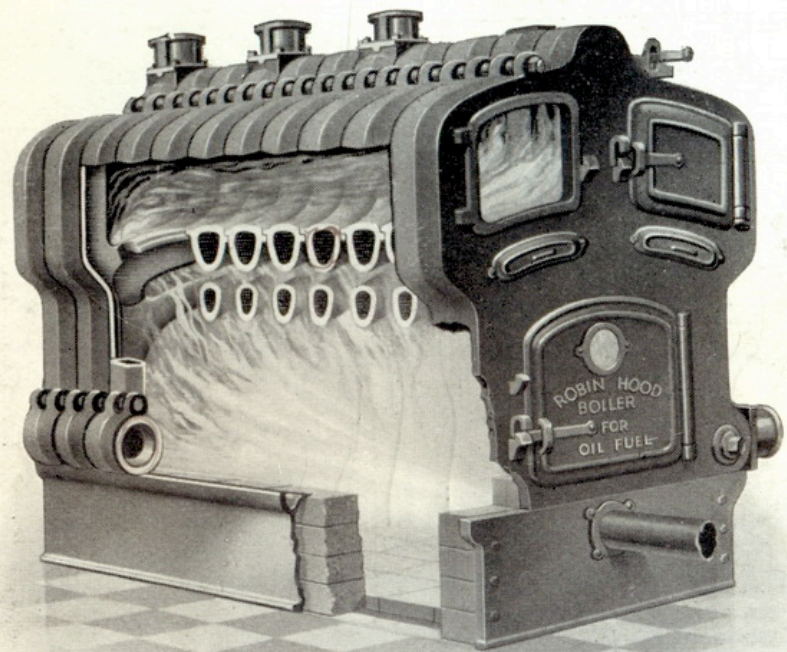


BEESTON ROBIN HOOD BOILERS. FOR OIL BURNING.

32



Robin Hood Boilers are specially suitable for Oil Burning, because of their deep firepot, long flame travel, and heavy castings. Wide firepots and shallow flues give best results with oil, and Robin Hood Boilers provide both these features.

We can fit the front section of all our Robin Hood Boilers to take any make of Burner, and we can arrange it so that Burner is taken into firepot at whatever height required, by stopping out the tube below fire door.

Robin Hood Boilers having loose fire bars, change over from oil to hand firing can be made at once if it becomes necessary.

The Burner capacities given on page 35 are arrived at by allowing 14,000 B.T.U.'s per lb. of oil per hour actual.

When required, we can fit fire door with an observation window of heat-resisting glass, about 3" diameter. See illustrations, page 32.

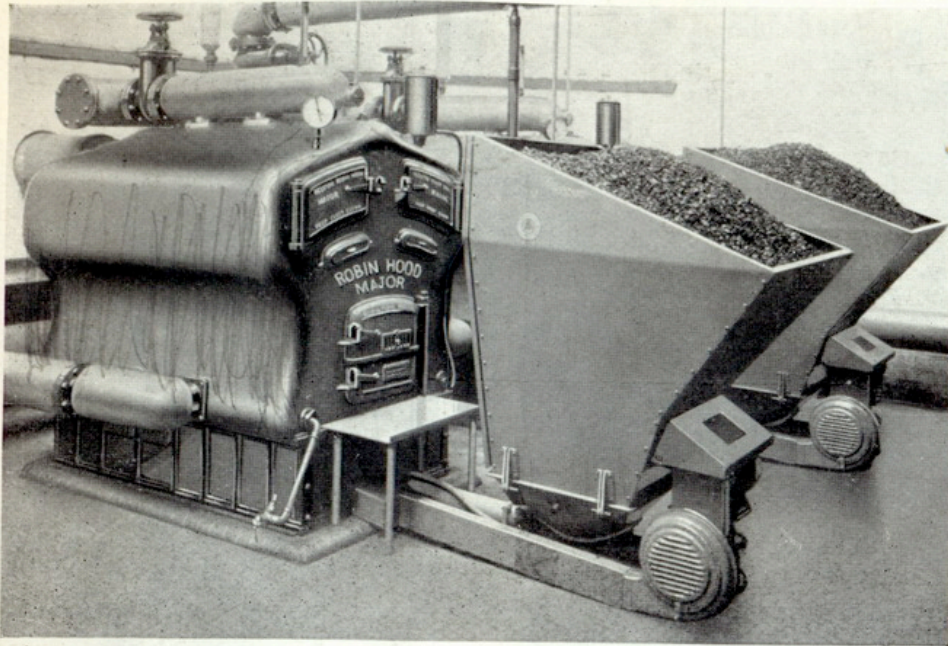
The maximum length of a Robin Hood Boiler for hand firing is 12 sections, because beyond this number the Boiler is difficult to stoke and the percentage of efficiency is not maintained. This restriction to the length, however, does not operate with oil-fired Boilers, and we have therefore given particulars and data on page 34 for some of our Robin Hood Boilers up to 16 sections long. Even longer Boilers can be supplied if required.

