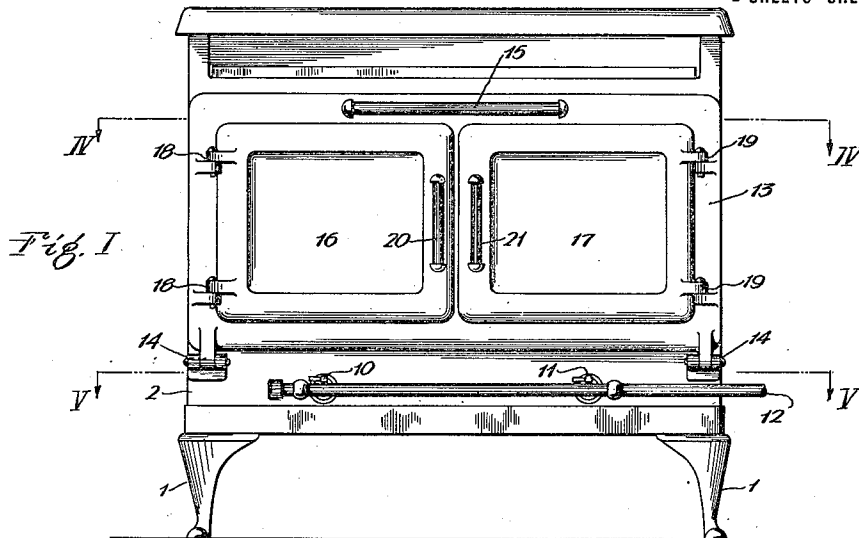
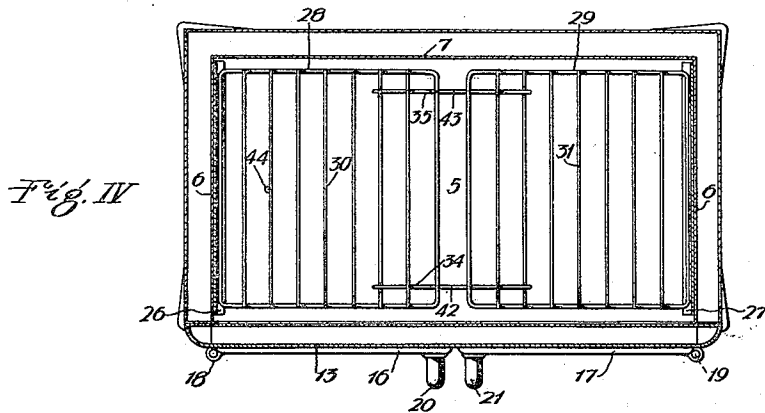
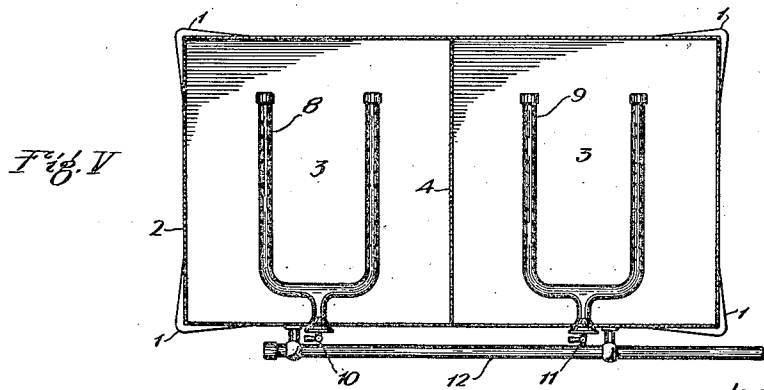


J. KNEIER.
 CONVERTIBLE STOVE OVEN.
 APPLICATION FILED AUG. 9, 1919.

1,398,725.

Patented Nov. 29, 1921.

2 SHEETS—SHEET 1.



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CONVERTIBLE STOVE-OVEN.

1,398,725.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JOSEPH KNEIER, a citizen of the United States, residing at 680 E. 127th St., in the city of Cleveland, county of Cuyahoga, and State of Ohio, have invented a new and useful Improvement in Convertible Stove-Ovens, of which the following is a specification, the principle of the invention being herein explained and the best mode in which I have contemplated applying that principle, so as to distinguish it from other inventions.

