
This mine, which has so long attracted the attention of the antiquary, is situated on the left bank of the Cothy, forming part of the grounds of Dolau Cothi, the residence of Mr. Johnes, to whom the survey is indebted for much valuable aid during its progress in that part of Wales. He informs us, that the traditions of the country point to the Romans as the originators of these works, and that they were carried on in search for gold. The remains of Roman pottery, ornaments, and a bath afford reason, Mr. Johnes considers, for presuming that there was a Roman station near this spot, connected with the mines. Several gold ornaments have been discovered, and a beautifully wrought golden necklace is now in the possession of Mrs. Johnes. The name of the parish, Conwill Gaio, tends also, Mr. Johnes remarks, to the conclusion, that the Romans occupied this ground, provided the interpretation given to it be correct, for Conwill Gaio is supposed to signify "the advanced post of Caius." The name of Meli-y-milwyr, Angl. "The Soldiers' Mill," is given to the remains of a pond, supposed to have supplied the works with water, brought for a distance of eight or ten miles, allowing for curvatures, along the sides of the hills, from a place in the Cothy called Porth uffern, or Hell's Gate. This old water-course can still be traced, at intervals, for the distance. The allusion to soldiers is considered to have reference to the Roman soldiers who may have been employed in the works.

The Romans were, of all the nations of antiquity, the most successful in bringing their colonies to a high state of prosperity, which, considering the military nature of their colonization, we should hardly be prepared to expect; and we find that their settlements in the North, South, East, and West, still remained vigorous, whilst internal corruption destroyed their great centre; and that they only fell when their protecting troops had been recalled, and they were left a defenceless prey to the barbarian swarms which formed so striking a feature of those times.

Among the various ways adopted by the Romans for augmenting the commerce of their settlements, there are two, of which the traces still remain; the improvement in communication by the laying out of good roads, and the development of the mineral wealth of a country by
NOTE ON THE GOOGFAU, OR OGOFAU, MINE.

mining; and since authenticated remains of the latter are very rare in this country, it becomes important to examine with care whatever is attributed to the agency of that great people, and to compare it with their known works in other parts of the world.

It has been a matter of surprise with those who visited the Ogofau that iron pyrites was the only ore visible, and that large heaps of apparently pure quartz, carefully broken to the size of a common nut, were alone found. The geological survey discovered, however, a specimen of free gold in the quartz of one of the lodes, and thus corroborated the evidence which tended to prove that the mines were worked for gold.

The majority of the workings extending to a considerable depth for some acres over the side of the hill, are open to the day, or worked, as usual, in the early days of mining, like a quarry; and the rock through which the lodes run, a portion of the lower Silurian rocks, is in many places exposed, and exhibits beds much contorted and broken, though having a general tendency to dip northward. Here and there a sort of cave has been opened on some of the quartz veins, and in some cases has been pushed on as a gallery, of the dimensions of the larger levels of the present day, viz., six to seven feet high, and five or six feet wide, and among these, two of the most remarkable (represented in plate 8) are kept clear by Mr. Johnes, and being easily accessible, allow of close examination. The upper surface of the hill is at this, the south-western extremity of the workings, deeply marked by a trench running N.E. and S.W. similar to the excavations technically called open casts, where the upper portions of the lodes were in very early times worked away; and when it was afterwards found disadvantageous to pursue the lode in this manner, a more energetic and experienced mind must have suggested the plan of driving adit levels from the north face of the hill through the barren rock in order to cut the lode, at a greater depth than it could otherwise be reached; and the perseverance exhibited in driving 170 feet through the slate in each of the levels in question, was no doubt based on a sufficient knowledge of the continuous nature of a mineral lode.

The upper level communicates with the trench on the surface of a rise on the lode, and with the lower level by a passage of some few feet in length, through which it is barely possible to creep, and then by workings from which a considerable quantity of matter has been removed. The miners could hardly have selected a spot where they could with greater reason hope for success, since several lodes with different inclinations have crossed each other in this small space; and it is evident that farther excavations were carried on at some depth, farther to the N. E., for the breaking in of the rock above has given rise to funnel-shaped hollows of considerable size on the surface.
The veins or lodes of quartz vary many degrees in their line of direction, and dip at angles of from 28° to 80°,—some to the S.E., others to the N.W.; and their width varies from an inch to a foot. The quartz is chiefly massive, and not very transparent; it frequently contains iron pyrites of the ordinary variety, crystallizing in cubes, and a few specks of galena may be detected in some parts.

The extended open-cast workings to the westward* appear to have been carried on through and around an intersection of quartz veins, similar in character, though more extensive and metalliferous than the above; but as the ramifications recede from the centre, the useful contents must have diminished in quantity.