The maximum amount of oil which can be efficiently burnt in the combustion chamber of a Heating Boiler is 3 lbs. per hour per cubic foot of combustion space. It will therefore be seen by a reference to page 34, where there are two columns shewing gross combustion space in Robin Hood Boilers, one with the fire bars removed and one with the fire bars fitted, that there is ample margin to develop the full B.T.U. rating of each Boiler.

For details of Tie Rods for long Boiler Stands, see page 40.

For prices of Boilers, see page 35.

BEESTON ROBIN HOOD BOILERS. FOR AUTOMATIC STOKING.



TWO NEW MAJOR ROBIN HOOD BOILERS.

As Robin Hoods have a separate base and loose fire bars, they are easily changed over from one method of firing to another. They also have a deep firepot and long flame travel. The flues are made gas-tight by means of asbestos rope and loose baffle stops. The sections are connected with short connecting bolts, which take up expansion better than long bolts.

Cheap fuel, such as washed peas, may be burned with excellent results.

Fuel Consumption.—We have had two automatic stokers under our own observation; one is fitted to a 6-section Robin Hood **Senior** which is listed to 472,000 B.T.U.'s per hour, and the other to an **EX Beeston Domestic**.

Using washed peas costing 15/- per ton, the 6-section **Senior** Boiler consumed during 212 days of the winter 1934-1935 an average of 345½ lbs. of fuel per day, and the cost works out to 2/3½ per day. This Boiler is used for house heating, and deals with 2,650 square feet actual. The **EX Domestic** averaged 160 lbs. of fuel per day over a period of 234 days, and cost works out to 1/0¾ per day. A constant supply of hot water is given to 4 bathrooms, 10 taps and 6 towel rails.

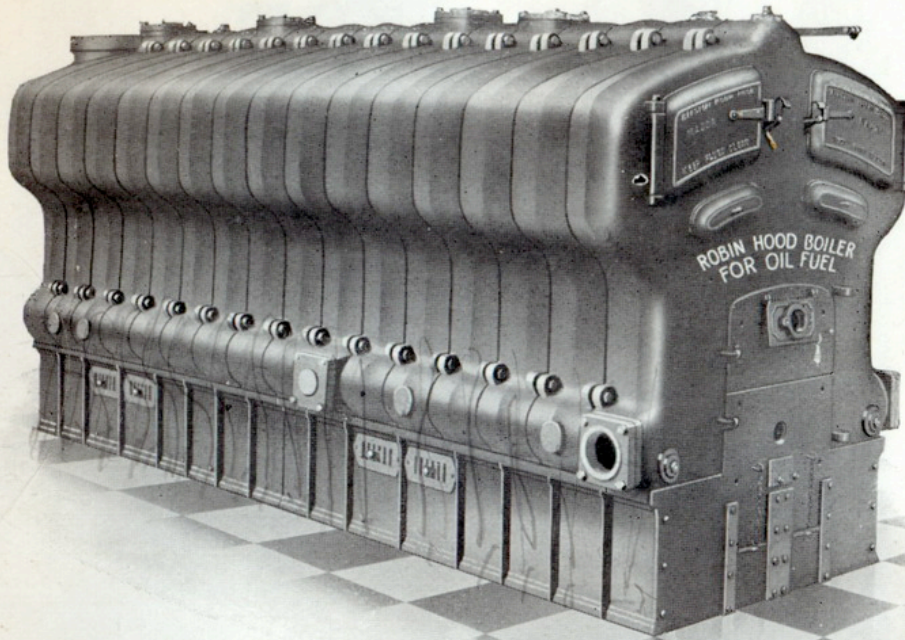
March 1938.—The above figures are confirmed at the present date, but since then there has been added to the **EX Domestic** 3 more hot taps and 3 more towel rails. The washed peas are now a little dearer.

Robin Hood Boilers have been used in large numbers for many years for **Horticultural** work, and automatic stokers are now being applied to such Boilers. Cheap bituminous coal is burnt, and a steady inside temperature maintained irrespective of the outside temperature.

