

J. D. WILSON

NESTABLE WHEELED TRAY CARRYING RACK

2 Sheets-Sheet 1

FIG. 1.

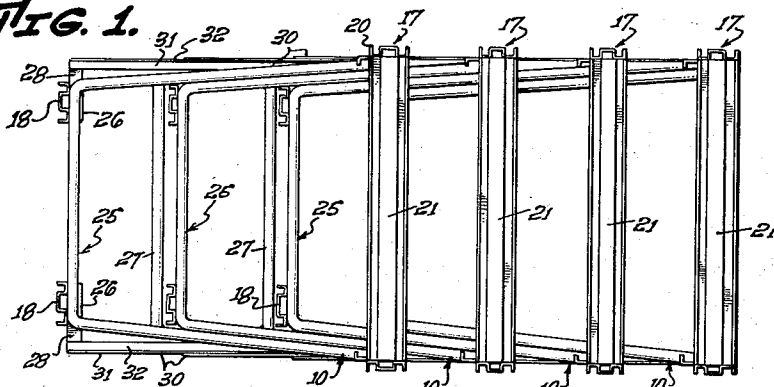
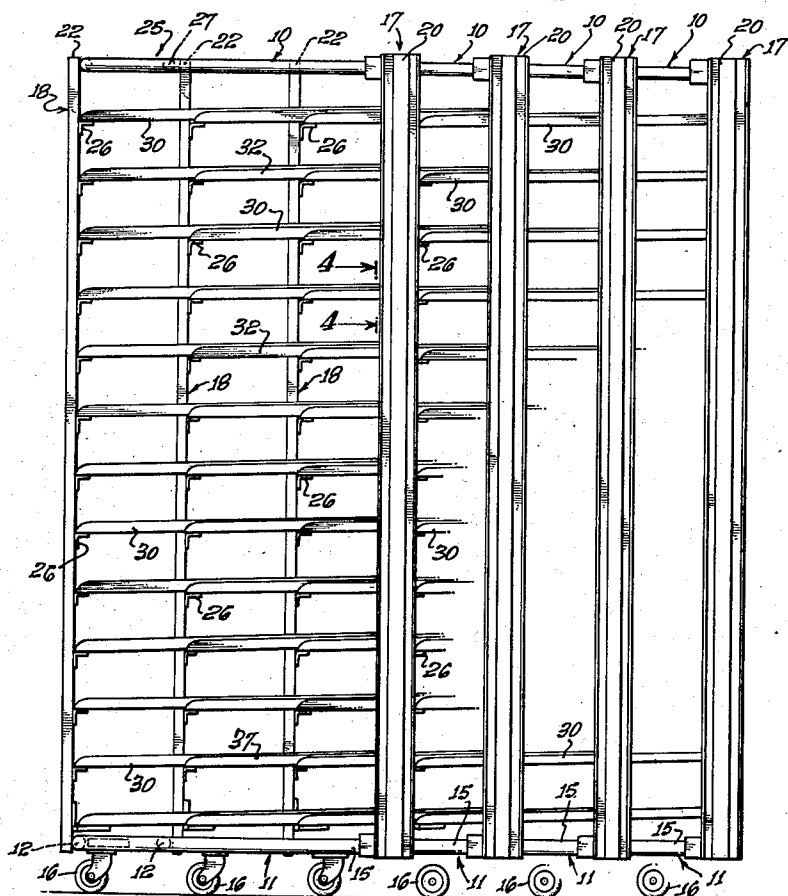


FIG. 2.

INVENTOR.
JAMES DUNCAN WILSON,
BY HIS ATTORNEYS.

HARRIS, KIECH, FOSTER & HARRIS.

March 15, 1960

J. D. WILSON

2,928,681

NESTABLE WHEELED TRAY CARRYING RACK

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FIG. 3.

