

ILLUSTRATED
ERECTION
INSTRUCTIONS
FOR
MODEL H30 & H34
AGA COOKERS

A P R I L 1 9 3 7



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AGA HEAT LIMITED

(Proprietors : Allied Ironfounders, Ltd.)

Showrooms: 20 NORTH AUDLEY STREET, W.1
(just opposite Selfridge's)

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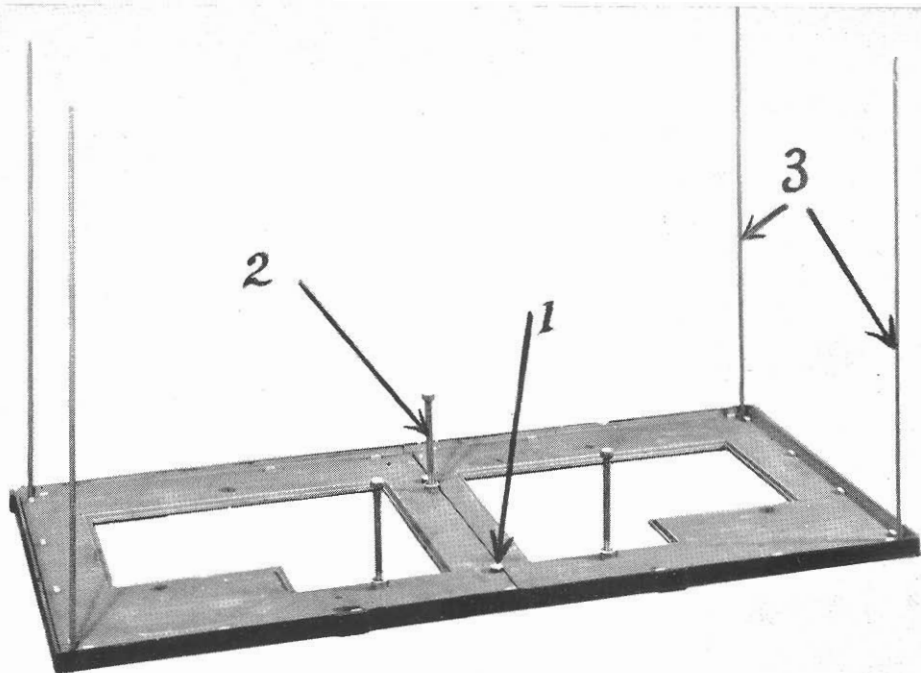
SUITABLE TOOLS FOR AVERAGE INSTALLATION

- I 1½ lb BALL-PLANE HAMMER.
 - I RUBBER Mallet.
 - I 7" COLD CHISEL.
 - I 5" x ⅜" COLD CHISEL.
 - I HACKSAW.
 - I ¼" x ⅝" SPANNER.
 - I ⅜" x ½" SPANNER.
 - I 12" SPANNER (ADJUSTABLE).
 - I 12" HALF-ROUND FILE.
 - I ¼" ROUND FILE.
 - I 3 ft. FOLDING RULE.
 - I pr. PLIERS, FLAT NOSED.
 - I pr. PLIERS (SPECIAL, THERMOSTAT)
 - I 18" SPIRIT LEVEL } (ADAPTED FOR
 - I 6" SPIRIT LEVEL } VERTICAL READING).
 - I 18" SCREWDRIVER.
 - I 6" SCREWDRIVER, WITH ⅜" BLADE.
 - I 20" CROWBAR.
 - 6 CORNER ROD GUIDES 4" LONG x ⅜" BORE TUBE (TO EXTEND CORNER STAY RODS AND SIMPLIFY THE FITTING OF TOP PLATE).
 - I ⅜" x 12" PLAIN ROD OR TUBE.
-

IMPORTANT

The following are essential points to be observed during the erection :—

- (a) Flat and level base.
- (b) Vertical front plates.
- (c) Level hotplates set ⅛" below top plate.
- (d) Correctly assembled Stabilisers.
- (e) Correctly assembled Thermostats.
- (f) Proper packing of insulating materials.



