may change to a neutron and a positive electron, the following relations are what is to be expected whenever an electron is emitted.

1. When a neutron is captured the radioactive disintegration gives a negative electron.
2. When a proton is captured a positive electron is emitted.
3. When deuterons or α-particles are captured either a positive or a negative electron is emitted.
4. In electron emission the isotopic number does not fall below zero.
5. When a positive electron is emitted the isotopic number rises to +1 or higher.
6. A low isotopic number, as compared with the position of the band of stability, favors the emission of a positive, and a high isotopic number, the emission of a negative electron.

At the present time almost any element may be produced in a radioactive form, and it is probable that some or many of these will be useful in medicine and surgery. The effects of neutrons upon tissues should be much more intense than those of γ-rays. On account of the large water content of the body fast neutrons which penetrate the tissues are rapidly converted into slow neutrons, which are then captured. Thus nuclear chemistry enters the realm of physiology.

OBITUARY

CHARLES VELMAR GREEN

ON April 18, 1936, two days after his thirty-fourth birthday, Charles Velmar Green, a research associate and one of the Board of Directors of the Roscoe B. Jackson Memorial Laboratory, was accidentally drowned while fishing near Bar Harbor, Maine.

This sudden end to an all too brief career, marked by superior ability and great industry, had in it elements of tragedy lacking in the foreseen termination of the activities of those of advanced age.

The years of quiet, patient effort that had marked Green's progress from his birthplace on a farm in Ashley, Michigan, through school, Michigan State College and the University of Michigan, left their mark on his character. They had been distinguished throughout by self-reliance and independence of thought, by tenacity of purpose and by the highest ideals of personal integrity.

When in 1927, two years after his B.S. degree, he received an M.S. under the friendly guidance of Professor Harrison Hunt, of Michigan State College, he had already developed a calm maturity of intellect and an unfailing soundness of scientific judgment far in advance of his years.

These qualities he continued to show in increased measure during the work for his doctorate and in the years which followed it (1930–36). By concentration and tireless effort he obtained and analyzed a sufficient mass of data to establish for the first time linkage between genes for size and a gene for color in mammals. His grasp of this subject was demonstrated, not only in the initial presentation of his results but in the extended discussion of them which followed.

In the course of the development of his work he also contributed notably to research in the field of differential growth, to changes in crossing-over correlated with age and to many other interesting and important phases of mammalian genetics. He had already published more than thirty scientific papers covering a wide range of research.

His chief happiness lay in research rather than in teaching. Each succeeding year saw broader and more important advances in his methods of approach. To these advances two factors contributed greatly. One was the contentment and inspiration of his home life and the completely adjusted companionship with his wife, Sybil Kent Green. The other was the joy that he derived from fishing and other recreation inherent in the environment of Mount Desert Island.

One may fairly say that happiness, creative activity and a balanced integration of purpose filled his own life so abundantly that, to an unusual degree, he transferred these qualities to those around him. In the face of these inspiring facts the deep personal sorrow of his friends and associates must quickly be recognized as selfish, and must give place to a willing determination to carry on as he would have done had he lived.

C. C. L.

SCIENTIFIC EVENTS

THE BRITISH NATIONAL HUMAN HEREDITY COMMITTEE

A LETTER to the editor of the London *Times* of May 6, signed by R. Ruggles Gates; Humphry Rolleston; Grafton Elliot-Smith; R. A. Fisher; Arthur Keith; E. Farquhar Buzzard; Moynihan; F. Gowland Hopkins, members of the British National Human Heredity Committee (115 Gower Street, London, W. C. 1), reads as follows:

Problems of national health have reached a point where the hereditary element can no longer be neglected. The leaders of the medical profession are no longer satisfied with the alleviation of disease, but are acutely conscious of the need for fuller knowledge of heredity in connection