# LETTERS TO THE EDITOR

# TWENTY THOUSAND MINERS CAN'T BE WRONG, BUT DR. KIERNAN CAN

## Roger Burt

It is a peculiarity of mining history that it has never acquired the debating style that is fundamental to most other areas of the historical disciplines. Mining historians are generally reluctant to undertake general analysis; they tend to stick to long established theories of the nature and causes of changes; and they rarely subject inherited orthodoxies to rigorous scrutiny and critical review. By and large, they are content to take the outline of their subject as it was drawn up by Raistrick, Lewis, Hamilton Jenkin, Gough and a few others more than a generation ago, and seek only to embellish it with ever more minute detail.

A classic example of this has been the slavish devotion to the idea that the modern era in British mining was ushered in by the arrival of German technicians and technology from the late sixteenth century. The usual argument is that they taught the poor backward English everything, from how to design and build pumping machinery, construct adits, use gunpowder, improve ore dressing machinery and revolutionise smelting methods. It may well be true of course - German technological superiority seems to be taken for granted in modern Britain - but it seems at least reasonable to re-examine the proposition and investigate any likely alternative explanations.

It was in this context that, I trailed my coat in a recent article in the Economic History Review. It argued that the English miner was not so dim or inexperienced that he needed to be taught how to dig lead by foreigners. That he was quite up to developing improved methods and machinery on his own account (Burt 1991). It was written partly in the academic "code" of the economic historians but it ought to be readily intelligible to a general audience and it was my hope that it would produce a creative response.

With this in mind, I was delighted to see David Kiernan's recent article in the Bulletin (Kiernan 1992). Although it addresses the issue of German influence on the British mining industry only very obliquely, his discussion of the 1641 miners' petition clearly provides an important stepping stone to a better appreciation of the changing structure of the Derbyshire industry during the period and the degree of capitalist organisation achieved by the mid-17th century. Whether his current conclusions about the level of wage dependency can be sustained must remain an open issue for the moment. Supporting evidence must be found and related questions - such as where the food supply for such a large and industrially specialised population could have come from - must be satisfactorily posed and resolved. But it is all good and careful work and should usefully extend the local history of the Derbyshire Peak.

It would have been nice, however, if Dr. Kiernan had shown the same care in the way that he drew his more general conclusions and, in particular, the way that he related them to my earlier article. The abstract of his piece boldly declares that his conclusions, "challenge the proto-industrial model recently advanced for the British non-ferrous mining industries by Roger Burt". If he had taken the trouble to read the article, he would have seen that the proto-industrial issue was addressed only at the very end and in the context of how my reinterpretation of the development of the metal mining industries might affect the debate over the issue of proto-industrialisation.

I certainly did not suggest a proto-industrial model for the experience of the industry in the 17th century and to talk of "The Panglossian proto-industrial model, as elucidated by Burt" is deliberately misleading and total nonsense. Dr. Kiernan appears to be so sensitive to any challenge to the orthodoxy received from his academic mentors that he loses his usual caution.

At this point, it would probably be appropriate for most readers of this journal to ask what all this is about. What is meant by "The proto-industrial model". It is a term that can be used without explanation in the Economic History Review, but it certainly requires some explanation to a non-specialist audience. It is surprising that the Editor of the Bulletin did not require Dr. Kiernan to provide a brief outline, since it would no doubt have enlightened him as well. I do not intend to go into it here, but would refer the reader to a very useful outline published by Mike Gill, in British Mining, which so often takes the lead in these things (Gill 1990). Dr. Kiernan might well have noticed it.

Finally, I would like to take issue with the quotation taken from my article which is discussed out of context (Kiernan 1992 p252). What I said - and I stand by it. was a generalisation relating to all British mining, ore dressing and smelting practice. The fact that specific Derbyshire practice diverged from it does not necessarily undermine the general case. For example, I said that there were few changes of significance in the British non-ferrous smelting practices after the late sixteenth century. Indeed there were in Derbyshire, but they resulted simply from the importation into that county of improved devices probably developed elsewhere in England.

I wrote that, "strategic changes in furnace design for tin and lead smelting from primitive wind blown "boles" to mechanically blown slag and ore hearths, were initiated in the south west well before the 16th century, and the ensuing period saw little more than the geographical diffusion and simple improvement of that well proven technology" (Burt 1991 p260). Does Dr. Kiernan wish to take issue with that? He has written himself that the new smeltmills introduced into Derbyshire in or around 1571 saw their origins, "in the development of new furnaces in the Mendip Hills in Somerset in the 1540s and 1550s" (Kiernan 1989 p126). We would be better employed debating where the inspiration came from for "a unknown county smelter in the Mendips whose invention freed the industry from its medieval shackles" (Kiernan 1989 p119). It is quite clear that all sorts of particular exceptions to my general comments can be advanced, but are they numerous and important enough to undermine the general?

Roger Burt.