1

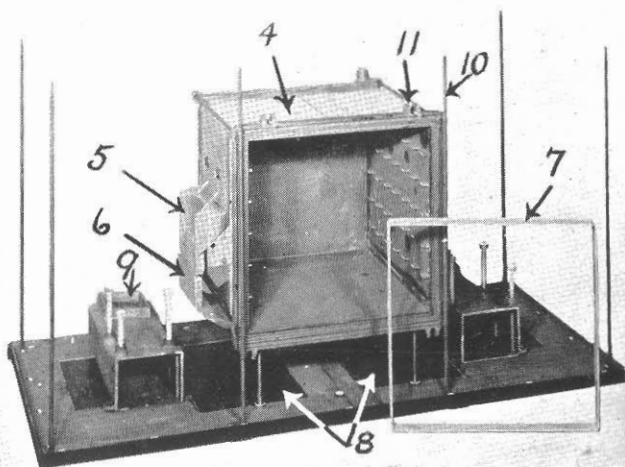
The Baseplate is delivered in two parts which must first be placed in position as shown. 2 screws (No. 1) $\frac{3}{8}$ " x $\frac{3}{4}$ " fasten the halves together. Shown also are 3 oven support bolts (No. 2), $\frac{1}{2}$ " x 7", screwed loosely in to an under-head height of 6", and 4 corner rods screwed tightly down by their short threads (No. 3).

2

The Oven in position. Resting on the 3 bolts the aluminium surrounds (No. 4) are sent attached and it remains to loosely affix, by means of 8 $\frac{3}{8}$ " x $1\frac{1}{4}$ " bolts and washers, 4 shaped castings (No. 5 and No 6), as shown. The oven frame (No. 7) will act as a spacer between the oven and the front plate to follow. 2 loose plates (No. 8) complete the baseplate.

The 2 stabiliser ducts are fastened down by $\frac{5}{16}$ " x $\frac{3}{4}$ " screws. In each duct 3 ashpit support bolts with pointed heads have been screwed to under-head heights of $3\frac{1}{4}$ " for the 4 long ones, $2\frac{3}{8}$ " for the 2 short ones. Note that the rear outlets (No. 9) of the ducts turn inwards.

2 more stay rods (No. 10) have been screwed down by their short threads and 2 fastening screws (No. 11), $\frac{5}{16}$ " x 3", with asbestos washers, lie ready for attachment to the front plate.

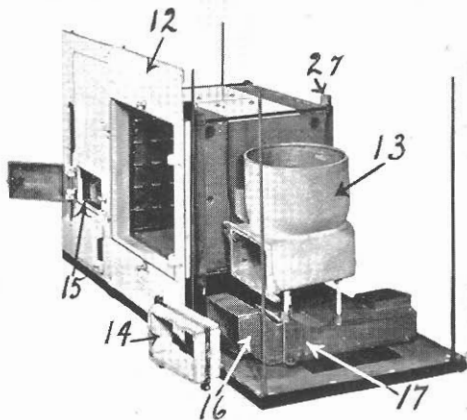


3

The Front Plates, of which 2 only are shown. It is usual to fit the side and back plates at this stage, also, for a normal erection, the various parts afterwards being put in from the top. The Centre Front Plate (No. 12) must be quite vertical and central on the baseplate. It is usual to screw all 3 Front Plates together by means of 6 $\frac{5}{16}$ " x 1" plated screws and nuts, and erect them together to ensure this.

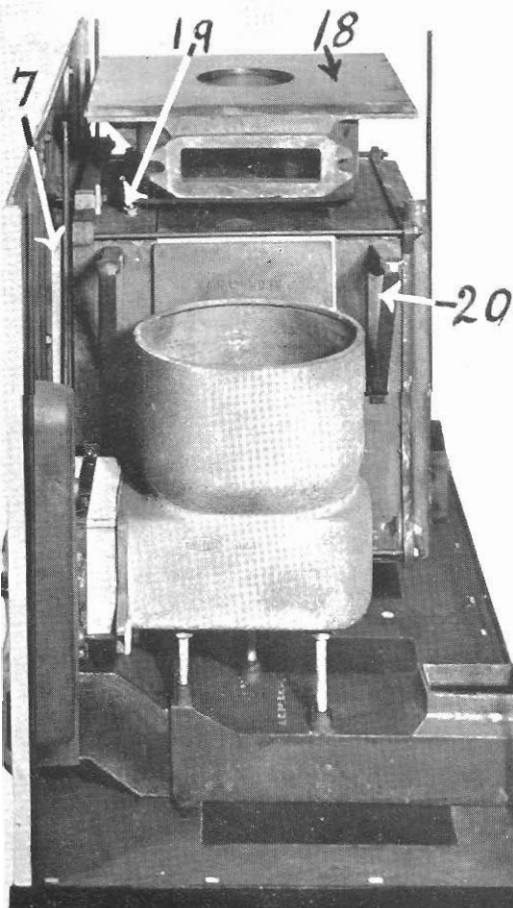
The loosely bolted castings on the oven should be lined up to each ashpit (No. 13) and tightened while in position: the ashpits firmly touching the shaped surfaces of the top pieces, while the lower castings should be slid downwards to press against the flat sides of the ashpits; care being taken that the ashpits keep in line with the door openings.