My invention pertains to a convertible stove oven appliance and more particularly to an alternative arrangement in the oven of the stove whereby, in the absence of a removable partition an extensible shelf structure may be supported across the entire width of the oven; and when a partition is in place the shelf structure embodying my invention may be adjusted to smaller compass so as to be accommodated within a division of the oven compartment.

My invention carries forward the idea represented by the Trenkamp Patent No. 1,355,868 and the pending application of H. J. Trenkamp, Serial No. 295,886.

Accordingly, the object of my invention is to provide in combination with a stove oven, convertible as to size, a shelf structure correspondingly alterable as to size and which shall be simple and economical to manufacture and the parts of which may be easily manipulated to their alternative relative positions.

Adverting to the drawings:—

Figure I is a front elevation of a stove suited to the practical use of my invention and showing its doors closed.

Fig. II is a view like Fig. I showing two smaller doors opened.

Fig. III is the same view, partly broken away, exposing the entire front of the oven compartment owing to a larger door having been opened.

Fig. IV is a section on lines IV—IV of Fig. I looking downwardly.

Fig. V is a section on lines V—V of Fig. I looking downwardly.

Fig. VI is a perspective view of a convertible shelf appliance adapted for conjunctive use in carrying out the invention.

Fig. VII is a perspective view of the shelf structure with certain parts shown in altered positions.

Fig. VIII is an enlarged perspective view of connections between certain of the parts of the shelf appliance.

The stove is shown supported on suitable legs 1 which carry a frame 2 which includes a bottom 3 and a partition 4 extending from front to rear thereacross and of limited height. Supported in any suitable manner within the frame 2 is an oven compartment including a bottom 5 extending across the top edge of the partition 4, side walls 6 and a rear wall 7. It is common practice in the art to so space an oven compartment both from the actual bottom of the stove and from its inclosing walls so as to afford conduits entirely around the oven for the gases of combustion arising from gas burner below. I propose to place at least one gas burner on each side of the partition 4 and to provide means whereby each burner may be separately controlled. In consonance, two burners 8 and 9 are illustrated which are located between the bottoms 3 and 5 and on opposite sides of the partition 4. The supply of fuel to the burners 8 and 9 is controlled by suitable valves 10 and 11 respectively both of which open or close communication with a gas supply pipe 12.

The open front of the entire oven compartment is adapted to be closed by a large door 13 mounted below on suitable hinges 14 and provided with a handle 15. Two smaller doors 16 and 17 are each hinged at 18 and 19 respectively to the larger door 13 and they carry handles 20 and 21. Extending across the middle of the top and bottom of the oven compartment in a direction from front to rear are two pairs of angle irons 22 and 23 respectively each pair forming a suitable channel for the slidable accommodation of a removable partition 24 which is provided on opposite sides and at various heights with ledges 25 as clearly appears in Fig. II. The side walls of the oven compartment are also provided with ledges 26 and 27 of corresponding elevation to the ledges 25.

From the foregoing description it will be understood that when the partition 24 is in place the doors 16 and 17 would ordinarily be employed, and that the larger door 13 would only be opened when it is desired to either insert or remove an article requiring more than one half of the width of the oven.

My improved shelf appliance consists ac-

cording to the exemplification shown, of wire frame work or grille construction certain parts of which are readily detachable and the whole of which when assembled may be clasped in one direction but not in the reverse direction so that if the remote ends of the assembled structure are supported the remainder supports itself in a substantially straight line. The construction comprises two equisized rectangular frames 28 and 29 each of which is of such a size as to fit one half of the oven compartment, that is to say, slide freely between one of the side walls and the partition 24 so as to rest on any appropriate pair of ledges. The frames 28 and 29 carry cross wires 30 and 31 respectively, which may, for example, be spot welded in place. It will be observed that there are seven wire lengths 30 and seven wire lengths 31 which will extend in a direction from front to rear when the shelf structure is in position in the oven. As shown in Fig. VI that one of the wires 30 which is second from the end of the frame 28 which is nearest to the frame 29 is fashioned near each of its ends with a downwardly curved eye 32. Likewise, the second nearest wire 31 in the frame 29 is provided with a pair of downwardly bent eyes 33 as is clearly shown in Fig. VIII. The eyes 32 and 33 are preferably equidistant from the nearest edges of the frames 28 and 29.

