rocks, such sandstones as the Millstone Grit and Gannister beds of the Coal-measures, are ill adapted for macadamising roads, for traffic rapidly grinds it into its original state of loose sand. Nevertheless, in some regions they have nothing else to use, and to obviate its defects the following process is used near Barnsley and in other parts of Yorkshire. The rocks in question were made from the débris of granites and gneiss, similar to those of the Scotch Highlands. The stone being quarried in small slabs and fragments, is built in a pile about 30 feet square, and 12 or 14 feet high, somewhat loosely; and while the building is in progress, brushwood is mingled with the stones, but not in any great quantity. Two thin layers of coal, about 3 inches thick, at equal distances, are, so to speak, interstratified with the sandstones, and a third layer is strewn over the top. At the bottom facing the prevalent wind, an opening about 2 feet high is left, something like the mouth of an oven. Into this brushwood and a little coal is put and lighted. The fire slowly spreads through the whole pile, and continues burning for about six weeks. After cooling the stack is pulled down, and the stones are found to be vitrified. Slabs originally flat have become bent and contorted like gneiss, and stones originally separate, get, so to speak, glued together in the process of vitrification, aided by the soda, potash, and iron, which form part of the constituents of felspar and mica and act as a flux.

In the year 1859 I visited a vitrified fort called Knockfarril, near Strathpeffer in Ross-shire, ‘ and came to the conclusion that the vitrification had been done of set purpose, and that the effect had been produced by burning wood.’ In the first volume of Dr. John Hill Burton’s ‘History of Scotland,’ 1866, he ex-