A. M. Woodruff, cultivated the virus on the chorioallantoic membranes of fertile eggs. Rous and Murphy had twenty years earlier used a similar technique in studies of tumours, including the Rous sarcoma; but Goodpasture and his colleagues really introduced the developing egg into virus research. Later, Burnet improved the method by showing how to make an artificial air-sac. In 1938 Goodpasture showed that viruses would grow after inoculation into the amniotic cavity of chick embryos; and this method, too, was taken up and developed by Burnet, and other workers. For many years Goodpasture worked with fertile eggs and used them for many purposes and to great advantage. He grew vaccinia on chorioallantoic membranes and advocated the use of such material for vaccination against smallpox. He grew 'difficult' viruses such as herpes zoster on grafts of human skin growing in eggs. He studied the behaviour in cells of egg membranes of some specialized parasites among the bacteria such as those of typhoid and tularæmia. The laboratory study of mumps really begins with his demonstration that monkeys can be infected by inoculation into their parotids.

Goodpasture held many important appointments, including that of scientific director of the International Health Division of the Rockefeller Foundation. On his retirement from Vanderbilt in 1955 he went to work at the Armed Forces Institute of Pathology in Washington. He was a member of the National Academy of Sciences and of the American Philosophical Society and received many honours.

C. H. Andrewes

NEWS and VIEWS

Nobel Prize for Chemistry

Prof. Willard F. Libby has been awarded the Nobel Prize for Chemistry for 1960 in recognition of his work on the carbon-14 method of age determination. In a series of experiments carried out during the period following his appointment as professor of chemistry at the Institute of Nuclear Studies, University of Chicago, Prof. Libby demonstrated the presence of carbon-14 in Nature at a level close to that which he had predicted, and showed that its distribution throughout the world-wide carbon exchange reservoir is substantially uniform. He then pointed out that the death of an organism would prevent further exchange of its carbon atoms with those of the reservoir and that consequently a measurement of the residual carbon-14 activity of dead material could be used as a basis for an age determination. The practical application of the method necessitated the development of an experimental technique capable of measuring accurately, and on a routine basis, the extremely low levels of carbon-14 activity which are found in ancient materials. Libby's success in this direction can best be judged by the list of nearly a thousand dates produced by the Chicago dating laboratory during its period of operation. The importance of the method is incalculable, for it provides not only an absolute method of dating independent of hypothetical considerations covering the past 40,000 years or so, but also one which is of world-wide application to a variety of commonly occurring materials. Archæology, geology, oceanography and climatology have all benefited and will continue to do so in the future from the applications of Libby's fundamental researches.

Nobel Prize for Physics

The announcement of the award of the Nobel Prize for Physics for 1960 to Prof. Donald A. Glaser of the Radiation Laboratory, California, has given pleasure to all who admire the way in which a young man not only conceived a brilliant idea but also, using commonplace physical ideas as a basis for his experimental work in an unexplored field, and working practically alone, presented the nuclear physicist with a powerful new tool—the liquid bubble chamber. The formation of bubbles along the track of an ionizing particle occurs in a medium of much greater stopping power than the gas in a cloud chamber, yet because of the short time (only a few milliseconds during which the liquid is rendered sensitive to such bubble formation it is possible to follow the various products of a particular nuclear reaction without the ambiguity, inherent in nuclear emulsions, caused by the presence of many other, extraneous, tracks. Chambers containing hundreds of litres of liquid, set up beside existing high-energy particle accelerators, can now produce photographs of nuclear events every few seconds and in this way not only has the existence of the neutral cascade particle been established but also new experimental data are being made available at such a greatly increased rate that only by the use of automatic measuring devices can the fullest advantage be taken of Prof. Glaser's great contribution to physics.

Royal Society: Award of Royal Medals

H.M. The Queen has been graciously pleased to approve recommendations made by the Council of the Royal Society for the award of the two Royal Medals for the current year as follows: to Sir Roy Cameron, professor of morbid anatomy at University College Hospital Medical School in the University of London, for his distinguished contributions in the field of cellular pathology; to Prof. A. C. B. Lovell, professor of radio astronomy in the University of Manchester and director of the Nuffield radio astronomy laboratories, Jodrell Bank, for his distinguished contributions to radio astronomy.

Applied Mechanics at Nottingham: Prof. G. B. Warburton

Dr. G. B. Warburton, who has been appointed to the recently instituted chair of applied mechanics in the University of Nottingham, studied at Peterhouse, Cambridge, and was awarded first-class honours in the Mechanical Sciences Tripos in 1944. As a demonstrator at Cambridge, he was attached to a research team investigating stresses set up in ships' plates due to welding. Later he became an assistant lecturer at University College of Swansea and, in 1947, joined the engineering staff at the University of Edinburgh. After varied teaching experience, Dr. Warburton was appointed head of the Postgraduate School of Applied Dynamics which was formed at Edinburgh in 1956, details of which appeared in *Nature*, 179, 1177 (1957). His research work at Edinburgh has