Phosphorus Retorts

The pottery vessels may be connected to the chemical industry rather than steel-making. These retorts were used in the 1800s for the manufacture of phosphorous, until coal firing was replaced by electricity in the 1890s.

After the initial processing of raw materials, animal bones or mineral calcium phosphates, the material was heated in these retorts set in banks of coal-fired furnaces, each holding 24 retorts. The firing took 16 hours, iron pipes being used to condense the raw phosphorous. That product was further refined before being ready for sale.

The description of the retorts given by Richard Threlfall in his 1951 history of Black Country phosphorous manufacturers Albright and Wilson provides a major clues as to the mystery pots' identity:

> 'The retorts - bottle shaped fireclay vessels about 48 inches long by 8 inches internal diameter (the mouths being narrowed to about 3 inches inside) were built into galley-type direct-fired coal furnaces commonly holding twenty-four of them (Figure 1)."

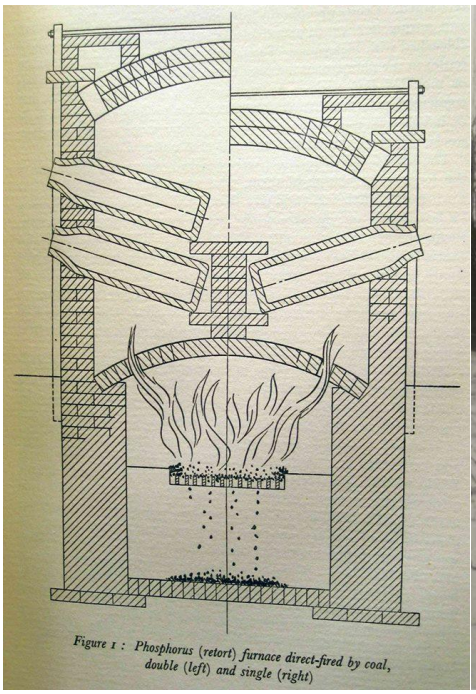
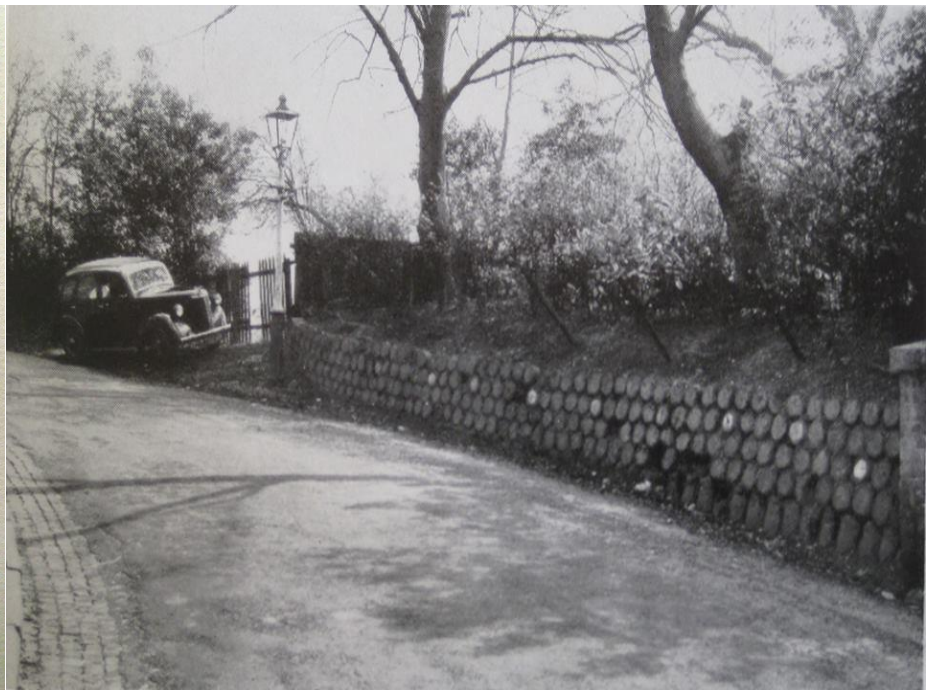
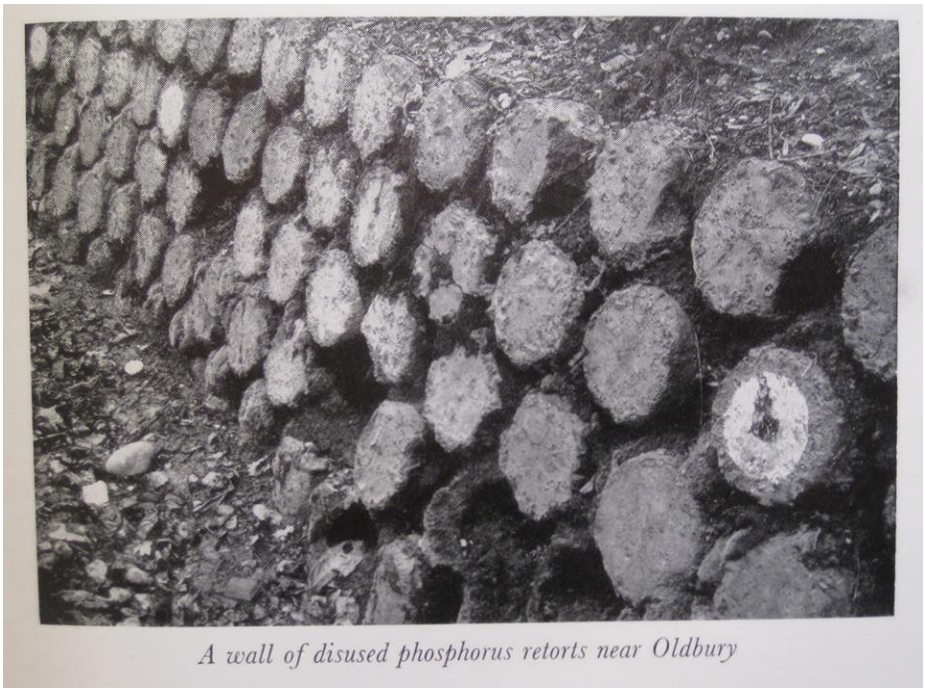


Figure 1 : Phosphorus (retort) furnace direct-fired by coal, double (left) and single (right)





A wall of disused phosphorus retorts near Oldbury

**The Story of 100 Years of Phosphorus Making, 1851-1951*

Richard E Threlfall

Published by Albright & Wilson (1951)