harm and may assist in the prevention of an ischemic heart attack."

Dr. G. J. Popják (Medical Research Council Experimental Radiopathology Research Unit, London) gave the final paper, which was concerned with selected aspects of lipid biochemistry. Knoop's hypothesis of the degradation of fatty acids is now understood in terms of a fatty acid cycle involving coenzyme A and mitochondrial enzymes. Animals can make labelled fatty acids and also cholesterol from isotopically labelled acetate. Until recently the sequence:

 $acetate \rightarrow squalene \rightarrow lanosterol \rightarrow cholesterol$

had many gaps, but the discovery by Folkers's group of mevalonic acid led to a fuller picture:

 $\begin{array}{c} \text{acetate} \rightharpoonup \text{mevalonate} \longrightarrow \text{phosphomevalonate} \\ \longrightarrow \\ \text{isopentenyl pyrophosphate} \\ \end{array}$

The latter compound, being in its reactions both electrophilic and nucleophilic, is a precursor of different polyisoprenoid products. As Lynen has

shown, geranyl (10 carbon atoms) and farnesyl (15 carbon atoms) pyrophosphates are formed from 5-carbon units. Two sesqui-terpenoid units condense tail to tail to form squalene, but the precise mechanism is still under discussion, Popják and Cornforth advancing rival theories. Squalene is enzymatically cyclized to lanosterol, which in turn is converted to cholesterol through intermediate states. The head-to-tail polymerization of isopentenyl pyrophosphate must be continued to produce the side-chains of the ubiquinones. Tail-to-tail linkages with 20-carbon units lead indirectly to carotenoids. A unified picture of beautifully co-ordinated enzymatic processes is emerging.

Himself so often in at the start of a chain of discovery, Hopkins might perhaps have been pleased to know that his centenary would provide an occasion to look back on what has been accomplished and to discern so much that remains to be done. The symposium will be published *in extenso*.

R. A. MORTON

NEWS and VIEWS

New Year Honours List

The following names of scientists and others associated with scientific work appear in the New Year Honours List:

Baron: Sir Russell Brain, for services to medicine. C.H.: The Very Rev. Walter Robert Matthews, Dean of St. Paul's.

Baronet: Sir Harry Jephcott, lately chairman, Council for Scientific and Industrial Research.

Knights: Jack Ellerton Becker, in recognition of his contribution to scientific research and pastoral development; Prof. N. F. Mott, Cavendish professor of experimental physics and Master of Gonville and Caius College, University of Cambridge; Lindsay T. Ride, vice-chancellor, University of Hong Kong; E. L. Russell, chief education officer, Birmingham; Dr. George Taylor, director, Royal Botanic Gardens, Kew: Prof. G. S. Wilson, director, Public Health Laboratory Service.

C.B.: E. A. Perren, lately director, Chemical Defence Experimental Establishment, War Office.

G.B.E.: Sir Hector Hetherington, lately principal

and vice-chancellor, University of Glasgow.

C.B.E.: J. M. Barnes, director, Toxic Research Unit, Medical Research Council; H. Barrell, superintendent, Standards Division, National Physical Laboratory, Department of Scientific and Industrial Research; E. G. Bowen, chief of the Division of Radiophysics, Commonwealth Scientific and Industrial Research Organization; Prof. H. Burton, principal, School of General Studies, Australian National University, Canberra; Prof. L. P. Pugh, professor of veterinary clinical studies, University of Cambridge; J. E. Richardson, director of education, The Polytechnic, Regent Street, London; Brigadier C. F. C. Spedding, scientific attaché, H.M. Embassy, Bonn; A. B. Stewart, director, Macaulay Institute for Soil Research, Aberdeen.

Joint Editorship of Nature: Mr. A. J. V. Gale

Mr. A. J. V. Gale, joint editor of *Nature* for the past twenty-three years, retired at the end of 1961.

He was educated at Latymer Upper School and the University of Cambridge. In 1920 he was appointed assistant to Sir Richard Gregory, who was then editor of Nature. When Sir Richard retired in 1939, Mr. Gale was appointed joint editor with L. J. F. Brimble; throughout the years this collaboration has proved congenial and fruitful. Mr. Gale's shrewdness in judgment and his meticulous editing have contributed largely to the advancement of the journal. He is highly esteemed not only by the entire staff of Nature but also by all members of the firm of Macmillan and Co., Ltd., the owners and publishers of Nature. It is good for all such people to know that Mr. Gale will continue to live in London. so that we can look forward to his visiting us and can, without doubt, depend on receiving the benefit of his advice if such occasions arise. Meanwhile, we hope Mr. Gale has many happy years ahead in which to enjoy a well-earned retirement.

Genetics at Groningen: Prof. M. J. Sirks

Prof. M. J. Sirks, professor of genetics in the State University of Groningen, retired on September 1. At the same time he decided to resign from the editorship of the two periodicals, Genetica and Bibliographia Genetica, of which he had been chief editor from 1931 onwards. His many publications are indicative of his wide knowledge of literature, current as well as old. His historical sense is clearly expressed in his text-book, Handboek der Algemene Erfelijkheidsleer, first published in 1924, the fifth edition of which was translated into English under the title General Genetics (Martinus Nijhoff, 1956). Prof. Sirks was an organizer on international level. Among other things, he was secretary of the seventh International Horticultural Congress in 1923 and of the sixth International Botanical Congress in 1935, both in Amsterdam. During 1935–47 he was secretary of the International Union of Biological Sciences and its president during 1947–50.

As a young man, Prof. Sirks played a leading part in the building up and the well-balanced development of genetics in The Netherlands. In the 'twenties it