The Brickworks, Bridge, Kent.

Report on existing kiln.

In accordance with instructions received from Messrs Saltwell and Co, I made a survey of the above, in the occupation of Mr Jones, on 13th April 1927 and have to report as follows.

The existing kiln.

The existing kiln is an old open kiln consuming wood fuel of a nominal capacity of 40,000 bricks but which, in its present state, will only hold 36,000. Under normal conditions the total annual output is about 240,000 bricks.

The kiln is in a worn and dilapidated condition, the upper parts of the external walls being badly cracked and bulged. The whole of the furnaces, flues and floor are in a defective state due to the intense heat generated in the burning of the bricks.

The upper part of the external walls should be taken down and rebuilt and the furnaces, flues and floor similarly treated and lined with firebrick where subjected to the greatest heat.

The level of the furnaces is so much below the ground level that in heavy storms they are liable to be dangerously flooded.

I was informed by the Tenant that the difficulty of obtaining adequate supplies of wood fuel at an economic price has become so serious that unless some means of changing over to coal fuel can be devised he will be unable to continue the business.

The cost of the execution of the work necessary to put the kiln in sound working order in its present form would be approximately £211.0.0.

Of this amount £99.0.0 would be for labour and cartage and £112.0.0 for materials to be supplied by the Landlord under the terms of the tenancy agreement.

Alternative proposals.

The alternative proposals submitted for consideration are as follows.

1. Alteration of existing kiln for coal consumption.
2. Erection of modern twin coal fired kiln.

1. Conversion of existing kiln to burn coal.

As a result of enquiries amog local Brickmakers I find that until a few years ago similar kilns to this have been used for making red bricks consuming coal.

For an extra cost of about £70, over and above the sum of £211.0.0 already mentioned as the cost of putting the kiln into sound repair, the flues and furnaces could be adapted to burn coal.

Beyond the fact that this method is now out of date owing to the extravagant use of coal, waste of heat and dependence on fine weather for satisfactory results, is the more serious question of the dense clouds of black smoke emitted during burning which might lead to complaints by the local Health Authority.

If this conversion were made the annual output would remain the same and the danger of flooded furnaces would not be removed.

2. Modern twin coal-fired kiln.

The Tenant has expressed a desire for a twin coal fired kiln built on up-to-date lines with a down instead of an up-draught.

I have inspected two such kilns in the neighbourhood and find that the total cost of building a twin kiln of a total capacity of 80,000 bricks would be about £800.0.0, assuming it were built by an outside contractor.

The new kiln could be built near the existing one and at a greatly reduced fuel consumption per 1000 bricks the total annual output could be easily doubled.

The main advantage of a twin kiln is that while one compartment is burning the other is being emptied or filled, so that valuable time at present more or less wasted in waiting for the single kiln to burn is usefully employed.

It is not impossible to build a kiln of this type and capacity for less but an examination of such a kiln built about two years ago at a cost of about half the above sum, which will shortly have to be completely rebuilt, prevents the recommendation of cheap construction.

General remarks.

It appears advisable, before embarking on additional capital outlay, to excavate a few test holes in the future brickearth area in

order to ascertain that a sufficient supply of good raw material is available for the future.

At present an increasing demand for red bricks warrants the extra capital expenditure.

If an increased rent cannot be obtained I suggest that an increased royalty on a doubled output would produce the necessary increase in revenue.

W.Leonard Grant.
High Street.
Sittingbourne.

25th April 1927.

WLG.