Jan. 29, 1935. C. T. HATCH 1,989,275

SHELVING FOR OVENS, REFRIGERATORS, AND LIKE COMPARTMENTS

Filed Sept. 29, 1933

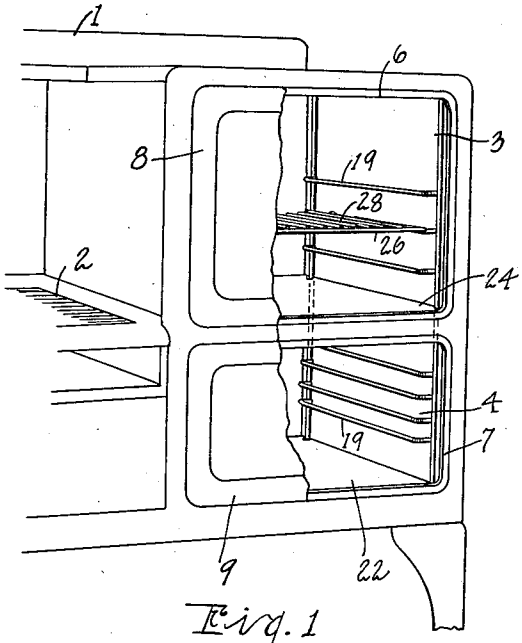


Fig. 1

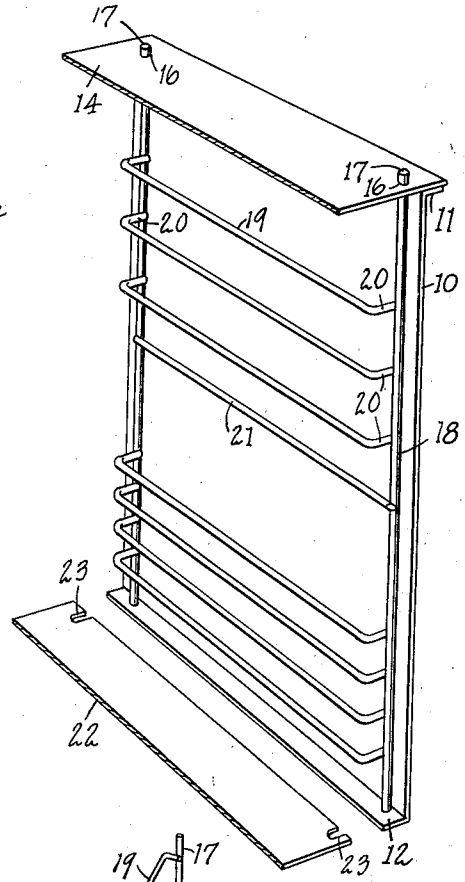


Fig. 3

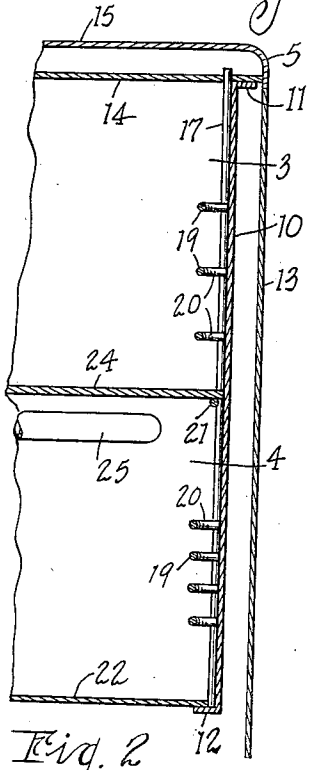


Fig. 2

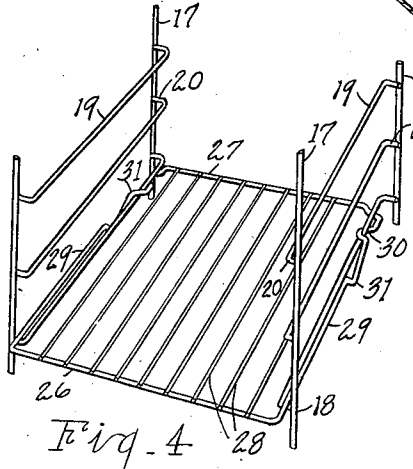


Fig. 4

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SHELVING FOR OVENS, REFRIGERATORS, AND LIKE COMPARTMENTS

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Application September 29, 1933, Serial No. 691,526

3 Claims. (Cl. 312—188)

The main objects of this invention are:

First, to provide improvements in shelving for refrigerators, ovens, and like compartments.

Second, to provide rack supporting units of light rod or heavy wire which may be readily installed or assembled in the compartment.

Third, to provide rack supporting units having these advantages, which also permit ready removal for purposes of cleaning and reassembling within the compartment by persons other than mechanics and without the aid of tools.

Fourth, to provide a structure having these advantages having sliding shelves in which the shelves are very easily operated and may, if desired, be entirely removed from the compartment.

Fifth, to provide shelving having the above desirable features and characteristics and which is simple and economical in its parts, effective and efficient in operation and readily cleaned.

Objects relating to details and economies of my invention will appear from the description to follow. The invention is defined and pointed out in the claims.

A structure which is a preferred embodiment of my invention is illustrated in the accompanying drawing, in which:

Fig. 1 is a fragmentary perspective view of a gas range or oven embodying the features of my invention.

Fig. 2 is an enlarged fragmentary vertical section.

Fig. 3 is an enlarged fragmentary perspective view showing the parts partially assembled.

Fig. 4 is a fragmentary perspective view showing the relation of the rack supporting units to a rack.

