

**Evidence of J. Buddle before the Select Committee of the House of Lords  
on the state of the coal trade, 1829**

*(Parliamentary Papers, 1830, VIII, pp. 28-54; in A. Aspinall and E. Anthony Smith, eds., English Historical Documents, XI, 1783-1832, New York: Oxford University Press, 1959, pp. 528-31.)*

Have you a general knowledge of all the collieries upon the Tyne and Wear? –Yes....

What is the deepest pit you know? -The deepest pit I am acquainted with as a working pit is 180 fathoms of shaft; but they frequently go deeper by inclined planes underground.

What is the shallowest? -The shallowest pit that I know of is 23 fathoms, and of very inferior coal.

Can you state generally what is the extent of the expense incurred in sinking a single pit? -I have known, in several cases, upwards of, £30,000; that includes the machinery requisite for sinking that pit, that is, the steam engine and all its apparatus; that is merely getting to the coal, and it might be called more properly a winning charge than a working charge.... Perhaps no stronger proof of the great risk can be adduced, than that it is a property that cannot be insured, either against fire, water, or any other accident. We have never been able to effect an insurance on a coal work.

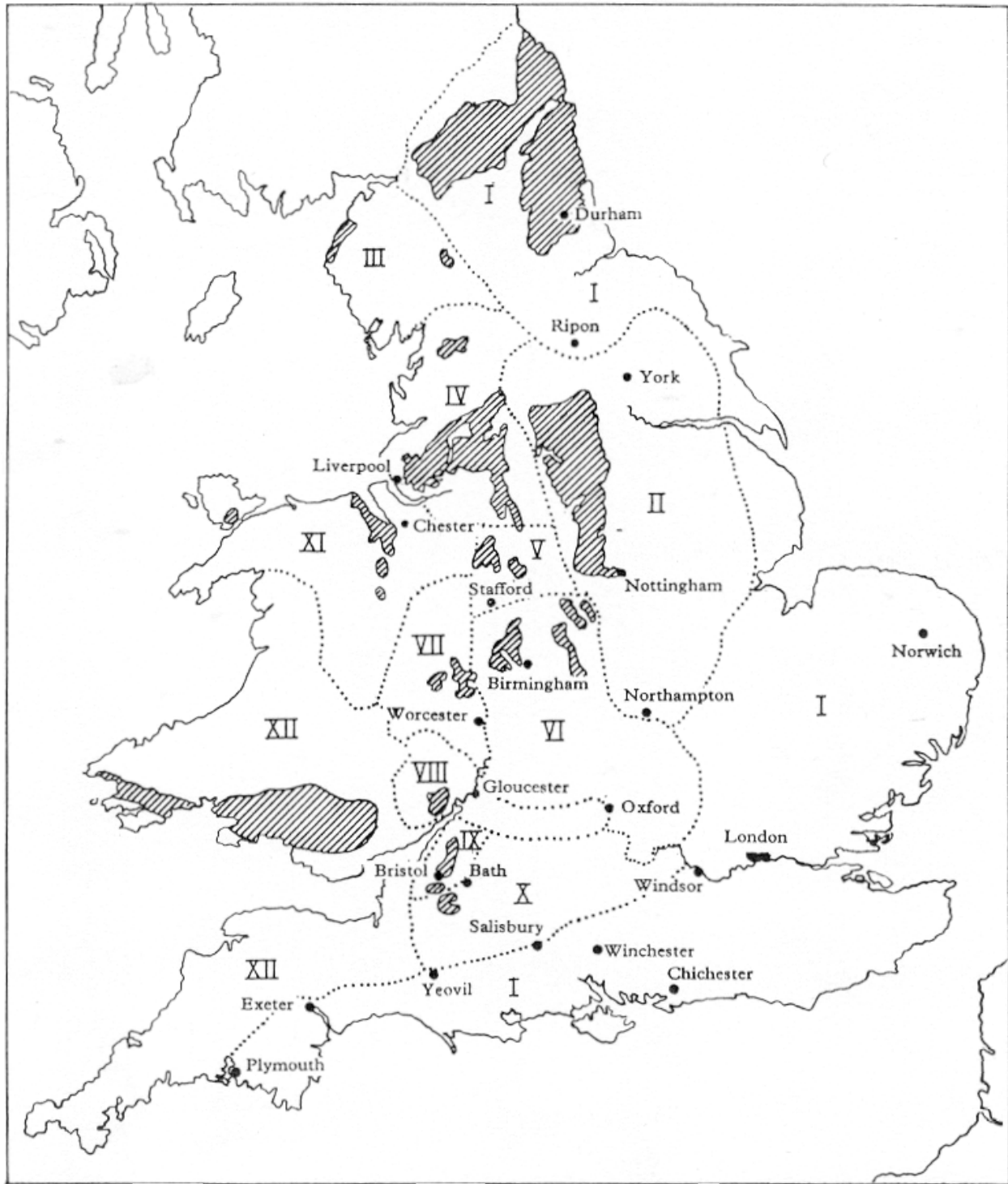
Have you any idea of the capital employed in the coal district? -Yes, I think I have, more particularly on the Tyne, where I have had more professional business, and have been more generally employed in valuations.... I should think that the aggregate capital employed by the coal owners on the river Tyne must amount to about a million and a half, exclusive of craft in the river. Some of them are owners of the craft; many of them hire keels or barges....

