There is evidence that these particles are atoms of mass about 3, carrying two charges. Consequently the atom of nitrogen can be disintegrated in two ways by collision with α -particles: one by the escape of an H atom, and the other by the expulsion of mass 3, and both processes occur independently. Atoms of mass 3 are also released from oxygen atoms, but H atoms cannot be detected.

It may be concluded, therefore, that atoms of mass 3, carrying two positive charges, are components of the nuclei of nitrogen and oxygen.

This new atom is to be regarded as an isotope of helium, and should give nearly the same spectrum. The energy of motion of the atom of mass 3 expelled from nitrogen and oxygen is about 8 per cent. greater than the original energy of the α -particle, showing that energy is liberated as a result of the disintegration. The atoms of mass 3 probably consist of three hydrogen nuclei with one binding electron, and atoms of helium of four hydrogen nuclei and two electrons. Apart from hydrogen itself, these atoms are important secondary units in the building up of atomic nuclei. In the light of the new experimental evidence, examples are given of the possible modes of formation of isotopes and possible structures of nitrogen and oxygen nuclei are considered. It is pointed out that close combinations may exist of H nuclei and electrons, giving rise to atoms of zero nuclear charge, and that such a conception is needed to explain the evolution of the heavy elements.

The Rockefeller Gift to Medical Science.

AS was announced in the *Daily Mail* of June 11, the Rockefeller Foundation for Medical Research has made the generous gift of a sum of 1,205,000*l.* for the advancement of teaching and research in the Medical School of University College and Hospital. Owing to the inconsiderate and premature manner in which the statement was made public, it is natural that some mistakes should have been made and the objects of the gift in certain respects misunderstood.

The reason for the delay in making a public announcement is that the Senate of the University of London has as yet had no opportunity of formally accepting the gift. When this had been done it was the intention to make it public through appropriate channels and in such a way that the people of England might appreciate the intention of the donors to give a manifest proof of the friendliness of their feelings towards the work that we are doing here and their appreciation of its value. We have reason to believe that they particularly wish this aspect to be emphasised. It should be remembered that the object of the Rockefeller Foundation is "the welfare of mankind," so that its benefits were not intended to be confined to the United States. The members of the Foundation desire it to be regarded as entrusted to them for this purpose, and the present endowment is not meant in any way as a charitable gift. In view of statements to the contrary, it is necessary to make it plain that no conditions are attached, and that the recipients are left free in a very wide sense to make the best use of the money for the benefit of medical science, and especially as to the details of its application. It will naturally be understood that the manner of its use has been the subject of much discussion between representatives of the Rockefeller Foundation and the institutions receiving the gift.

With regard to the objects to which it is proposed to devote the endowment, a few words on the history of the negotiations may be of interest. Towards the end of last year two representatives of the Rockefeller Foundation, Dr. Wickliffe Rose (General Director of

the International Health Board) and Dr. Pearce (Adviser in Medical Education to the Foundation) arrived in London. Before proceeding further they called at University College. In the absence of Prof. Starling, they were received by the present writer, whom they gave to understand that they had come to make inquiries into the conditions of medical education in London. They were accordingly informed of the recent creation of medical and surgical "units," of their situations and the names of various gentlemen associated with these units from whom they might obtain further information. This they proceeded to do. Early in the present year they made another visit to University College with definite proposals, and were seen by Prof. Starling and Prof. Elliot Smith, who showed them what was necessary to be done for the adequate provision of instruction and research in the fundamental sciences of anatomy, physiology, and pharmacology. It was clear to them that the most pressing need was the building of a new anatomical institute, although the medical sciences themselves naturally required the larger proportion of any proposed gift.

In April four representatives of University College and Medical School visited the United States for the purpose of further conference. These were the Provost (Sir Gregory Foster), Dr. Blacker (Dean of the Medical School), Prof. T. R. Elliott (professor of medicine), and Prof. Elliot Smith (professor of anatomy). On their return they brought back the definite offer of this extremely generous gift, and speak with the greatest appreciation of the friendliness of the manner in which they were received, the spirit in which the offer was made, and in which it was impressed upon them that it should be accepted.

Owing to the premature publication of the scheme it was necessary to call a general college meeting on Friday last, at which the Provost made a statement of its actual terms. In the words of the Rockefeller Executive Committee, they are as follows: "(1) An institute of anatomy. (2) Increase of clinical facilities. (3) Clinical laboratories planned. (4) Increased maintenance costs. (5) Closely unified administration." The Medical School will receive 835,000*l.* and the College 370,000*l.* Further details of the ways in which it is proposed to utilise the money will be duly announced. At this meeting Prof. Elliot Smith pointed out that anatomy is to be understood as including in its purview the microscopic structure of the tissues, embryology, and a study of the factors governing the development of form. It is further to be hoped that the working of the scheme will involve a much closer co-operation between the College and the medical departments, to the advantage of both.

It is perhaps advisable to direct attention to the fact that the gift is for the purpose of improving medical education and research. At the same time the hospital, as an institution for the cure of patients, will benefit indirectly, although doubtless its working expenses will be increased owing to the enlargement proposed.

W. M. BAYLISS.

The Permanent Value of University Benefactions.

AN account of the opening of the new building of the Department of Applied Statistics and Eugenics at University College, London, presented by Sir Herbert Bartlett, was given in last week's NATURE. The speech made by Prof. Karl Pearson in seconding the vote of thanks to the donor contains certain truths which have a wider application than to the immediate audience, and we therefore reproduce it