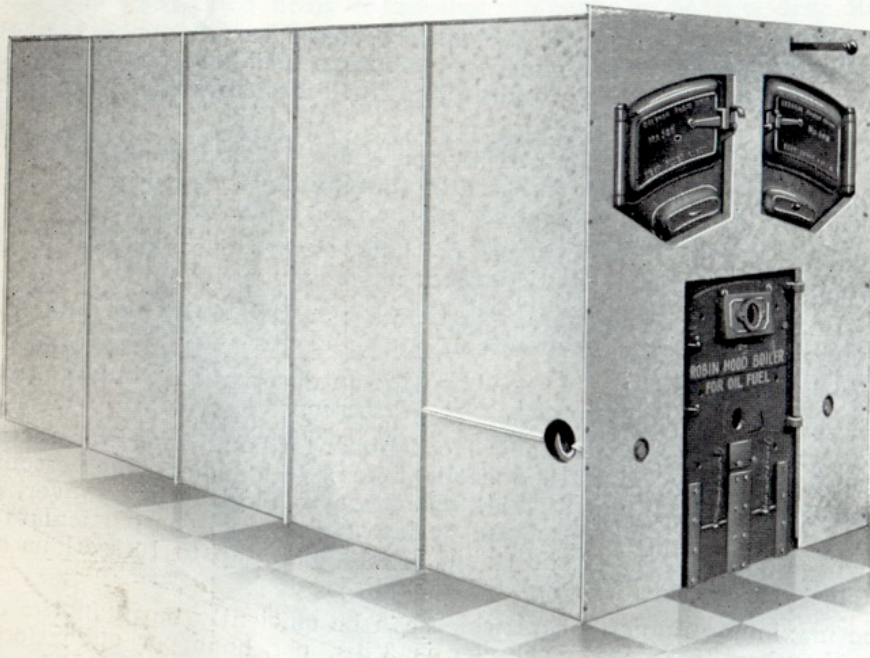
When ordering Robin Hood Boilers for automatic firing, please give the name and address of the maker of the Stoker, and we then arrange for the Boiler to be fitted up to suit. We shall be pleased to furnish names and addresses of Automatic Stoker makers on application.

For prices of Boilers, see page 35.

BEESTON ROBIN HOOD BOILERS. FOR OIL BURNING.



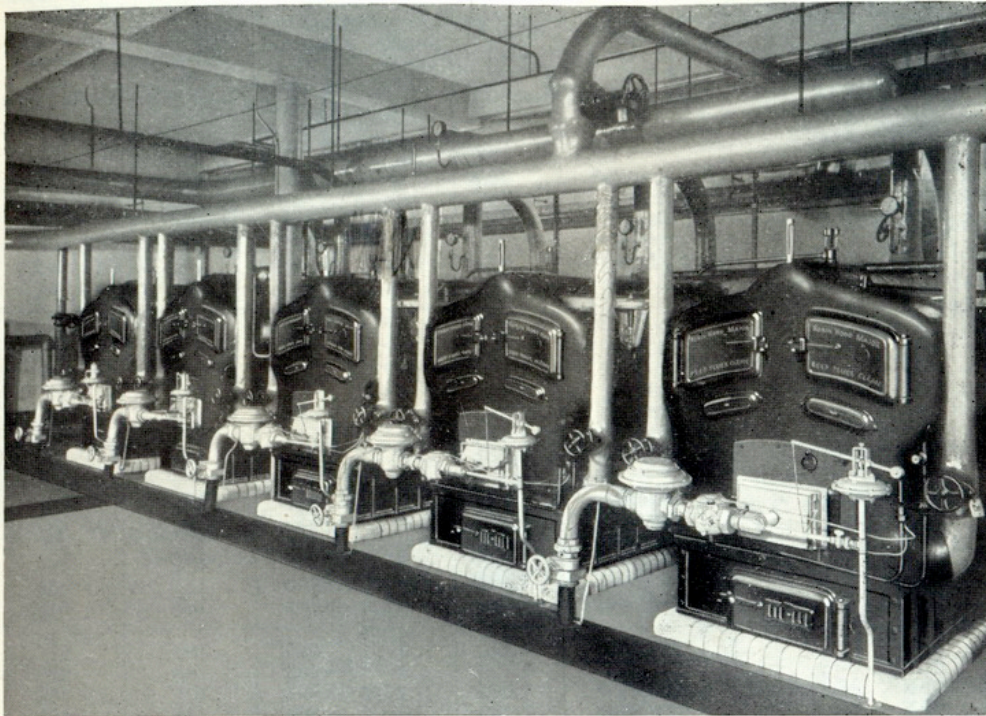
Sixteen-section MAJOR Boiler fitted for Oil. Front waterway bar stopped out. Plate fitted with observation window, and hole for Burner Nozzle in place of standard firing door. Long Boilers can also be used with Automatic Stokers.



Sixteen-section MAJOR Boiler fitted with Galvanized Insulated Steel Jacket. These Jackets can be fitted after Boiler is assembled and pipe connections have been made. Joints do not open after Boiler has been in use a little time. Robin Hood Boilers can also be easily adapted for firing by pulverised coal.

For prices of Boilers and Jackets see page 35.

ROBIN HOOD BOILERS. FOR GAS FIRING.



