

verse sets us is an inverse problem. But the two most distinguished philosophers amongst us, starting from the Absolute as their criterion, declare the whole world as we know it, including ourselves, as infected with contradictions, which are only resolved in the Absolute. Precisely how resolved we do not know, and never can know. But at least everything is blended and transformed into one perfect experience in which no finite centres of experience as such are respected or retained. Is the Absolute, then, making sport of us, it is asked, since the untransformed, discrepant "appearances," it would seem, must ever remain to perplex us? No, it is replied; for these appearances are the Absolute's revelation to us. Moreover, in the unification of our originally disjointed experiences which underlies all human development, and again in the ever-increasing mutual "transparency" of formally distinct individuals—who are thereby ever more and more enabled to think and feel and act as one—we can see the beginning of the process that in the Absolute is eternally accomplished. But, it was rejoined, the progress of knowledge shows no sign of reducing the categories of thought to the mere "adjective" with which, perhaps, it began. Nor does our advance to a higher unity show any tendency to replace stability and originality of character by mere "connections of content." In conclusion, it was urged that it is hopeless to attempt to begin from the point of view which only a *completed* philosophy could occupy. To advance continuously and be coherent—that should be our golden rule. The whole procedure would be tentative—that must always be the case with inverse problems. Crises, too, there would be again, as in the past; but such crises, after all, would only be cases of "sloughing an outgrown skin," not of radical disease. Philosophy on the whole had progressed; and so long as it followed the method which Nature herself observes—to make no leaps—why should it not progress still?

Mineralogical Society, November 4 (Anniversary Meeting).—Sir William P. Beale, Bart., president, in the chair.—Dr. W. R. Schoeller and A. R. Powell: Villamaninite, a new mineral. The new mineral, which occurs, disseminated in black grains and plates, with a distinct cleavage, and in small nodules with a radially fibrous structure, in a crystalline dolomite near Villamanin, Cármenes district, León province, Spain, has probably a composition corresponding with $(\text{Cu}, \text{Ni}, \text{Co}, \text{Fe})_2(\text{S}, \text{Se})_2$. Its streak is sooty-black, hardness $4\frac{1}{2}$, and specific gravity 4.4-4.5; it is opaque.—A. Russell: The occurrence of phenakite and scheelite at Wheal Cock, St. Just, Cornwall. The author found good specimens of these minerals in 1914 at Wheal Cock, which is the locality whence came the crystal (undoubtedly phenakite) described by Sowerby in 1804 as argilla electrica or white tourmaline. Phenakite was not known until 1833 as a distinct species.—L. J. Spencer: New crystal-forms on pyrites, calcite, and epidote. On pyrites the dyakis-dodecahedron (641) occurs as large, well-developed faces on five specimens, one of them from Traversella, Piedmont, and the others from coal-shales of unknown locality. On 424 crystallised specimens of pyrites in the British Museum collection, 35 crystal-forms were noted. Faces of the cube are present on 76.6 per cent. of the specimens, the octahedron on 62.7 per cent., the pentagonal-dodecahedron (210) on 54.7 per cent., and the dvakis-dodecahedron (321) on 36.1 per cent. As simple forms, not in combination with other forms, they are represented by 12, 2, $2\frac{1}{2}$, and $\frac{1}{2}$ per cent. respectively. The decomposition of specimens of pyrites in collections was discussed. Calcite, a clear scalenohedral crystal, probably from Iceland, consists of a combination of the two scalenohedra (201) and (12.0.7), both largely developed, and

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with an angle of only $4\frac{1}{2}^\circ$ between corresponding faces. Epidote, a crystal, probably from Ala, Piedmont, closely resembling in appearance the yellow prismatic crystals of anatase, carries a minute face (134) (Dana's orientation) in addition to twenty other crystal-forms.—Dr. G. F. Herbert Smith: A curious crystal from the Binnental. The crystal, which was found with a few loose sartorite crystals in the Trechmann collection, is twinned and tabular in habit, and shows signs of corrosion. The symmetry is peculiar, since, although a face occurs at right angles to the prism edge, it is neither a plane nor a pole of symmetry, and the crystal appears to represent a new species of sulpharsenite.

MANCHESTER.

Literary and Philosophical Society, October 7.—Mr. Francis Jones, vice-president, in the chair.—Sir Henry A. Miers: The future of the Manchester Literary and Philosophical Society. Attention was especially directed to the urgent need in societies for informal discussions, a work performed by such societies in their pioneer days. With the increase of scientific knowledge the tendency has been for scientific people to segregate into special groups. As a result of this, the papers read at modern specialist societies are calculated to appeal only to experts. A reaction is indicated by recent attempts at co-operation between the humanities and sciences. Great work could be done by making the most recent advances in science understood by those who were not experts, and by promoting meetings at which new ideas can be expressed in language intelligible to all. There is danger of a scientific hierarchy, and of a cleavage between specialists and amateurs. Investigators might be encouraged to give popular expositions of their own discoveries to a general audience, in addition to the more severely scientific paper intended for publication.

PARIS.

Academy of Sciences, October 27.—M. Léon Guignard in the chair.—C. Moureu and A. Lepape: The stabilisation of acrolein. An empirical method of stabilisation. The crude aldehyde is shaken with 10 per cent. of its weight of dry sodium bicarbonate. The acidity is reduced to 5 per cent. of its original value, and the acrolein so produced is practically stable.—A. Chatelet: Hypercomplex numbers with associative and commutative multiplication.—E. T. Bell: Particular representations by some quadratic forms of Liouville.—P. Chevenard: The viscosity of steels at high temperatures. A chrome-nickel steel wire was maintained at a constant temperature in an atmosphere of nitrogen, and the elongation under a fixed load measured photographically as a function of the time.—H. Vanderlinden: Observations of Borrelly's comet 1919c. Measurements were made at the Royal Belgian Observatory at Uccle on October 18, 22, and 23. On October 22 the comet appeared as a nebulousity of 1' diameter. The nucleus was clear, and of magnitude about 9.—J. Volmat: The application of aerial photography to hydrographic surveys. Photographs from an aeroplane of the sea-floor in the neighbourhood of Brest proved the great possibilities of this method of marine surveying. Several points of rock which had escaped previous careful surveys were discovered with ease.—L. Majorana: Experiments on gravitation.—E. Perucca: Plane waves laterally indefinite, with pendular vibrations, which reflection and refraction associate with one or two given analogous systems of incident waves.—H. Muraour: The comparison of explosion temperatures calculated starting from the specific heats with those calculated starting