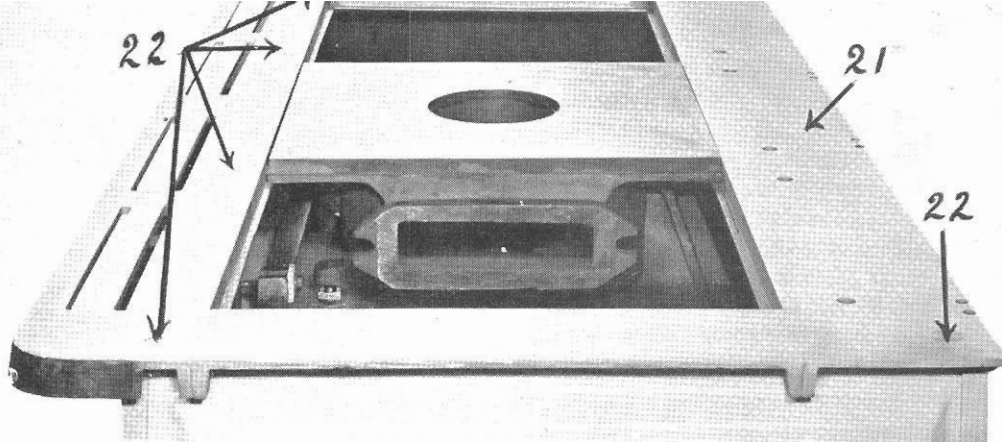
The ashpit may then be fastened to the Front Plates by 2 $\frac{5}{16}$ " x 7" screws and nuts and 2 $\frac{5}{16}$ " x 3" screws and washers. The ashpit floors, the brick tunnel (No. 14) and the door sill (No. 15) must be level. The sheet metal connecting duct (No. 16) fits between the stabiliser duct (No. 17) and the Front Plate.



4

The Simmering Plate (No. 18) in position. Loosely placed on the oven, it is supported by 3 $\frac{1}{2}$ " x 1" screws (No. 19) adjusted to an under-head height of $\frac{7}{16}$ ". The outer barrel support brackets (No. 20) are attached by $\frac{1}{2}$ " x 1" screws, one to each bracket. The oven frame (No. 7) should now be well sealed to both the oven and front plate by asbestos string and water glass.