Have you made any calculation on that vested in collieries on the river Wear? -Only by approximation.... I should think from 6 to 700,000....

Have you any ... calculation of the number of men and ships employed on the two rivers ...? The returns from the Tyne are [from] official documents; from the Wear' ... it is by an approximate calculation. The number of persons employed underground on the Tyne, are, men 4,937, boys 3,554, together 8,491; above ground, men 2,745, boys 718, making 3,463 ; making the total . . . 11,954, which in round numbers I call 12,000, because I am pretty sure there were some emissions in the returns. On the river Wear, I conceive there are 9000 employed, making 21,000 employed in digging the coal and delivering it to the ships on the two rivers. From the best calculations I have been able to make, it would appear, that averaging the coasting vessels that carry coals to the size of 220 London chaldrons each vessel, there would be 1,400 vessels employed, which would require 15,000 seamen and boys. I have made a summary; there are, seamen 15,000, Pitmen and above ground people employed at the collieries 21,000, keelmen, coal boatmen, casters and trimmers 2,000, making the total number employed in what I call the Northern coal trade, 38,000. In London, whippers, lightermen and so forth, 5,000; factors, agents, &c. on the coal exchange, 2,500; 7,500 in all, in London. Making the grand total in the north country and London departments of the trade, 45,500. This does not, of course, include the persons employed at the outports in discharging the ships there....

THE COALFIELDS OF ENGLAND AND WALES AND THE AREAS NORMALLY  
SUPPLIED BY THEM IN 1830

(From a map in the Report of the Select Committee on the State of the Coal Trade,  
1830; *Parliamentary Papers*, 1830, viii.)



*Coalfields, and areas supplied*

I Northumberland and Durham	VI South Staffordshire, or Dudley and Warwick
II Yorkshire, Nottinghamshire and Derbyshire	VII Shropshire, including Coalbrookdale
III Whitehaven	VIII Forest of Dean and Plain of Shrewsbury
IV Lancashire	IX South Gloucestershire or Bristol
V North Staffordshire or Pottery	X Somerset
	XI North Wales or Flintshire

Has the price of wages with respect to the labouring colliers continued at the same rate as during the war? -No; there has been a small reduction.

Has the prices of provision continued the same as during the war? -They have fluctuated very much; at one time they were very low, now they are higher again.

Do you consider the reductions the colliers have submitted to, equal to the reduction of the prices of living which has taken place in the country? -I would answer by saying, that if they could have full their wages are ample: but there is no employment for them, 14s a week is their lowest wages; but they could earn 5s per day if they had work to enable them to do so.....

*The Davy Lamp.*

Do you think that the particular accidents by explosions, which you have ...described, have been much lessened by the introduction of Sir Humphrey Davy's safety lamp? -They have, I have conceive; but on taking the average for 34 years, up to the present period, scarcely one half of which we have had the benefit of this lamp, the loss of life has been nearly about the same; but I attribute that to this cause, that we are working mines, from having the advantage of the safety lamp, which we could not have possibly worked without it, and of course they are in a more dangerous situation, and the risk is increased in a very great degree. If we had not had the Davy lamp, these mines could not now have been in existence at all; for the only substitute we had, and that was not a safe one, was what we called a steel mill, which was the only means of introducing light, except by the naked flame, ...). In daylight this appears to produce very little light, but in a coal pit I have frequently been obliged to write by this light, before the invention of the Davy lamp: but the defect of this light is, that it is not secure from explosion at a certain mixture.... They were completely superseded by the Davy lamp. This ... is the Davy lamp of the simplest construction; it costs only about 5 or 6 shillings. A steel mill is very hard work; we were obliged to have two persons to relieve each other; and this was introduced in its room: ... this introduced quite a new era in coal mining, as many collieries are now in existence, and old collieries have been reopened, producing the best coals, which must have lain dormant but for the introduction of the Davy lamp.