In the accompanying drawing, I show my improvements as embodied in a gas oven or range designated generally by the numeral 1 and shown mainly in conventional form. It will be understood, however, that my improvements are adapted for use in compartments wherever sliding shelves are required, being particularly desirable for use in ovens, refrigerators, and like compartments.

The gas range or stove 1 is provided with an open cooking top 2 and a cooking oven 3, there being a broiling oven 4 arranged below the latter. The cooking and broiling ovens are enclosed in the outer casing 5 which has upper and lower openings 6 and 7 provided with doors or closures 8 and 9, respectively. The doors are hinged by means not shown.

Inner side or lining walls 10 having outwardly extending top flanges 11 and inwardly extending bottom flanges 12 are arranged in spaced relation to the outer side walls 13 of the casing 5. An inner top or lining panel 14 overlaps the top flanges 11 and is arranged in spaced relation to the outer top panel 15 of the casing 5 with the ends of the inner top panel abutting the inner sides of the outer side walls 13. The inner top panel 14 is provided with pairs of spaced holes 16 for the passage of the spaced uprights 17 of the rack supporting units 18 preferably formed of light rod or heavy wire.

The rack supporting units 18 are disposed on the bottom flanges 12 of the inner side walls 10 at the inner sides of said side walls. Each of the rack supporting units consists of the pair of uprights 17 and vertically spaced horizontal rails 19 having out-turned ends 20 spot welded to said uprights. Each of the rack supporting units is provided with an intermediate panel support 21 spot welded at its ends to the uprights.

The inner bottom panel 22 is arranged on the bottom flanges 12 and is provided with outwardly facing slots 23 for receiving the lower ends of the uprights 17. The intermediate panel 24 is disposed on the supports 21 with its ends abutting the inner sides of the inner side walls 10, the panel dividing the oven chamber into upper and lower compartments constituting the cooking oven 3 and broiling oven 4. The gas burner unit 25 is arranged directly under the intermediate panel 24 in the broiling oven compartment 4.

The rack or shelf 26 which is preferably that of my application for Letters Patent, Serial No. 585,817, filed January 11, 1932, comprises substantially rectangular border frames 27 and spaced longitudinal grill members 28 of wire or light rods. The side members 29 have offsets 30 and 31, the offsets 30 being inwardly offset and the bight portions thereof being inclined rearwardly and downwardly so that the upper arms of the offsets lie above and ride upon the rails 19 while the lower arms thereof project below the rails to support the front end of the shelf against downward tilting when the shelf is drawn forwardly. The offsets 31 extend downwardly from the upper arms of the offsets 30 and lie at the outer side of the rails where they constitute supporting means limiting the lateral movement of the shelf and preventing its being bumped into the inner side walls 10 of the compartment and also constituting stops which coact with the out-turned ends 20 at the front of the rails to limit the forward horizontal or sliding movement of the rack. The front end of the rack,

however, may be tilted up to lift these stops over the coacting stops formed by the ends of the rails and the rack may then be completely withdrawn from the compartment and replaced there in by a reversal of this motion.

While I have described my improvements in connection with the oven compartment of a gas range or stove, it will be apparent to those skilled in the art that my device is equally applicable to other uses, as, for example, in refrigerators and like compartments.

My improved shelving is economical to manufacture and is highly effective and efficient in operation, the rack supporting units being light in weight and readily assembled with and disassembled from the compartment. Further, the shelves and shelf supporting units may be readily cleaned.

I have illustrated and described my improvements in an embodiment which I have found very practical. I have not attempted to illustrate or describe other embodiments or adaptations, as it is believed this disclosure will enable those skilled in the art to embody or adapt my improvements as may be desired.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

1. In an oven, refrigerator or like chamber, the combination of inner side walls having outwardly extending top flanges and inwardly extending bottom flanges, an inner top panel overlapping said top flanges and having spaced holes therein, rack supporting units of light rod or heavy wire removably disposed on said bottom flanges at the inner sides of said side walls and each consisting of a pair of uprights loosely extending through the holes in said top panel, vertically spaced horizontal rails having out-turned ends spot welded to said uprights, and a substantially straight intermediate panel support spot welded at its ends to said uprights, an inner bottom panel overlapping said bottom flanges and having slots loosely receiving the lower ends of said uprights, and an intermediate panel resting on said supports with its ends abutting the inner sides of said side walls and dividing the chamber into upper and lower compartments.

2. In an oven, refrigerator or like chamber, the combination of inner side walls having outwardly extending top flanges and inwardly extending bottom flanges, an inner top panel overlapping said top flanges and having spaced holes therein, rack supporting units removably disposed on said bottom flanges at the inner sides of said side walls and each consisting of a pair of uprights loosely extending through the holes in said top panel, vertically spaced horizontal rails having out-turned ends spot welded to said uprights, and an inner bottom panel overlapping said bottom flanges and having slots loosely receiving the lower ends of said uprights.

3. In an oven, refrigerator or like chamber, the combination of inner side walls having outwardly extending top flanges and inwardly extending bottom flanges, an inner top panel overlapping said top flanges and having spaced holes therein, rack supporting units removably disposed on said bottom flanges at the inner sides of said side walls and each consisting of a pair of uprights loosely extending through the holes in said top panel, vertically spaced horizontal rails having outturned ends secured to said uprights, and a substantially straight intermediate panel support secured at its ends to said uprights, an inner bottom panel overlapping said bottom flanges and having slots loosely receiving the lower ends of said uprights, and an intermediate panel resting on said supports with its ends abutting the inner sides of said side walls and dividing the chamber into upper and lower compartments.

CHARLES T. HATCH.