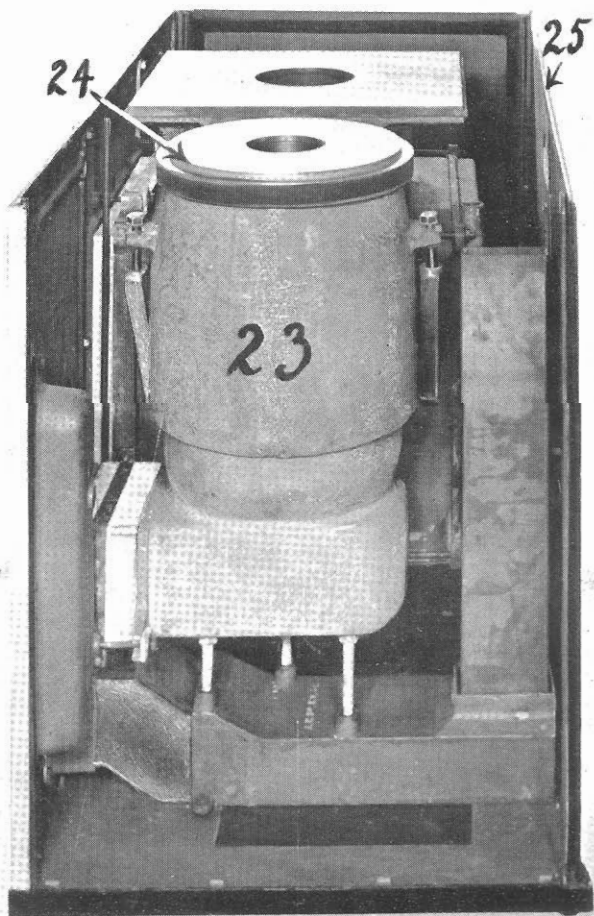


5

The Top Plate in position (No. 21). It has been tightly screwed down on to the front, back and side plates by 6 flat headed screws (No. 22) coned so easily find the stay rods. The simmering ring must be levelled carefully and left $\frac{1}{16}$ " below the surface of the top plate to allow for expansion when hot.

6

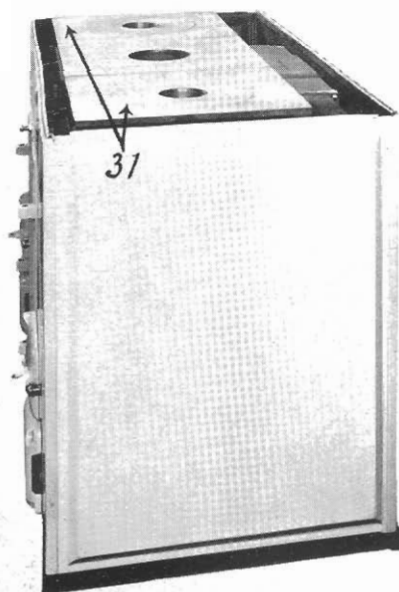
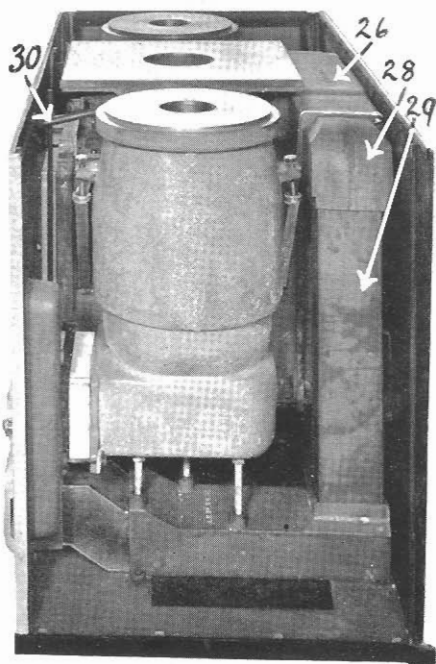
The Outer Barrel (No. 23) and Inner Barrel (No. 24). One each of these are shown. Those attached to the left side of simmering ring are fitted in same manner. The Outer Barrel is supported by $2 \frac{1}{2}$ " x $2 \frac{1}{2}$ " bolts with square nuts screwed to within 1" of the heads. The Inner Barrel is placed in this. By means of a long level used as a straight edge the Inner Barrel surface may be levelled to that of the simmering ring and the whole assembly bolted together by $2 \frac{1}{2}$ " x 1" bolts and nuts with washers. On the right is the stabiliser trunk. Note that the backplates have 2 strengthening ribs (No. 25) fitted along the top.