We have carefully examined the quartz matrix from all the old workings, but the above-mentioned minute particle of gold remains the only specimen of the precious metal which has rewarded our search.

At an inconsiderable distance from the old workings lies a large block of sandstone, approximating in form to a four-sided prism, the faces of which are indented by rudely circular and elliptical hollows of small depth, evidently caused by artificial attrition. It appears highly probable that this stone was employed as a mortar for the purpose of breaking up or bucking the ore, a process still in use in cases where it is important to pick out valuable portions by hand. The traditions of the country, however, refer its indentations to a much more marvellous cause, connected with the five saints from whom the adjacent village, Llanpumpsant, derives its name.†

* Among the numerous irregular caves at the western end of Ogofau, is one which has derived the name of Efyynon Gwennno (the well of Gwenna), from the following tradition kindly given to us by Mr. Johnes. The water which still occupies its lower part, was, in days of yore, reputed to possess medicinal qualities, which attracted numerous bathers from the surrounding district. Among these, a fair maid, named Gwennllian, or, for brevity, Gwenna, was induced, on an unfortunate day, to attempt to explore the recesses of the cavern beyond a frowning rock, which had always been the prescribed limit to the progress of the bathers. She passed beneath it, and was no more seen; she had been seized by some superhuman power, as a warning to others not to invade those mysterious penetralia; and still, on stormy nights, the spirit of Gwennllian is seen to hover over a lofty crag which rises near the entrance of the now deserted cave, and bears the name of Clock ty Gwenna, or Gwenna’s steeple.

† "Five juvenile saints, on their pilgrimage to the celebrated shrine of St. David, emaciated with hunger, and exhausted with fatigue, here reeled themselves to rest, and reposed their weary heads on this ponderous pillow; their eyes were soon closed by the powerful hand of sleep, and they were no longer able to resist, by the force of prayer, the artifices of their foes. The skies were suddenly obscured with clouds, the thunder rolled, the lightning flashed, and the rain fell in overwhelming torrents. The storm increased in vehemence, all Nature became chilled with cold, and even Piety and Charity felt its effects. The drops of rain were soon congealed into enormous hailstones, which, by the force of the wind, were driven with so much violence on the heads of the weary pilgrims, as to affix them to their pillow, and the vestiges they left are still discernible. Being borne away in triumph by the malignant sorcerer who inhabits the hollows of these hills, they were concealed in the innermost recesses of his cavern, where they are destined to remain
In considering the proofs of the Roman origin of these works, one of the most remarkable points is the large size of the levels, whilst we know that the galleries of mines for some centuries previous to the general application of gunpowder in blasting, were made so small as to render it very painful to walk through them for an hour or two. Examples of this are frequent in the older mines in Cornwall, and still more so on the continent of Europe; nor till we go back to the time of the Romans, have we anything with which we can compare the Ogofoau; but in the extraordinary hill called Cisata, or fortress, at Verespatia, in Transylvania, the grand arches and roomy tunnels wrought in hard sandstone and porphyry by that enterprising people, throw into the shade the puny works of their followers, and prove that the art of extracting gold from quartz—ever where invisible to the naked eye,—was then understood. This place was, no doubt, an important spot in Dacia Ulterior; and the ornaments and implements of massive gold frequently found in the neighbourhood, and mostly deposited in the Imperial Cabinet at Vienna, bear witness to the abundance in which this precious metal was obtained.

If we examine Pliny for the state of knowledge on this subject among the Romans, we find that gold was obtained by three processes:—first, washing the sands of certain rivers; secondly, following the lode by shafts and levels (puteis et cuniculis), whilst the earth is supported where necessary by props or pillars of wood; thirdly, by excavating hollows.
of larger magnitude, supported for a time by arches of rock, which are afterwards gradually removed to allow the whole superincumbent mass to break in. The ore is broken, washed, burned, ground to powder, and pounded with pestles (quod effossum est, tunditur, lavatur, triturur, molitur in farinam, ac pilis cuditur). In Transylvania we may see to this day the results of the two latter processes.

A sentence from Cicero has often been quoted to prove that the Romans imagined there was no silver in Britain; but Tacitus, in his 'Life of Agricola,' expressly states the occurrence both of gold and silver, "fert Britannia aurum et argentum et alia metalla, pretium victoriae."

Whence, knowing that the method of extracting finely impregnated gold was practised by them, and that this metal was recorded as a produce of Britain, we need only to recollect that the flourishing time of Dacia as a colony was under Trajan, and therefore long before the legions were recalled from this island, to support, on strong grounds of probability, the assertion that the Ogofau were Roman gold mines; and in order to dismiss all doubt on the subject, we have only to add the evidence which Mr. Johnes has deduced from the various antiquities found in the vale of the Cothy, from which it is clear that there existed at this spot a station of some importance.