## SATURDAY, AUGUST 24, 1878.

## MINING AT CAPLEDRAE AND LOCHORE.

## Gas Coal

The mines of Capledrae and Lochore have been known for a good period of years to be productive of gas coal of a very fine quality, notwithstanding that the strata in the district, in many instances, is somewhat irregular. In the year 1872 (the beginning of the coal famine period) the works changed hands – a number of rather wealthy gentlemen having formed themselves into what is known as the Lochore and Capledrae Cannel Coal Company. A prospectus being issued at a very auspicious time, £110,000 in share capital was raised. The Company at once negotiated with Lady Scott, proprietrix of Lochore grounds, and Mr R.B. Symington, Dunfermline, proprietor of some of the works, for the buying of Lochore estate. The leases of the minerals, with the whole machinery, plant, and operations. The lands of Lochore were bought at a cost of £50,000, and leases of nearly all the minerals in the district were affected - the stipulated agreement for the whole transaction, including all charges for the formation of the Company being £100,000. Numerous mines were at once sunk in what was considered to be the most advantageous places, the cost of which, together with the workmen's houses, was about £37,000. A railway branch was also conducted into the collieries from Kelty station at a cost of £21,549 17s 8d, the N.B. Railway Company having defrayed the most of the expenses for such. Operations had not proceeded far, however, in the Lochore mines, when numerous obstructions were met with, the coal being thin and much distorted. An unusual quantity of water had also to be contended with, which could only be brought to the surface by heavy pumping machinery. This latter fact need not be wondered at, seeing that the mines are all situated near the base of Benarty Hill, consequently they could only form tanks as it were, for the many springs with which the hill is surrounded. About 18 months ago, the lower section of what is known as the Lochore Mines became entirely flooded with water, and work there from that time to the present has been abandoned, the water having now reached the mouth of the shafts. The fittings of the pits are nearly all standing yet, and are, of course, deteriorating in value every day, the machinery being rusty, while the other fittings are crumbling down. Such a state of matters cannot but present a disheartening appearance to those who are concerned in the works, and people who are passing are apt to infer that the capital has been laid out in a wrong quarter. When the Company was formed they obtained a lease of the minerals of Capledrae, the buying of the whole of the plant at the old mine there being included in the £100,000 already spoken of. To prove the mineral, it was thought advisable that before sinking a shaft, boring should be resorted to, and accordingly an English Company was engaged, who proved the strata with a vertical diamond drill bore worked with steam. The coal was reached at a depth of 100 fathoms, was found to be of good workable thickness, and considered a pretty fair quality. One very formidable barrier in the way of sinking a shaft was the fact that from the bore it was found that 30 fathoms of whin rock had to be sunk through. To pierce a perpendicular shaft in such a hard substance seemed to be considered impracticable at that time, although we believe it would not be such a difficulty now, seeing that dynamite as a blasting material has become so popular. The manager of the Company rather thought it advisable to start an incline in 1874 from the surface, running with the vein

of coal at an angle of 45 degrees, or to use a hackneyed mining phrase – halfedge. Of course this incline was intended from the first to be run until the basin of the coal was reached, at which point it was expected that the "coveted treasure" would rise on every side, thus making coals easy to get.