7

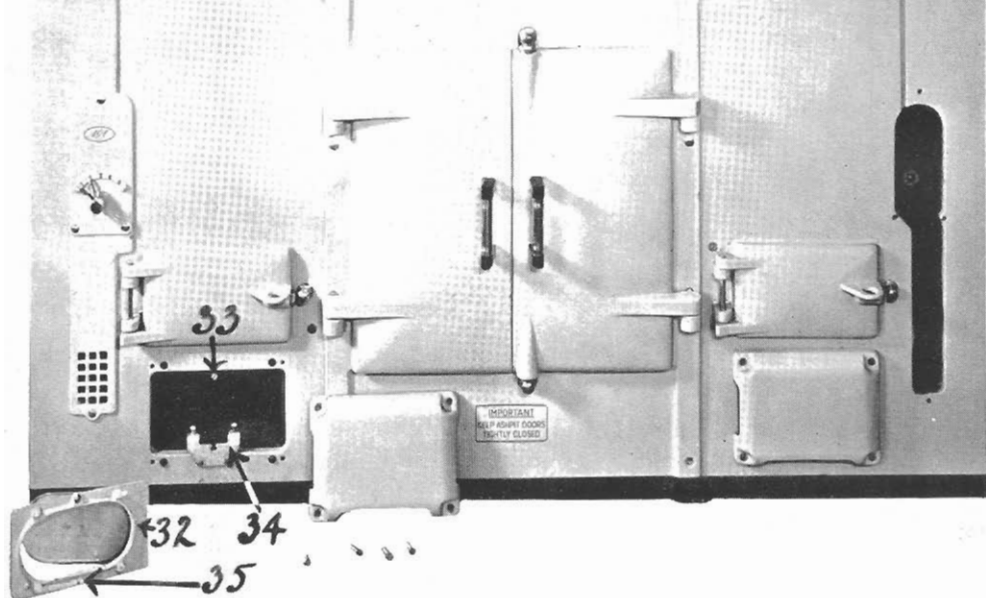
The Flue Manifold. The Manifold (No. 26) is placed over the oven vent (No. 27 in photograph No. 3) and attached to the underside of the simmering ring by 2 $\frac{1}{2}$ " x $1\frac{1}{2}$ " screws, an asbestos gasket completing the joint. 2 angle pieces (No. 28) fit over the inclined trunks (No. 29) and attach to the manifold by round headed $\frac{3}{8}$ " x 1" screws, with asbestos gaskets to complete.

2 thermostat protector tubes (No. 30) are shown between the front plate and the outer barrels.



8

The complete Hotplate. The 2 loose machined plates (No. 31) must form one level surface with the simmering ring and all should be $\frac{1}{16}$ " below the top plate when the latter is fitted.



9

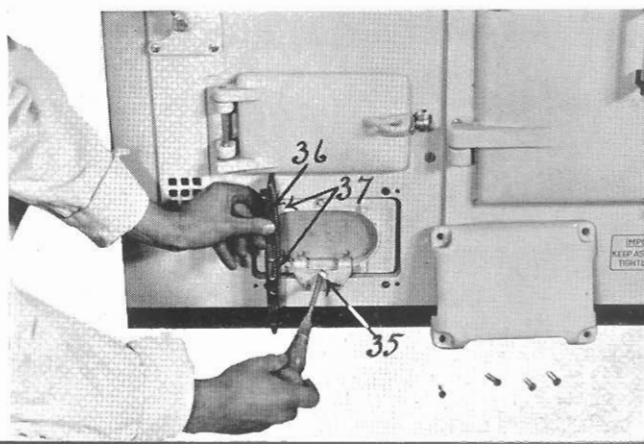
The Stabiliser. The cooker may arrive with the Stabiliser (No. 32) already fitted, when it is necessary only to free it of packing. When supplied separately some care must be taken in fitting and alignment. The operation should take the following order :—