Group of five No. 12M MAJOR Robin Hood Boilers at Nottingham Town Hall, fired with gas.

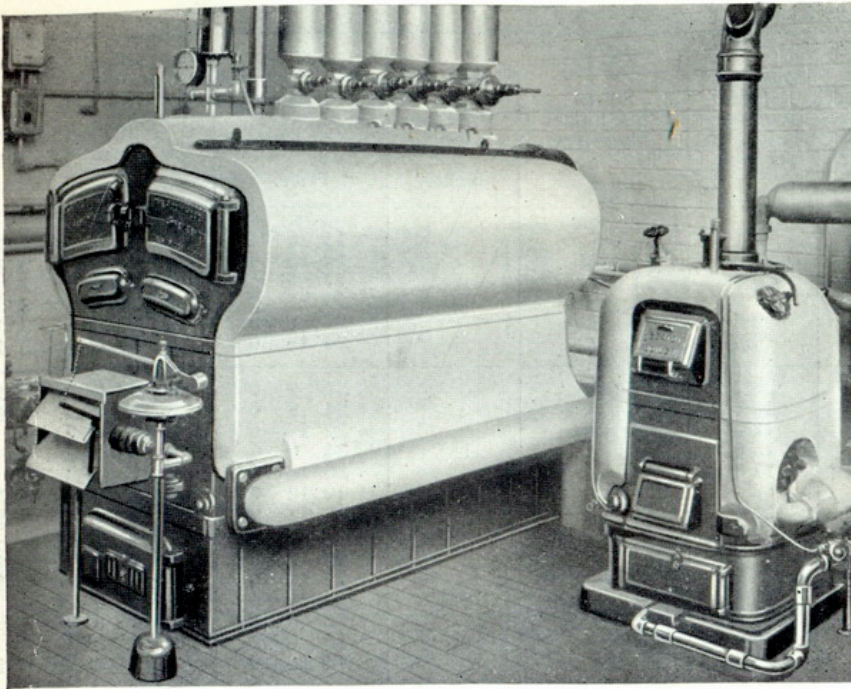
The conversion of Robin Hood Boilers to Gas Firing is carried out in a simple manner. (A) One system provides patent gas burners in the firepot, and recommends sheet-iron baffles in the fire pot, and fire-brick or sheet-iron baffles in the Boiler smoke flues to reduce their area.

(B) In another system the method of conversion is to construct horizontal flues of refractory material mounted in stages inside the firepot, the essential point of the conversion being to obtain a long flue travel for the gases inside the Boiler. As a general rule, the primary air is introduced into the Boiler through a special door in the back of the stand; the stand then forms a chamber for pre-heating the air, and also prevents downward heat loss through the base. The Boiler is thermostatically controlled by a rod thermostat usually screwed into a boss on the face of the Boiler, and operates on a diaphragm valve fixed into the supply main to the Boiler. The gas burner itself is of a simple design, consisting of an extension of the gas supply main mounted on the fire door of the Boiler. See illustrations in this list.

We shall be pleased to receive enquiries for supplying gas equipment for new Robin Hood Boilers or conversion of old ones. Before quoting, it is necessary we should have the size of the Boiler required, and the calorific value of the gas. If the latter cannot be given, the source of supply should be furnished.

ROBIN HOOD BOILERS

FOR GAS FIRING.



Gas is being increasingly used as a fuel, and town's gas lends itself particularly to automatic control of temperature and hours of operation by means of thermostat and clock. Briefly, its advantages might be stated as follows : (1) Absolute cleanliness ; (2) No labour involved ; (3) No storage space required ; (4) Automatic control. Many gas undertakings in this country offer special rates for gas used in central heating boilers, and are glad to co-operate with heating engineers in connection with the installation thereof.

Robin Hood Boilers have the following advantages over other types when fired with gas :—

Every part of a Robin Hood Boiler can be easily cleaned so that deterioration from condensation is reduced to a minimum. The heavy cast-iron sections have a much longer life than other Boilers.

The thermal efficiency of gas-fired Robin Hood Boilers is equal to any other pattern on the market.

Robin Hood Boilers can usually be extended to meet increasing demand, and conversion to any form of firing can be carried out without difficulty. Existing Boilers can easily be converted to gas firing, as usually all that is necessary is a special front and back plate of stand.

A No. 9N Senior Robin Hood Boiler, which is listed to 721,000 B.T.U.'s per hour, and fixed at a Lancashire school, maintained a temperature of 60° in the classrooms during January and February, 1938, with an average consumption of 46,800 cubic feet of gas per week. The weekly cost at 3½d. per therm being approximately £3/10/0. The Boiler works at full capacity a total of eight hours per day, and is fitted up in accordance with System B. (See page 37.)