

A NEW TYPE OF DIRECT-FIRED AIR HEATER FOR DRYING TEA*

CONTRIBUTED BY THE SHELL CO. OF CEYLON, LTD.

WITH A FOREWORD BY R. C. SCOTT

I have been asked by Messrs. the Shell Co. of Ceylon, Ltd., Colombo, to write a short introduction to an article on the direct-fired heater for drying tea that is installed in Ottery Factory, Dickoya, Ceylon; it is with great pleasure and satisfaction that I do so.

The construction and working of the furnace are explained in the following memorandum by Messrs. the Shell Co. of Ceylon, Ltd. I have little to add to the comments made except to say that I fully endorse them.

At the end of the memorandum are listed the advantages of the direct-fired heater; the only disadvantage I can name is the fact that, since the heat is applied to the tea in the drier direct, it is not possible to use a fuel other than oil for heating. With always the possibility that one may not be able to obtain a supply of liquid fuel, it is necessary to have a drier with the ordinary tubular form of heater available in which one can use either firewood or coal.

As stated, the drier with the direct-fired heater has been in regular use since June, 1938. Certain interesting figures are given; these I supplement with others showing the cost of firing made tea (fuel only), viz:—

June-Dec. (incl.) 1938.	0.69	cent per lb.	
Jan.-Oct. " 1939.	0.67	do.	
Jan.-Dec. " 1939.	0.71	do.	(a)
Jan.-Mar. " 1940.	0.85	do.	(b)

(a) price of liquid fuel increased by 7 cents per gallon since November, 1939 (inclusive).

(b) in addition to (a), crop was very short owing to drought prevailing.

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As regards the prices obtained for the teas directly fired, such have been regularly satisfactory and compare most favourably with the highest being obtained by surrounding estates.

The economy obtainable by this method of firing is obvious; the maintenance charges are quite negligible, and so is the danger of fire since one has no tubes to cause one apprehension; neither is there danger of sparks being emitted from the chimney which is always cool, since the chimney damper is fully closed except for 5-10 minutes when the burner is lighted and this very readily.

I can confidently recommend the installation of a direct-fired heater, and shall be pleased to demonstrate that in my factory to anyone interested.

Requests for such demonstrations should be made through Messrs. the Shell Co. of Ceylon, Ltd.

ROBERT C. SCOTT.