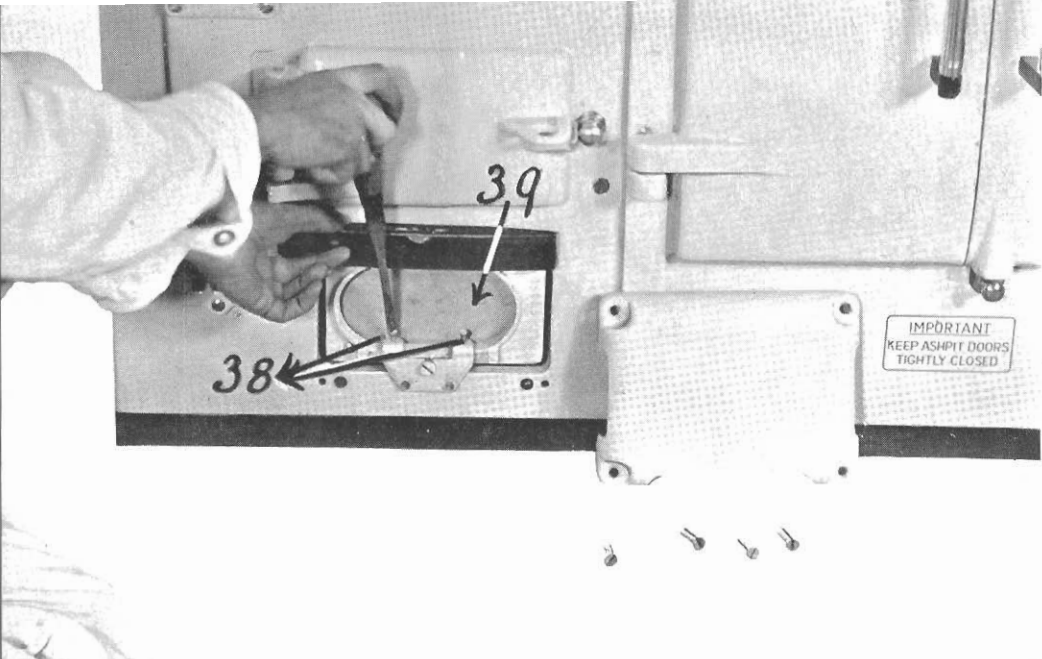
- (a) Remove screw (No. 33).
- (b) Remove bracket (No. 34).
- (c) Fit Stabiliser (No. 32) in opening and replace screw (No. 33).
- (d) Replace bracket and refit the screw (No. 35) at the bottom.

The Stabiliser is then ready for adjustment.

10

Stabiliser being levelled vertically. A short spirit level (No. 36) is being used on the projections (No. 37) and the screw (No. 38) adjusted to bring the frame vertical.



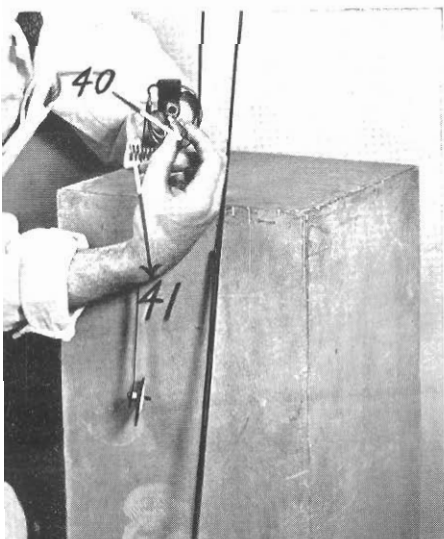


11

The Stabiliser being levelled horizontally. The spirit level is resting on 2 projections and 2 small screws (No. 38) are being adjusted to make the frame horizontal. These screws should be left tight, when both levels should be checked. The cover may then be fitted.

Since there is probably no draught passing through the cooker at this stage, the Stabiliser disc (No. 39) will remain closed. The function of the Stabiliser is that of reducing excess draught to normal, automatically. A low draught installation may not find the disc open at all, but this is an unlikely condition.

NOTE.—Even when in a "closed" position, the stabiliser disc allows a specified amount of air to pass into the flue.

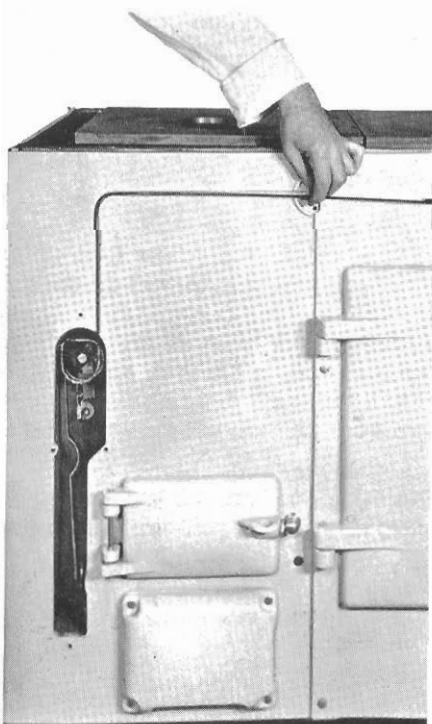
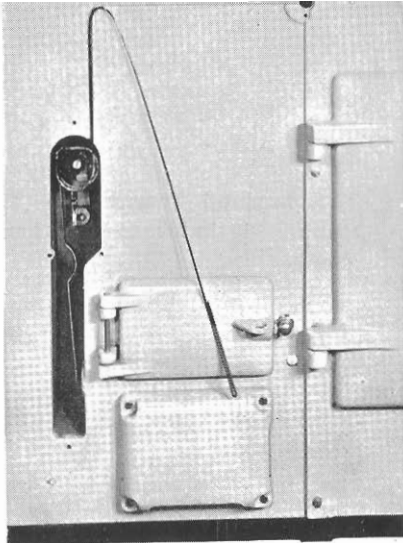


