pair are arranged in parallel spaced relation and provide a track upon which is slidably mounted one of the elements 14, 18, 19, 20, 21 or 22. Each track member 68, Figure 6, consists of a strap 69 of sheet metal of the desired gauge oblong portion provided with spaced openings 70 for registering with a pair of sockets 63, an angularly disposed rear end portion 71 for abutting the rear wall 8 of housing 1 and an angularly disposed apertured outer end portion 72 for connection to the leg 73 of one of the front corner angle irons 74 Figure 4, forming an element of the housing 1. The end portions 71 and 72 are arranged in parallel spaced relation. Each track member is anchored in position by holdfast devices 68 extending through the openings 70 thereof and engaging in the sockets 63 which align with said openings. The top edges of the track members 68 which are secured to the lugs 55, 56, 57 and 58 are overlapped in spaced relation by the retainers 64, 65, 66 and 67 respectively.

The element 14 is to be supported and suspended by and slidably and removably mounted upon the track provided by those track members 68 secured to the lugs 60 and the element 18 is to be supported and suspended by and slidably and removably mounted upon the track provided by those track members 68 secured to the lugs 59. The flanges 16 and 35 are seated upon lugs 60, 59 respectively and are interposed between the track members and the side walls of the housing. The elements 19, 20, 21 and 22 are supported and suspended by and slidably and removably mounted upon the tracks provided by those track members 68 secured to the lugs 58, 57, 56 and 55 respectively by the horizontal legs 36, 40 and 48 respectively of the flanges 36, 40 and 47 respectively seating upon the top edges of the said tracks. The vertical legs 38, 41 and 49 of the flanges 36, 40 and 47 respectively are seated upon the lugs 58, 57, 56 and 55 respectively and are interposed between the track members and the side walls of the housing. The flanges 16, 25 and legs 38, 41 and 49 of the flanges 36, 40 and 47 when seated upon the lugs couple in connection with the track members the elements 14, 18, 19, 20, 21 and 22 with the housing and further act to limit the lateral shifting of the said elements with respect to the tracks upon which they are mounted.

The container elements are maintained in spaced relation with respect to the side walls of the ovens by the flanges coacting with the track members, and are also maintained in spaced relation with respect to the rear wall of the oven by the abutments 17 which are positioned in the path of the inner end walls of the container elements.

What I claim is:—

1. In a combined track forming, spacing and retaining structure for slidable objects, two opposed spaced parallel pairs of spaced vertical parallel bars, a suspension lug anchored at one end to and extending at right angles from one face of each of said bars, each lug being formed with a socket opening at its other end, the lugs of each pair of bars arranged in parallel relation, the lugs of one pair of bars being arranged in parallel relation with respect to the lugs of the other pair of bars, a track member positioned against the said other ends of the lugs of each pair of bars, and means extending through said members and into the sockets of said lugs for anchoring said members to the lugs in suspended position, said members being disposed in parallel spaced relation to provide a track for suspendingly supporting the object, a retainer lug anchored at one end to and extending at right angles from said face of each bar, said retainer lugs arranged in superposed spaced relation with respect to said suspension lugs, and said retainer lugs being of greater length than suspension lugs and extending over and spaced from said members, each of said members including a pair of end portions disposed at right angles to the said oblong portion and arranged in parallel spaced relation, one of said end portions being of less width than the other.

2. In a combined track forming, spacing and retaining structure for slidable objects, two spaced opposed pairs of spaced vertical parallel narrow supporting bars, two spaced opposed parallel pairs of spaced horizontally disposed short suspension lugs, each having a straight upper face and a lower face inclining upwardly from one end to the other, each lug being anchored at its largest end to and extending at right angles to one face of a bar, said lugs being spaced from the side edges of said bars and each provided with a socket opening axially of its smallest end and extending lengthwise thereof, said lugs being disposed at right angles to the said faces of said bars, a pair of parallel spaced track members disposed at right angles to said lugs, each track member including an upper and a lower edge and having one of its side faces abutting the smallest ends of a pair of lugs between the transverse median and the ends of such member, the upper edges of said members being positioned above the straight upper faces of said lugs, the lower edges of said members being flush with the high end of

the bottom of said lugs, means engaging said sockets and extending through said members for anchoring the said side faces of said members against the smallest ends of said lugs, and two spaced opposite parallel pairs of spaced horizontally disposed retainer lugs, each having a straight lower face and an upper face inclining upwardly from one end to its other end, each retainer lug being anchored at its largest end to the said side face of a bar, said retainer lugs being of greater length than said suspension lugs, the lower faces of said retainer lugs being arranged in superposed spaced relation with respect to the upper faces of said suspension lugs and the upper edges of said members, and said retainer lugs projecting beyond the other side faces of said members and preventing the vertical movement of an object slidably mounted upon the upper edges of said members.

3. In a combined track forming, spacing and retaining structure for slidable objects, two spaced opposed parallel pairs of spaced vertical narrow supporting bars, two spaced opposed parallel pairs of spaced horizontally disposed short suspension lugs, each of said lugs being anchored at one end to one side face of and disposed at right angles to a supporting bar, each of said lugs being formed with a lengthwise disposed socket opening axially of the other end thereof, a pair of parallel spaced track members disposed at right angles to said lugs, each track member including an upper edge and a pair of spaced parallel openings disposed between the transverse median and the ends thereof, said members having one side face thereof positioned against the socket ends of said lugs, said members having their openings registering with the mouths of said sockets, means extending through said openings and engaging in said sockets for anchoring said members to said lugs, said members having their top edges extended above the upper faces of said lugs, and two spaced opposed parallel pairs of spaced horizontally disposed retainer lugs anchored to the said side faces of said bars, said retainer lugs being of greater length than said suspension lugs, the lower faces of said retainer lugs being arranged in superposed spaced relation with respect to the upper faces of the suspension lugs and the top edges of said members, and said retainer lugs projecting beyond the other side faces of said members and preventing the upward movement of the object slidably mounted upon the top edges of said member.

4. The invention, as set forth in claim 3, having each track member formed with angularly disposed end terminal portions, one of said portions being of less width than the said other portion, and having each track member provided with a reduced part merging into said end portion of less width.

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