XVIII. Note on Welsh Gold. By T. A. READWIN, F.G.S. [Abstract.]

[Read June 24th, 1884.]

IN "Notes on some Minerals of the Mawddach Valley, Merionethshire," Min. Mag., Vol. III. p. 122, I referred to their general auriforous character; and to the occasional occurrence of free or native Gold in workable quantity, often in states of Electrum, &c.

Since then I have been experimenting rather largely with the auriferous lode-stuff and its enclosing Silurian slate-rock, just at its junction with the coarse Cambrian (or, it may be, pre-Cambrian) sandstone, about 1,000 feet up the Gwynfynydd or white mountain, ascending from the beautiful waterfalls known to tourists as Pistyll-y-Cain and Rhiadr* Mawddach.

Recently I have made 22 trials upon 53[‡] tons of the rocks and minerals by amalgamation, and extracted $44\frac{1}{2}$ ounces of gold therefrom.

Altogether, at various times I have made 78 trials upon 72 tons from this mountain, resulting in $113\frac{1}{2}$ ounces of gold, exclusive of rich stones reserved from the treatment, holding about 20 ounces of gold.

These trials were undertaken by me, primarily; to ascertain the relative and intrinsic values of the different minerals, next, an approximate average value, and lastly, the possibility by an eye-test simply, of casting aside some considerable bulk of them as being comparatively non-auriferous.

All this, to a satisfactory extent, I have done; and whilst doing it, have discovered several new and most interesting modes of gold occurrence which I purpose at another time to describe and exhibit to the Society. One of the richest specimens (weighing 160 grains) I have now the pleasure of submitting for examination, partly on account of its singular beauty, and partly in illustration of recent spontaneous gold-growth.

The gold in this beautiful specimen certainly had not its origin in pyritous matter; and it most certainly has undergone appreciable changes of shape since I discovered it last summer.

^{*} Both Pistyll and Bhiadr mean Cascade, on the rivers Cain and Mawddach.