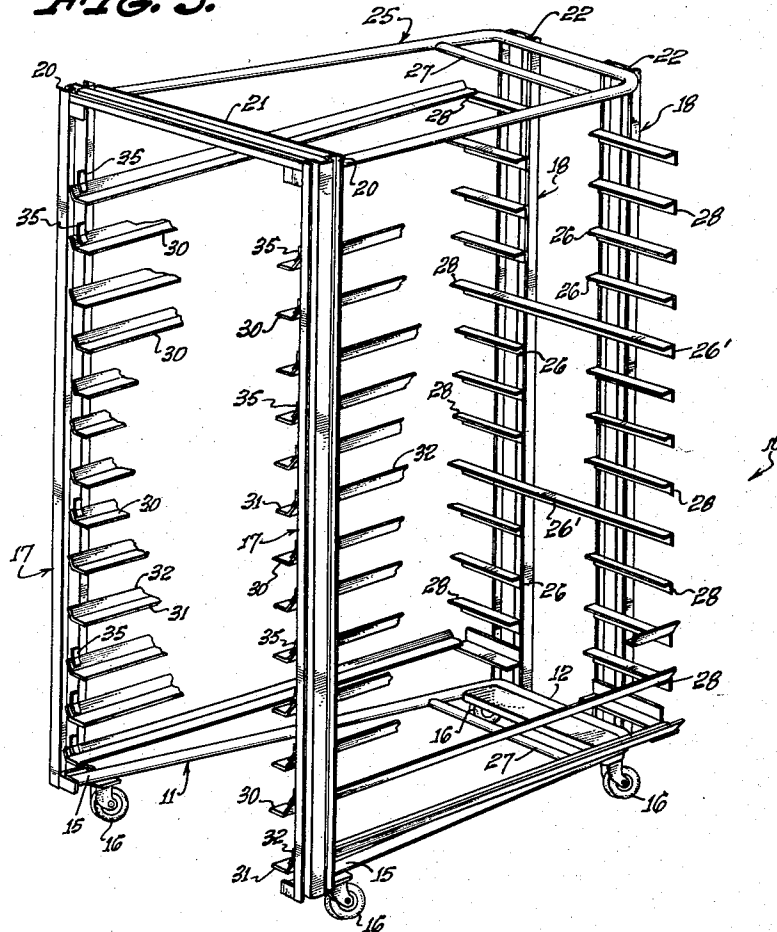
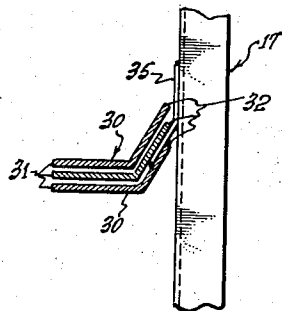


FIG. 4.



JAMES DUNCAN WILSON,
INVENTOR.

BY HIS ATTORNEYS.

HARRIS, KIECH, FOSTER & HARRIS.

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2,928,681

NESTABLE WHEELED TRAY CARRYING RACK

James Duncan Wilson, Long Beach, Calif., assignor to Wire & Metal Manufacturing Co., Los Angeles, Calif., a corporation of Ohio

Application September 7, 1954, Serial No. 454,260

1 Claim. (Cl. 280—33.99)

The present invention relates to new and improved tray racks. A broad object of the instant invention is to provide racks of the class indicated which may be nested together, which may be readily moved about either singly or when nested with other racks of the invention, and which are comparatively simple and inexpensive to construct. Other objects of the instant invention, as well as various advantages of it, will be apparent from the remainder of this specification and the accompanying drawings.

The invention may be briefly summarized as being concerned with tray racks employing a generally U-shaped bottom member to the corners of which there are attached various conventional casters, and to parts of which there are attached or secured upstanding supports which in turn are connected together by various tray supporting and other members as will be apparent from the remainder of this description. The invention is more precisely defined and summarized in detail by the appended claim forming part of this specification. The various constructional details involved with the invention will be apparent from the accompanying drawings, in which:

Fig. 1 shows a top view of a plurality of tray racks of the invention nested together;

Fig. 2 is a side view of Fig. 1;

Fig. 3 is an isometric view partially broken away showing various constructional details of a tray rack constructed according to the present disclosure; and

Fig. 4 is a cross-sectional view taken at line 4—4 of Fig. 2.

In Figs. 1 and 2 of the drawings there are shown a plurality of individual tray racks 10 nested together in such a manner that they occupy a comparatively small space for storage. Such a group of tray carrying racks may be readily handled together, as when being moved from one location to another, with a minimum of difficulty.

In Fig. 3 of the drawings there is shown an individual tray rack 10 of the invention in detail. Here it is seen that such a tray rack includes a substantially U-shaped bottom member 11 having a front edge 12 and rear ends 15. Conventional casters are secured to these rear ends 15 and to the extremities of the front edge 12 in a conventional manner. Further, comparatively wide upstanding rear supports 17 are attached to the rear ends 15 so as to project upwardly therefrom. Also, similar front supports 18 are attached to the front edge 12 adjacent the ends of this front edge so as to project generally therefrom parallel to the rear supports 17. The tops 20 of the rear supports 17 are secured together by a time member 21 of substantially the same cross-sectional dimensions as the rear supports 17. The tops 20 are also connected with the tops 22 of the front supports 18 by means of a U-shaped member 25 of substantially the same configuration and dimensions as the member 11. Crossbraces 27 are secured between the respective sides of the bottom member 11 and the top member 25 for the

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purpose of providing structural rigidity to these members.

