

XXII.—Professor DAVID PAGE, F.G.S., *and his WORK as a GEOLOGICAL WRITER.* By E. A. WÜNSCH, F.G.S.

[Read 11th April, 1879.]

IN undertaking to bring forward this motion* I am not only prompted by my personal feelings, but by the knowledge that I shall be sustained by the sympathy of all the Members of the Society while I add a few words giving a slight sketch of Dr. Page's connection with us in our earlier days, as also while I endeavour to assign to him his true share in the progress and diffusion of geological knowledge in this country during the last 25 years.

I need not remind you that our Society, founded in 1858, has just attained its majority, and that the contrast between its present position and that of 21 years ago is almost as great as the contrast between infancy and manhood.

Only a few survivors now remain of the small band which two decades ago met one winter's evening, and timidly ventured upon the experiment of founding a Geological Society in Glasgow. At that time a man openly professing geology, with all the consequences then supposed to flow from its bold inquiries, required a great deal more of moral courage than he is called upon to display in the present day, when a knowledge, more or less extended, or its principles is considered a legitimate portion of a liberal education. Accordingly, small was the number of members and little was the progress made during the first few years, and it was not until we had the good fortune to secure Mr. Page's services for a first course of lectures that our Society, and with it the cause of geology, prospered and made progress in the West of Scotland.

From that date forward, year after year, a course of lectures by Mr. Page was the central point in the sessional programme of the

* "That the Office-bearers and Members of this Society record their deep sense of the loss to science sustained by the death of their Honorary Member, Dr. Page, whose memory is cherished by them as closely connected with the earlier history of the Society—as an active promoter of its interests by means of his admirable lectures, and as one to whom all Members of the Society and all Students of Geology generally must ever remain deeply indebted for his unwearied teachings and his able exposition of the principles of the science through his widely-known text-books and other writings."

Society, and the subject as handled by the lecturer, the charm of style, the originality and wide scope of his views, and his power of reproducing abstract science in popular language and in investing it with a living interest, roused the attention and enlisted the sympathies of all classes of the community as much as, or more than, "Science Lectures" have done in more recent days.

At every successive course of lectures in the Merchants' Hall, then in Hutcheson Street—at that time the principal hall in the city for such gatherings—there was an increase in the attendance of the *élite* of the intellect of Glasgow, while with it came an increase to the popularity of the Society and a corresponding addition to the membership.

As an instance of their high character and originality, I may mention that the introductory lecture of one season, expressly written for our Society, was entitled the "Philosophy of Geology," and was afterwards expanded into a small volume, which was published under the same title. A copy of this work, dated 1863, which I now hold in my hand, I have read and re-read with great pleasure at various times, and have often in the author's lifetime quoted it to friends as the perfection of a clear scientific style and of philosophic reasoning. And now, when the active hand and busy brain which gave it to the world are at rest for ever, and sixteen years, with all their new discoveries and views have passed over so progressive and so changeful a science as geology, this work is still as fresh as if written but yesterday—it is still crowded with passages as true and as suggestive now as on the day they were written—it sparkles, as it were, with prophetic insight; while almost every page affords room for quotations that will form the text for many an enlarged theme by future writers on geology.

This book is, however, only one of many similar publications. Text-books and handbooks of various kinds poured forth in rapid succession while the author was at the height of his mental activity—numerous editions succeeded each other, and translations of the leading works into various foreign languages appeared. To enumerate the different issues in detail to you would be superfluous, since they are "familiar as household words" to every student of geology.

And when the time came for Dr. Page's removal from Edinburgh to that honourable post at the Durham University, which he held to the close of his career—when his Glasgow friends began

to fear that the greater distance which separated them, the more pressing calls upon his time, and also the increased physical suffering, which had already then began to show itself, might prevent him coming to Glasgow as often as hitherto—they invited him to a farewell entertainment, which will be fresh in the recollection of all but the younger members of the Society. On that occasion he must have been fully convinced of the high personal esteem in which he was held by his Glasgow friends, and I believe this was also the last occasion on which most of us beheld him.

Of his teachings in his new sphere we received the most gratifying reports, and, doubtless, there will be some who can speak of this from their personal experience. But, though bodily absent from us, his teaching remained—the good seed had been sown and had prospered—for the Society, as the older members will remember, had for a number of years made it an essential feature that in each session there should be a course of “elementary lectures,” delivered by its own members and office-bearers, and founded upon Dr. Page’s text-books. The burden of these labours was, as is well known, borne by our friend Mr. John Young, and so well did he acquit himself, that the system took shape in a regular and more extended course of lectures upon geology at the Glasgow Mechanics’ Institution; and this course is, I am glad to say, still carried on by him there, and proves a valuable ally and feeder to our Society, under whose auspices it first took shape.

Had time permitted, it would have been a labour of love to me to enumerate more in detail the successive and varied aspects of the literary labours of our lamented friend. There is no doubt that this task remains to be done, and will be carried out at some future time by a hand more competent than mine; but I may, perhaps, in conclusion, adduce a single instance of the wide range of Dr. Page’s writings in geological science, and of what may be called their suggestiveness. I have already referred to the highly-philosophic character of one of his works, and I now take up another volume of his writings, but one of an entirely different character from the last—one intensely practical. It is entitled “Economic Geology,” and contains a wonderful amount of thoroughly work-a-day information, arranged so lucidly that a French writer and geologist, Dr. S. Meunier, has translated it, not in the usual sense of a literal translation, but, following the subject and enumeration of the author, he has in the same order

reproduced the headings of the various chapters; and, giving the substance of the English text, he has added an account of the corresponding localities in France where the same substances are found, and of the corresponding processes by which they are made available to agriculturists, chemists, and all other industries. This little French volume I have also before me, and, though I never had an opportunity of learning Dr. Page's personal opinion of it, for it only appeared in 1877, I think it must have been felt by him as the highest compliment which one author could pay to another.

We therefore find a comfort in our sorrow in thinking that the good work initiated by a single master mind continues to increase and prosper. As geologists we are all conscious that our own minds are more or less pervaded by the teaching of the master who has departed from amongst us—"that though he be dead he yet speaketh"—and that his memory lives, and will continue to live, in the affection and gratitude of all true geologists.

XXIII.—*On the occurrence of FLINT NODULES and WORKED FLINTS in the POST-TERTIARY SANDS of the AYRSHIRE COAST between SALTCOATS and TROON.* By JOHN SMITH, Corresponding Member. WITH A SECTION [Plate VI.].

[Read 10th April, 1879.]

IN the autumn of 1871 I first examined the sands of this portion of the Ayrshire coast, in the hope of finding meteoric stones, my reasons being that if meteors had at any time fallen it might be possible to pick up a few, as the sand was being constantly shifted by the wind, which covered up one part while laying another bare. After crossing some considerable knolls of blown sand, to my delight I came upon various patches of gravel lying in the hollows from which the sand had been blown. This was so much of what I had anticipated, that the search for the meteorites continued.

I found the gravel to be made up of representatives of almost every kind of rock, granites, contorted schists, clay-slates, a great variety of trap rocks, quartzites, conglomerates, sandstones, limestones, &c., with here and there small nodules of jasper. The granites and the harder varieties of rock were polished more or less