April 21, 1931. F. CARAMELLA 1,802,234

OVEN RACK

Filed March 28, 1930

Fig. 1.

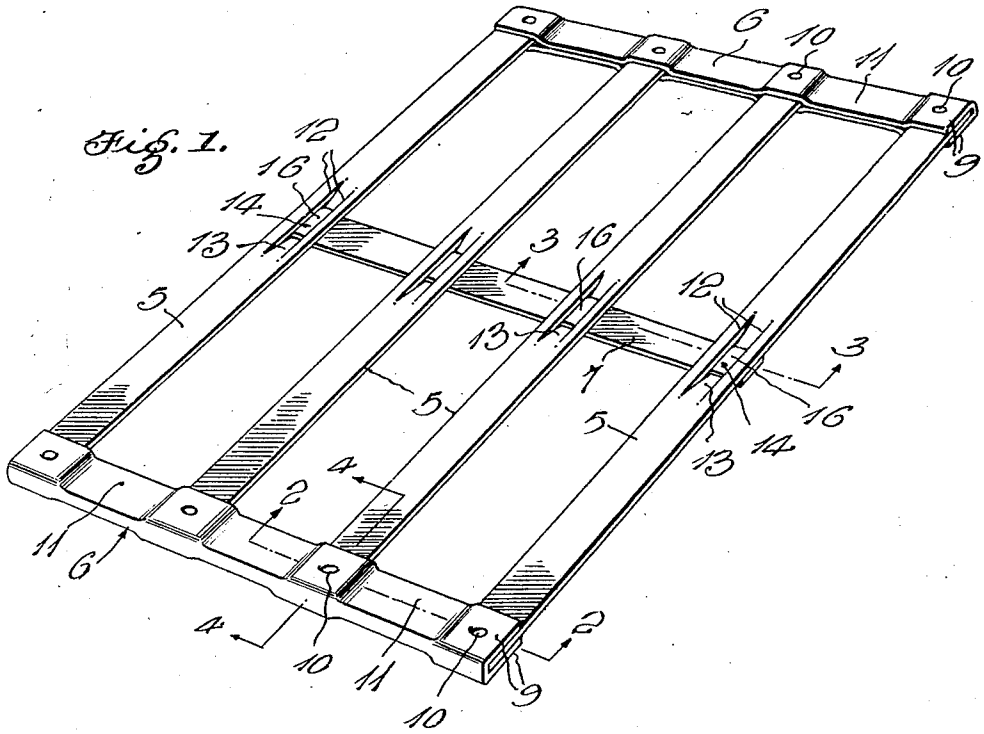


Fig. 2.

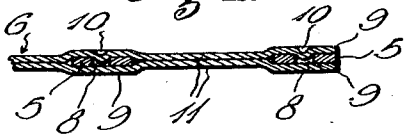


Fig. 3.

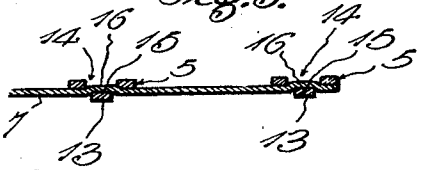
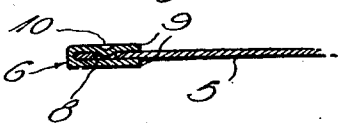


Fig. 4.



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UNITED STATES PATENT OFFICE

FRANK CARAMELLA, OF DETROIT, MICHIGAN

OVEN RACK

Application filed March 28, 1930. Serial No. 439,766.

The invention aims to provide a new and improved oven rack which may be easily and inexpensively manufactured without the use of welding or rivets, the construction being nevertheless of rigid and durable nature.

With the foregoing in view, the invention resides in the novel subject matter hereinafter described and claimed, description being accomplished by reference to the accompanying drawing.

Fig. 1 is a perspective view of an oven rack constructed in accordance with my invention.

Figs. 2, 3 and 4 are detail sectional views on the correspondingly numbered lines of Fig. 1.

The rack embodies a plurality of flat, parallel, longitudinal, metal strips 5, two substantially flat channel metal end strips 6, and a flat intermediate transverse strip 7. Each strip 5 is provided at its ends with openings 8, and these apertured strip ends are snugly received between the side flanges 9 of the channel metal end strips 6, portions 10 of at least one flange of said strips, being pressed inwardly into the openings 8. The portions 11 of the side flanges 9, between the strips 5, are bent inwardly into contact with each other and it will thus be seen that the strips 5 and 6 are rigidly secured together.

Between its ends, each strip 5 is formed with two parallel longitudinal slits 12, the metal 13 between the slits being stamped from the plane of the strip, leaving the latter with a longitudinal slot 14. The transverse strip 7 passes between the offset strip portions 13 and the adjacent portions of the strips 5, and said strip 7 is so distorted as to provide it with transverse grooves 15 snugly receiving the offset strip portions 13, and with transverse ribs 16 which are snugly received in the slots 14, thereby rigidly connecting the strips 5 and 7.

The various bars are assembled when the side flanges 9 are spaced rather widely and parallel with each other and when the strip portions 13 are rather widely spaced from the adjacent portions of the strips 5. Then, by a single pressing operation or a plurality of such operations, the end bars 6 are distorted to provide the formations 10 and 11, and the engaging portions of the strips 5 and 7 are distorted to connect them in the manner shown and described. Constructing the device in this manner, allows it to be easily, rapidly and inexpensively manufactured, yet the complete structure is rigid and durable.

The exact details disclosed are preferably followed, but within the scope of the invention as claimed, minor variations may be made. Moreover, while the improvements herein described are preferably used in connection with an oven rack, they might also be applied to devices for other uses.

I claim:

In a device of the class described a plurality of flat longitudinal metal strips having openings in their ends, two channel metal end strips whose channels receive the ends of said longitudinal strips, said ends abutting the flange connecting portions of said channel strips, the flanges of said channel strips having portions pressed into the aforesaid openings of the longitudinal strips, the parts of said flanges between said ends of the longitudinal strips being bent inwardly into contact with each other and abutting the edges of the channel engaging portions of said longitudinal strips thereby preventing said strips from pivoting about the portions of the flanges of the end strips which engage the openings in the ends of the longitudinal strips.

In testimony whereof I affix my signature.

FRANK CARAMELLA.