

and directly felt, would be the advantages of having among us men more skilled to apply practically, physics, mechanics, agriculture, natural history; and even to investigate that most important, yet least understood field, the world beneath the waters, whence we draw our harvest of the deep; such an important item to a people whose land borders on two oceans, and is intersected by the largest lakes and rivers of the world. But I must leave that to abler hands than mine, and touch only on what I am best acquainted with—the professions of the Civil and Mining Engineer. These two professions are of great antiquity, although the records of their achievements are too frequently obscured in the annals of conquest and intrigue. The ancient aqueducts and harbours of Europe and Asia form striking monuments of the value attached to the services of the Civil Engineer engaged in those two most important duties, the supplying of towns with fresh water, and the formation of commodious harbours at points of commercial and strategical importance.

The enterprise of an English traveller has recently re-opened the historical mining district of Midian, and certainly from his account of the richness of its mineral resources the “old men” deserve credit for their selection of a good mining ground.

Still the progress of these twin professions was very slow, and it appeared at one time as if the art of the continental Coal Miner was doomed to extinction, for it became very evident that with the appliances of the day it would soon be impossible to raise the water of the coal mines from a depth materially exceeding that already reached by the workman.

The discovery of steam however has changed all this, and opened to the Civil and Mining Engineer a vast and unlimited field. To the one it gave the Railway and its accessories of bridges, tunnels, and the improvement and deepening of rivers and harbours at points hitherto undreamt of. To the other it furnished a powerful agent for deepening and extending the subterranean galleries, and by its economical application afforded scope for a vehement and yet well regulated extraction of minerals, so that it is not unusual to see an English Colliery