A number of front tray supports 26 are secured to the front supports 18 at right angles thereto so as to project from these front supports 18 a short distance beyond the confines of the front edge 12 of the bottom member 11. As is apparent in Fig. 3 of the drawings, these front tray supports 26 are preferably in the form of angle irons secured to the front supports 18 in such a manner that the angles of these members face downwardly and backwardly from the location to which they are secured. Several crossbraces of the same general construction as the tray supports 26, serving the same general function as the front tray supports 26, are secured between the front supports 18 in order to provide extra rigidity to the tray rack 10. These crossbraces 26' and the tray supports 26 terminate in aligned ends 28. The ends 28 of the front tray supports 26 and the crossbraces 26' are connected to the rear supports 17 by means of angle brackets 30 which are secured to these ends 28 and to the rear supports 17 in such a manner that they are located on the inner side of the rear supports 17 facing one another so that their sides form an angle generally opening in an upward direction. Preferably, the angle brackets 30 are formed with side walls 31 and 32 (Fig. 4) disposed with respect to each other at an angle greater than 90°, as shown, so that any trays placed upon these angle brackets 30 will be automatically centered upon them. For purposes of construction, it is normally advisable to use small brackets 35 attached to the walls 32 and to the rear supports 17 in order to secure the angle supports 30 to these rear supports.

When a plurality of the tray racks 10 are nested together as shown in Fig. 1 of the drawings, the various angle supports and the members at the top of the racks 10 telescope over one another so as to be positioned with respect to one another substantially as indicated in Figs. 2 and 4 of the drawings. In order that these angle supports and members may be properly telescoped, they are preferably located sloping slightly downwardly towards the front supports 18 and towards a common vertical line. The angle of the slope is normally exceedingly small, and, of course, varies depending upon the precise dimensions of the tray rack 10. Further, these angle brackets 30 may be formed in such a manner as to limit the amount by which the tray racks 10 telescope together by being secured to the tray rack in such a manner as to fit against one another when they have been telescoped a desired amount.

It is thought that those skilled in the art will at once realize from the details of the construction of the invention illustrated in the drawings many of the essential advantages of the various tray racks which may be constructed in accordance with the broad teachings of this application. Such tray racks are extremely desirable for many uses, such as, for example, handling bakery products or the like, and are, of course, very simple to construct and comparatively easy to maintain. Further, because of the precise construction illustrated in the drawings, these tray racks are sufficiently strong structurally to withstand the normal wear encountered in commercial use. The width of the front and rear supports 17 and 18 employed with the invention is considered to add substantially to the rigidity of the racks 10 of the invention.

Those skilled in the art will realize that the herein described invention is capable of wide modifications within the scope of the instant disclosure. Such modifications are to be considered as part of the inventive concept insofar as they are defined by the appended claim.

I claim as my invention:

A tray rack which is particularly advantageous because it may be readily moved about as desired, either singly

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or when nested together with other racks of the instant invention, which comprises: a generally U-shaped bottom member, the side legs thereof being spaced apart farther at its rear end than at its front edge; casters attached to the rear ends of said bottom member and to the front edge of said bottom member; upstanding rear supports secured to rear ends of said U-shaped bottom member so as to project upwardly therefrom; upstanding front supports attached to the front edge of said U-shaped bottom member so as to project upwardly therefrom parallel to said upstanding rear supports, said front supports being spaced apart a distance less than said rear supports; means connecting the upper extremities of said upstanding rear supports and said upstanding front supports; horizontal front tray supports secured to said upstanding front supports at right angles thereto, said horizontal front tray supports extending outwardly beyond said front supports; and opposed angle brackets secured to the ends of said

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front tray supports and to the inner walls of said upstanding rear supports, the side walls of each of said angle brackets being disposed with respect to each other at an angle greater than ninety degrees, said angle formed by said side wall opening upwardly and inwardly, the space between said opposed angle brackets being less at said front tray supports than at said upstanding rear supports with each of said angle brackets sloping slightly downward toward said front tray supports, said angle brackets serving to hold trays above said U-shaped bottom member.

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UNITED STATES PATENT OFFICE
CERTIFICATE OF CORRECTION

Patent No. 2,928,681

March 15, 1960

James Duncan Wilson

It is hereby certified that error appears in the above numbered patent requiring correction and that the said Letters Patent should read as corrected below.

In the grant, lines 2 and 3, for "assignor to Wire & Metal Manufacturing Co., of Los Angeles, California, a corporation of Ohio," read -- assignor, by mesne assignments, to Banner Metals, Inc., of Los Angeles, California, a corporation of Ohio, --; line 12, for "Wire & Metal Manufacturing Co., its successors" read -- Banner Metals, Inc., its successors --; in the heading to the printed specification, lines 3, 4, and 5, for "assignor to Wire & Metal Manufacturing Co., Los Angeles, Calif., a corporation of Ohio" read -- assignor, by mesne assignments, to Banner Metals, Inc., Los Angeles, Calif., a corporation of Ohio --; column 1, line 64, before "therefrom" insert -- upward --; column 2, line 12, before "tray" insert -- front --; line 46, for "tracks" read -- racks --; column 4, line 5, for "wall" read -- walls --.

Signed and sealed this 30th day of August 1960.

(SEAL)
Attest:

ERNEST W. SWIDER
Attesting Officer

ROBERT C. WATSON
Commissioner of Patents