12

The Thermostat. This is sent as shown except for the screw (No. 40) which arrives fitted in the front plate. The thermostat should be held only by its strong back plate. The coil spring (No. 41) is pushed into the side of the back plate.

13

The Thermostat being prepared. It has been placed in its recess and lightly screwed down and the capillary tube has been shaped to fit the groove in the front plate.

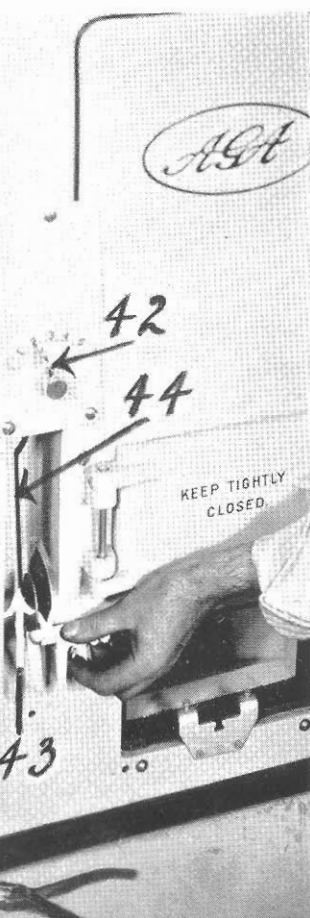
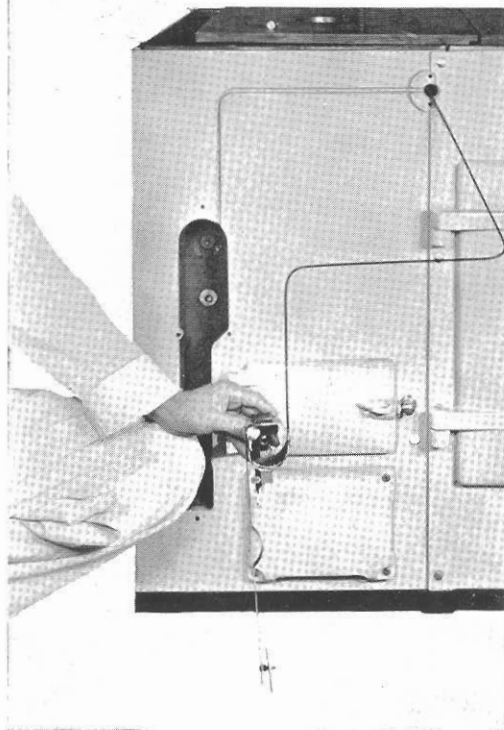


14

The Thermostat being prepared. The tube is being marked by the thumb where it must next be bent. To do this the thermostat should be removed and the tube bent sharply inwards and upwards.

15

The prepared Thermostat. The angles shown enable the tube to make a snug fit in the groove.



16

Thermostat being adjusted. The pointer (No. 42) is always placed on "2" before the space between the disc and seating is measured. If the label instructed (say) 14 mm. clearance the disc should be turned on the screw until this distance is registered between the disc and the seating, but the disc must not be left tight against the nut (No. 43). An ordinary rule marked in millimetres will serve instead of a vernier.

The pendulum (No. 44) may be bent with special pliers. A double kink will keep the part of the pendulum near the disc vertical.

17

The complete Model H.30. Prior to this stage the cooker is packed with its insulating material, in this case, Zonolite.

In order to prevent the leakage of insulating material, the following joints should be smeared with a thick layer of water glass :—

All joints in the exterior casing, e.g., angle corner pieces, joints of sides and front, etc.

Joints in spoildraught ducting, particularly those immediately behind front plate.