In running this incline the vein of the coal has been often lost, the workmen being intercepted with boulders of whin which throw them entirely out of the coal position. Seeing that Benarty and the Lomonds are situated in close proximity to the mines, the strata may have been disturbed a good deal by volcanic eruptions. On the theory that the above hills were raised since the period of the coal formation, the regular lying seams would be violently torn asunder, and mixed with a combination of various metals or "trap-dykes". In fact, the surface itself in the district indicates clearly that there has been a "whin battle" at some period or another, as large boulders crop out amongst the soil in every field. The coalfields of Scotland are all more or less traversed by these faults or dykes, which in most cases gives evidence of foreign matter having been imported into the coal measures, and forming separations by volcanic agency consisting of greenstone porphyry. In almost every instance, dykes destroy the coal in point of contact, and masses of trap intercept the minerals, which are burnt and wasted, the coal at a considerable distance being inferior in quality. They, as a rule, run parallel to each other, and are frequently of great extent, the strata being tilted up so much that the coal may be found at the surface on one side of the "fault", while on the other it may be 100 yards in depth – thus the continuity of the seam at Capledrae is very much broken, and has made the getting of a regular lying seam of coal a work of great difficulty. In fact, it is questionable as yet whether the desired "coal haven" may be reached, as the workmen after a period of over three years are still digging into stone, exploring the unknown regions. A depth of fully 200 fathoms has now been pierced, which at an angle of 45 degrees means that the men are working at a perpendicular depth of 400 yards. Just imagine for a moment the dangers the men at the foot of this great hill must have while the hutches of rubbish are being raised by the engine to the surface, as the rope may break or a large fall of stone may hurl from the top to the bottom. Such is the position of the men who are engaged in mines, and parties who have such dangers to contend with ought to be remunerated handsomely. Still, this in the meantime, is not the case, and there is just now little hope of a soon revival. The operations at this Capledrae incline have been under the directorship of Mr H. Aitken, managing director for the Company, while the more immediate superintendence has been conducted by Mr John Ferguson, manager of works. Both men seem to understand their work thoroughly, and Mr Aitken, who is also a mining engineer, has had large colliery experience. His ability has been very much tried in the Capledrae subject, however; and during the tedious three years that the search for coal has been carried on with so much uncertainty, several meetings of the shareholders and Board of Directors have taken place. From the reports of these meetings it is apparent that "fate" has been against the Company from their very commencement, and the shares have dwindled beautifully down to a merely nominal sum. To quote from Mr G. Robertson, W.S., at a meeting of the directors in October last, he stated, "that their debts amounted to £47,504, and their assets to £52,000. Deducting their liabilities from that there remained £4500 to meet a subscribed capital of £100,000. In fact, he said, the Company was almost bankrupt." We only mention this to show that the shareholders, if they could spend all, are determined to prove the minerals - Some of the directors have been quite outspoken; and one could almost have imagined that the concern, under such adverse circumstances as we have spoken

of, would, ere this, have been "played out". Mr Aitken, notwithstanding the obstacles raised by the other directors, combined with the more serious obstacles daily cropping up at the mines, has always, and even yet, holds out a ray of hope that success will attend their efforts, and that they will yet be able to pay a dividend. He is certainly a gentleman in every sense of the word - enterprising, persevering - possessed of a "not-to-be-beat" spirit. From the "Journal" of the 10<sup>th</sup> inst. We notice that the Company were advertising for 30 additional hands, which is an indication that things are looking up. We hear this week that the men working in the mine are now getting into more regular formed strata, and that they are in the stone which is supposed to immediately overlay the coal. It is to be hoped, now that so much money has been laid out, that a good remunerative seam will be found, and that the directors of the Company will even yet, at this late hour, have the pleasure of declaring a dividend to the shareholders. At present a good many of the houses are empty, and as they are situated in a rural (although lovely) district, things have altogether a dull and deserted appearance. If the coal is found, however, there is no doubt but a large number of the men who left the colliery about two years ago will again return, and will unveil the "hidden treasure", with a profit, we trust, to all concerned. In concluding the present article, perhaps the following explanation as to what cannel or parrot coal is composed of may be of interest to our readers: - Cannel coal, which is applied to gas illumination, was first introduced into this country in 1792, and practically applied in 1805 into the workshops of Messrs Boulton & Watt, at Sohonear, Birmingham. Illuminating gas is chiefly composed of carburetted hydrogen – the density being 0.6 of that of air. The best bituminous coal yields something like 8000 cubic feet of gas per ton, while the quantity obtained from cannel coal is from 10,000 to 12,000 cubic feet per ton. Gas is drawn from the coal by the process of dry distillation.