The shelf appliance comprises in addition to the frames 28 and 29 a bracket also shown to be of wired construction. As shown in the drawings the bracket is permanently secured to the frame 28 and detachably connected with the frame 29. The bracket consists of two wrought iron side members 34 and 35 connected by a pair of cross wires 36 and 37. One end of the side member 34 is fashioned with a hook 38 which is closed around the eye 32 as may be seen in Fig. VIII. The alined end of the side member 35 is similarly fashioned with a hook 39 closed around the other eye 32. The opposite ends of the side members 34 and 35 are fashioned with opened hooks 40 and 41 respectively adapted detachably to engage with the eyes 33. Raised middle sections 42 and 43 of the side members 34 and 35 correspond in length to the distance between the near edges of the frames 28 and 29 and substantially to the space required for the passage of the partition 24. In this manner the assembled shelf structure when extended may rest upon the ledges 26 and 27 as shown in Fig. III. Also, the tops of the raised sections 42 and 43 may thus be substantially level with the upper sides of the frames 28 and 29 and additionally form a steadying abutment.

One of the wires 30 and specifically the second from the end of the frame 28 which is

farthest from the eyes 32, is provided at its middle with a downwardly directed integral spring hook 44. Such hook is substantially the same distance from that wire 30 which is provided with the eyes 32 as is the wire 37. In this manner when the frame 29 is disconnected from the hooks 40 and 41 the bracket may be swung against the frame 28 and the hook 44 caused to spring around the wire 37 to maintain such relationship preparatory to use as a separate shelf supported upon the ledges 25 and 26 as shown in Fig. II.

As will now be readily understood the frame 28 together with its attached inutile bracket may act as a shelf on the side of the partition 24 while the frame 29 serves as a shelf on the opposite side. The assembled frames 28 and 29 may rest upon the ledges 26 and 27 when the partition 24 is removed as appears in Figs. III and IV, in which position the adjacent edges of the frames 28 and 29 bear downwardly against the side members 34 and 35 about their hook and eye pivots. Fig. VII illustrates the position of the frames 28 and 29 which enables the engagement or disengagement of the eyes 33 by the hooks 40 and 41 whereby the alternative function of the whole may be realized.

I claim.—

1. A device of the character described comprising a pair of shelves each provided a given distance from one end with a pair of eyes, and a bracket provided at each end with a pair of hooks adapted for movable engagement with said eyes respectively said bracket being adapted to underlie said shelves when brought into substantial alignment therewith and adapted when in such position to support such attached ends of the shelves in substantially the same horizontal plane when the other free ends thereof are supported, one pair of said hook and eye connections being detachable whereby said shelves may be separated, and means for fastening the end of said bracket thus freed to the shelf to which it remains attached.

2. The combination with a stove oven provided with ledges, a removable upright partition likewise provided with ledges, an adjustable oven shelf including a member of a size adapted to rest upon ledges on one wall of said oven and the near side of said partition respectively, a bracket pivotally connected with one end of said member, and another member detachably connected with said bracket and of a size adapted to rest upon a ledge on the opposite wall of said oven and upon a ledge on the opposite side of said partition, and a catch upon said first mentioned member adapted to secure the free end of said bracket when said last mentioned member is detached, the connected members and bracket together adapted to span the entire

oven and rest upon its ledges when the partition is removed.

3. A device of the character described comprising the combination of a stove-oven 5 having oppositely disposed side walls provided with ledges, a member adapted to assume a partitioning position across said oven and likewise provided on opposite sides with ledges adapted to be substantially level 10 with said wall edges when said member is in its partitioning position, and a convertible shelf structure formed of a pair of separable parts adapted singly to rest each upon a distinct pair of wall and partition ledges, 15 and adapted to be attached to each other so as to rest in substantially horizontal positions each with an edge supported upon one of said wall ledges when said member is not in its partitioning position.

20 4. A device of the character described comprising the combination of a stove-oven having oppositely disposed side walls provided with ledges, a removable partition provided on opposite sides with ledges sub- 25 stantially level with said wall ledges, a convertible shelf structure formed of a pair of separable parts each adapted singly to rest upon a wall and a partition ledge, and means rigidly connecting said parts in ex- 30 tended relationship, whereby to enable support thereof upon said wall ledges when said partition is removed.