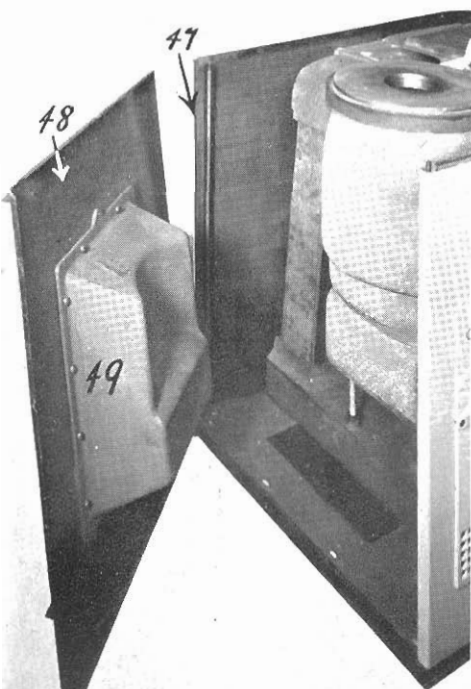
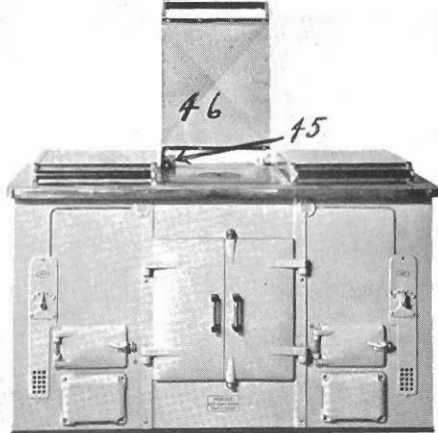
Ashpit tunnel joint.

NOTE.—The joints between ovens, oven insulating frames and front plate, should be made as before, i.e., with asbestos string and water glass.

First pour into the Cooker sufficient material to fill it to the top ; then take a long rod of about $\frac{3}{8}$ " diameter (a corner rod is quite good), insert this through the material down to the base plate and work it about so that the material packs down. The rod should be inserted in all possible places and the degree of packing required is obtained when the rod will not fall through the material in any place.

When the first filling has been so packed, pour in the remainder and press down lightly with the hands.

Before the top plate is fitted 6 insulating cover pillars (No. 45) bolt to its surface, with grub screws to the front. Short bars complete the hinges when the covers (No. 46) are fitted. The thermostat pointers are on "3" as is usual for normal running.

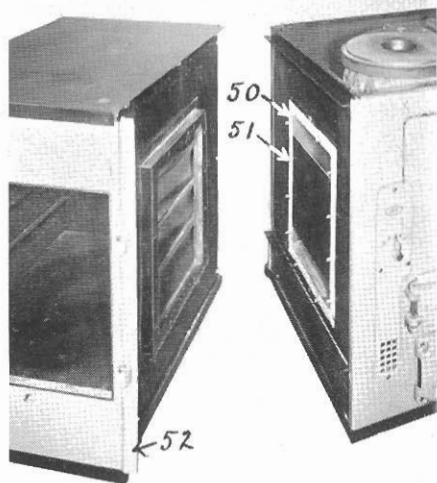


18

Model H.34. A cooking oven may be attached to either or both ends of the Model H30. Photograph shows the special side plate (No. 48) with heater casting in position. The latter will fit close to the outer barrel and ashpit of the cooker. The side plate is fastened in position by means of a corner slide (No. 47).

19

The Cooking Oven. The special side plate is in position and a thick asbestos gasket (No. 50) placed over the 12 $\frac{5}{16}$ " x 1" screws (No. 51). The oven side plate fits against the cooker and is bolted up from inside. The front plate (No. 52) neatly overlaps that of the cooker.



20

The complete Model 34. The top plates (No. 55) must be flush and even. The grate is shown held by the hook. By means of the hook (No. 53) the grate (No. 54) may be handled easily, even when hot. It is slid up the runners on the ashpit sides, tilted to rest on the right hand support near the door and raised to engage the catch on the left. A baffle, made of thin plates, is placed just inside the door. Its purpose is to keep the door cool when the Cooker is in use.

To complete the flue the Cooker may be fitted with alternative types of flue chamber for convenience, details of which are shown on the special pamphlet which deals with "Flue Layouts." On completion of the flue connections the Cooker may be lighted according to the method printed on the instruction card supplied with the Cooker.

