

## Early use of Coke in Derby.

A LETTER from Mr. G. J. Gilbanks Tyson, of The Hollies, Sinfin Lane, to the *Derby Evening Telegraph* of the 2nd Nov., 1933, on the use in Derby of coke in the malting processes seems of more than passing interest even if further research fails to substantiate the principal point in his communication. Mr. Tyson quite frankly says he wishes to elucidate only the earliest industrial use of mineral coke. He tells us that a friend, Mr. R. A. Mott, of the Sheffield University Staff and Secretary of the Coke Research Committee, has been investigating the early history of coal coke and has been forced to the conclusion that it was first used industrially by the Derby maltsters in the drying of their malt. Mr. Mott has made labourious and detailed search amid a very large number of obscure and unfamiliar deeds and documents but finds no earlier references to the industrial use of this article than that of John Houghton, F.R.S.—a name not unknown to serious students of our local history—in a weekly news-letter which he commenced to publish in 1692.<sup>1</sup>

This work consists of weekly letters issued from London on the various themes of the title. Mr. Tyson quotes (among others) this, dated June 16, 1693: "As for cowks and coals, which appear to be cheaper than in any part of England, Newcastle not excepted, there has been an account given before . . . . It's not above half a century of years since they dried their malt with straw (as other places now do) before they used cowkes which

<sup>1</sup> A Collection for Improvement of Husbandry and Trade. No. 1 Mar. 30, 1692 to No. 289 Feb. 5, 1697-8, by John Houghton, F.R.S. The Derby Public Library has a series of this news-letter far more complete than the British Museum set. It contains a lot of information about Derbyshire—Ed.

has made that alteration since that all England admires . . . . ” An earlier letter (April 20, 1693) also quoted says

“ I understand that Derby has five parishes, viz.: All Saints, in which there are 317 families and 20 malthouses; in St. Peter's, 120 families and 11 malthouses; in St. Werburgh's, 114 families and 33 malthouses; in St. Alkmund's, 94 families and 7 malthouses; in St. Michael's, 49 families and 5 malthouses; in all 694 houses or families and 76 malthouses, in which is malted so much as supplies the town and three hundred loads of six strikes to a load are carried weekly into Cheshire and Lancashire, and 'tis observed that at Maxfield or Manchester and thereabouts better ale can be made with a load of Derby malt, than Derby can do with a quarter of the same and limestone water which is plentiful in Lancashire, is thought to cause the difference.” [Perhaps I need not remind readers that the special element in the quality of old time Derby and Burton ales which made them famous was largely due to the dissolved gypsum or sulphate of lime in the water].

Houghton proceeds “ The reason of Derby malt being so fine and sweet, my friend thinks, is the drying it with cowks which is a sort of coal (so called there) they having a very hard sort that will not cawk and are not of so shining or blewish colour as the soft, which are sometimes found to lie in a vein 20 yards or more above the hard coal in the same pits, but most commonly in delfs by themselves and these are cawkified thus . . . . ” He then describes in detail the method—pretty much that of the old charcoal burners—of converting the coal, built up in heaps and fired from the top and later choked down, into coke, which I need not reproduce.

He then tells us “ The chiefest of coalmines thereabouts are one at Smaley, four miles; at Heanor, six miles; and at Denby, five miles from Derby; through

which abundance in summer are carried as far as Northamptonshire from whence is brought back barley. These coals at Smaley and Heanor are in the hands of one Samuel Richardson who finding that Derby consumed annually about 3,000 loads beside what was fetched into Leicestershire and Northamptonshire, designed to sell his coal for threepence the hundred and had got them to six shillings and sixpence the load. But the worshipful John Lowe of Denby, Esq. . . . sells them for five shillings and sixpence [the load] so that this year we bought coals delivered [in Derby] for  $3\frac{1}{2}$ d. the hundred." I have suggested elsewhere that probably part of the good quality of the Derby malt was due to the quick and thorough drying which destroyed any tendency to microscopic moulds—an enemy prone to develop in inadequately dried malt and very deleterious, we are told, in its effect.

Mr. Tyson concludes from such evidence as I have condensed above that "during the latter half of the seventeenth century Derby must have been almost totally engaged in the production of malt and ale, this prosperity being evidently due to the particular method used in drying the malt, which produced a far superior taste to that obtained by the older method of drying by straw and stubble."

Mr. Tyson for his friend the investigator, Mr. Mott, appeals for confirmation of Houghton's figures of which they have found no other contemporary evidence. I should be glad to hand on or publish elsewhere any such evidence supplied to me. I ought to add I have not checked the quotations from Houghton, feeling justified in accepting without question Mr. Tyson's transcripts.

W. H. WALTON.