

In countries where coal has long been worked, almost every district is explored at least nearly to its boundaries. This is at present the case in England—indeed, generally in Europe; and, consequently, it may be thought that the time has gone by for the geologist to be of service, and the future is to be intrusted to coal viewers and workmen. When coal viewers become geologists, (and this is now very generally the case with men of eminence in that profession), the question of the future extension of our coalfields will be in safe hands; but in all cases, and at all times, this is *a geological question*. Only sixteen years ago, (it is in our own memory,) a valuable estate in Durham was pronounced to be devoid of coal, “because it was situated on the magnesian limestone,” and might have been sold under this opinion, but that a geologist of celebrity, Dr. William Smith, showed the falsity of the reasoning, reported favourably of the probability of finding good coal in abundance beneath the property, and advised the proprietor to work it. That estate is now the centre of a rich and well explored mining tract, all situated beneath the magnesian limestone, and this result was the fruit of scientific geology, not “practical” coal-viewing, though the professional mine-agents of the North of England are now employed in extending its benefits.

This fact is one of a large class; and it more particularly deserves attention, because the magnesian limestone overlying the coal of Durham is united in one system of rocks with the red sandstones of Cheshire and Staffordshire, beneath which, as beneath the magnesian limestone of Durham, the coal appears to dip, and the red marls of Somersetshire, under which it is largely worked. Is there a coalfield below the great Cheshire plain?

If this question is to be answered without the boring-rod, none but geologists can venture to speak; nor of these, any but those who have studied the *peculiar* character and relations of the coalfields which border the red sandstone plain in Lancashire, Shropshire, Staffordshire,