

Plant Morphology

MR. H. HAMSHAW THOMAS's paper entitled "The Old Morphology and the New", read before the Linnean Society on November 10, created considerable interest. In recent years, Mr. Thomas said, a great gulf has arisen between the classical concepts of plant morphology and the new ideas which have been suggested by a study of the modern pteridophytes and of the older Palaeozoic floras. A century of botanical investigation has not strengthened the foundations of the old morphology, but its modern exponents on the Continent have been led to regard much of what is termed morphology as irrelevant, and they reject all considerations of phylogeny, as well as the studies on the anatomy and cytology of plants. On the other hand, the foundations of the old system have been seriously shaken. Goethe, in a passage which has been generally overlooked, recognised the validity of some of the considerations of the new morphology, the name applied to the concepts put forward by Lignier, Bower, Tansley, and others. According to this view the body of the higher plants is derived from a thallus with forking branches bearing terminal sporangia; large leaves were derived from branch systems which may or may not have continued to bear sporangia. Thus the reproductive structures of the seed plants are to be considered as modified branches or branch systems rather than as modified foliar structures. The application of these ideas to the flowering plants may lead to considerable changes in our ideas of primitive characters. It is suggested that the flowering plants may be derived from the Palaeozoic pteridosperms, and this leads to some new suggestions as to the morphology of modern floral structures.

Science and the Community

IN an address to the annual conjoint meeting of the Manchester Chemical Societies on November 10, Prof. A. Findlay, under the title "Science and the Community", strongly deprecated extravagant claims advanced as to the part science has to play in the administration of the State. Much disservice has been done to the cause of science by those who fail to recognise that scientific facts are often only one aspect or factor involved in a problem. Science is only one of the great human values, and attempts to antagonise the spirit of science and the quest of beauty, moral values and ethics are a misfortune to the whole community. Prof. Findlay suggested that, so far as industry is concerned, the battle for the recognition of science is already won, but his opinion that science has already received full recognition in the affairs of State was strongly challenged in the subsequent discussion. Prof. Findlay referred to the excessive specialisation of the average graduate in science and emphasised the need for a wider training and for the imparting of general culture and particularly the sense of values which the philosophy of science inculcates. In this, as in his plea for the recognition of the scientific spirit as one of the great expressions of the human spirit, making a

contribution to spiritual welfare of mankind fully as important as that of art and literature and religion, Prof. Findlay presented an admirably balanced picture of the position of science in human culture which was greatly appreciated even by those who most strongly criticised either his assumptions as to the position of science in industry and the State, or the intractability of the human factors in social problems to the probings of the scientific mind.

Mexican Archæological Sites

THE Mexican Supreme Court has ruled, according to a Science Service (Washington, D.C.) message from Mexico City, that the country's archæological sites are under the jurisdiction of the Federal Government, and not that of the individual States. This settles an important issue, as has already been indicated in these columns (NATURE, Oct. 29, p. 656). Upheld by the recent decision, Federal Government archæologists arranged to proceed at once to make excavations at Monte Alban, where the spectacular discovery of a treasure tomb was reported last January. The expedition is under the leadership of Alfonso Caso, the discoverer of the Monte Alban tombs, and he will be assisted by a staff of four archæologists and six students. As little appears to have been known in Great Britain of the case upon which the Supreme Court has now pronounced until the matter was *sub judice*, a brief account of the point at issue and the origin of the dispute between the Federal Government and the States may not be out of place.

HITHERTO the Federal Government alone, with the exception of the State of Mexico, has shown any interest in the protection and investigation of the antiquities of early Mexican civilisation, the State governments being either indifferent, or without the resources necessary for such an undertaking. When, however, the remarkable treasures discovered in the Monte Alban tombs were placed on exhibition in March last, the enormous intrinsic value of the treasure and the wide-spread interest it aroused, which, it may be said, was responsible for the raising of a considerable sum of money from the public in the form of entrance fees, moved the State of Oaxaca, in which Monte Alban is situated, to lay claim to the treasure and to assert its rights over the antiquities within its borders. This at once raised the whole question of Federal and State jurisdiction in relation to antiquities, upon which the Supreme Court has now given its ruling. The decision has been awaited with anxiety, and there can be no doubt that the ruling is in the best interests of the study of Mexican archæology in present circumstances. The individual States have not the experience or the interest in their antiquities requisite for dealing with questions arising out of the granting of concessions for archæological exploration—a matter of importance in view of the widely-extended and invaluable activities of numerous expeditions from the United States now operating in Mexico; they have neither resources, nor personnel