5. A device of the character described comprising the combination of a stove-oven 35 having oppositely disposed side walls provided with ledges, a removable partition provided on opposite sides with ledges substantially level with said wall ledges and a convertible shelf structure formed of a pair 40 of separable parts adapted singly to rest each upon a distinct pair of wall and partition ledges, and a bracket pivotally attached to one of said parts and adapted to be swung against and lie within the confines thereof, 45 said bracket being adapted for attachment with the other of said shelf parts and to underlie both parts when so attached whereby to sustain the two parts as a unit across the partitionless oven when the free ends 50 of said parts rest each upon one of said wall ledges.

6. A device of the character described comprising the combination of a stove hav- 55 ing an oven compartment, a removable partition adapted to divide said oven compartment, a pair of gas burners located below said oven and on opposite sides of said partition, the walls of said oven which are 60 opposed to said partition being provided with ledges, said partition being also provided on its opposite sides with ledges, said ledges being of corresponding elevation, and an adjustable shelf structure adapted to rest either upon the ledges of said walls

or upon one of said wall ledges and one of 65 said partition ledges.

7. A device of the character described comprising the combination of a stove hav- 70 ing an oven compartment, a removable partition adapted to divide said oven compart- ment, the walls of said oven which are op- posed to said partition being provided with ledges, said partition being also provided 75 on its opposite sides with ledges, said ledges being of corresponding elevation, and an adjustable shelf structure adapted when extended to rest upon the ledges of said 80 walls, said structure being composed of separable parts each of which is adapted to rest upon one wall ledge and one partition ledge.

8. A device of the character described comprising the combination of a stove hav- 85 ing an oven compartment, a removable partition adapted to divide said oven compart- ment, a pair of heating devices located below said oven and on opposite sides of said partition, the walls of said oven which 90 are opposed to said partition being provided with supports, said partition being also provided on its opposite sides with sup- ports, all of said supports being of corre- sponding elevation, means separately con- 95 trolling said heating devices, and an extensible shelf structure adapted when ex- tended to be carried by upon said wall sup- ports, said structure being composed of separable parts each of which is adapted to be carried by one wall support and one par- 100 tition support whereby both heating devices may be employed when the partition is removed or either one alone when culinary needs require less than the whole of said oven compartment.

9. A device of the character described 105 comprising a pair of shelves and a bracket movably connecting said shelves in spaced relation, end portions of said bracket under- lying said shelves, an intermediate por- tion of said bracket being raised level with 110 said shelves.

10. A device of the character described 115 comprising a pair of wire grilles each having one cross wire provided with a bend, and a bracket provided at each end with a pair of hooks adapted for movable engage- 120 ment with said bends respectively said bracket being adapted to underlie said shelves when brought into substantial align- ment therewith and when in such position 125 to support such attached ends of the shelves substantially level when the other free ends thereof are supported, the distance between said hooks on opposite ends of the grilles exceeding that of the aggregate distance be- 130 tween two bends on the same sides of different grilles whereby the assembled structure is longer than the two grilles.

11. A device of the character described comprising a pair of wire grilles of the same shape, size, and a rigid member pivotally connected at a plurality of points with the lower side of each of said shelves whereby the three sustain themselves in substantial alinement when the remote ends of said shelves are supported, one of said pivoted connections being detachable and a catch on the lower side of one of said grilles adapted to secure and hold the detachable end of said member when detached from the other grille.

12. The combination with a stove oven having ledges on oppositely disposed walls, a removable upright partition having ledges on its opposite sides adapted to be opposed to said wall ledges respectively, two shelves in size suited to rest each one on a wall and on a partition ledge and a bracket removably attached to each shelf so as to underlie and support rear ends of said shelves when said partition is removed, said bracket and shelves being collectively adapted in size

to span the entire oven while the remote ends of said shelves rest upon said wall ledges respectively.

13. The combination with an oven having opposed walls provided with ledges, of a removable partition, a pair of members, a rigid bracket pivotally connected with an end of one of said members and with an end of the other at points a certain distance from the proximate edges of such ends and on the same side of said members, whereby such ends are held suspended as an extended shelf when the other or remote ends of said members are supported on the ledges on the opposed oven walls, one of said pivotal connections being quickly detachable so as to enable said bracket to be folded against one of said members whereby to serve as a shelf between one wall of said oven and said partition.

Signed by me, this 2nd day of August, 1919.

JOSEPH KNEIER.