

OBSERVATIONS ON THE PERIOD WHEN THE COAL MINES IN  
ENGLAND WILL BE EXHAUSTED.

Coal was known, and partially used, at a very early period of our history. I was informed by the late Marquis of Hastings, that stone hammers and stone tools were found in some of the old workings in his mines at Ashby Wolds; and his lordship informed me also, that similar stone tools had been discovered in the old workings in the coal mines in the north of Ireland. Hence we may infer, that these coal mines were worked at a very remote period, when the use of metallic tools was not general. The burning of coal was prohibited in London in the year 1308, by the royal proclamation of Edward the First. In the reign of Queen Elizabeth, the burning of coal was again prohibited in London during the sitting of parliament, lest the health of the knights of the shire should suffer injury during their abode in the metropolis. In the year 1643, the use of coal had become so general, and the price being then very high, many of the poor are said to have perished for want of fuel. At the present day, when the consumption of coal, in our iron furnaces and manufactories, and for domestic use, is immense, we cannot but regard the exhaustion of our coal beds as involving the destruction of a great portion of our private comfort and national prosperity. Nor is the period very remote when the coal districts, which at present supply the metropolis with fuel, will cease to yield any more. The annual quantity of coal shipped in the rivers Tyne and Wear, according to Mr. Bailey, exceeds three millions of tons. A cubic yard of coal weighs nearly one ton; and the number of tons contained in a bed of coal one square mile in extent, and one yard in thickness, is about four millions. The number and extent of all the principal coal-beds in Northumberland and Durham are known; and from these data it has been calculated, that the coal in these counties will last 360 years. Mr. Bailey, in his Survey of Durham, states, that one third of the coal being already got, the coal districts will be exhausted in 200 years. It is probable that many beds of inferior coal, which are now neglected, may in future be worked; but the consumption of coal being greatly increased since Mr. Bailey published his Survey of Durham, we may admit his calculation to be an approximation to the truth, and that the coal of Northumberland and Durham will be exhausted in a period not greatly exceeding 200 years. Dr. Thomson, in the Annals of Philosophy, has calculated that the coal of these districts, at the present rate of consumption, will last 1000 years; but his calculations are founded on data manifestly erroneous, and at a variance with his own statements; for he assumes the annual consumption of coal to be only two million eight hundred thousand tons, and the waste to be one third more,—making three million seven hundred thousand tons, equal to as many square yards; whereas, he has just before informed us, that two million chaldrons of coal, of two tons and a quarter each chaldron, are exported, making four million five hundred thousand tons, beside inland consumption, and waste in