Semenoff's first analysis of the theory of chain reactions was mainly mathematical and formal and he rarely ventured to propose intimate chemical mechanisms. It is a tribute to his insight that in the twenty-five years of intensive work which in all parts of the world have followed, his conceptions have been clothed with a perfectly fitting chemical garment. Arising from this work is the understanding of the widespread participation of atoms and free radicals in chemical reactions. Part of Semenoff's later work has dealt with the isomerization of free radicals and with their elementary reactions. An account of his later views and reflexions on chain reactions can be found in his recent work, "Some Problems of Chemical Kinetics and Reactivity", published in the U.S.S.R. in 1954, which it is to be hoped will be accorded an English translation. Semenoff is now director of the Institute of Chemical Physics in Moscow, where he has a large and widely oriented school of research.

Dr. G. Gaylord Simpson

DR. GEORGE GAYLORD SIMPSON, who has also recently been elected a Foreign Member of the Royal Society, is known to all palæontologists as the leading student of fossil mammals. He came to London in 1926 from Yale University to examine the famous collection of Mesozoic mammals in the British Museum (Natural History), and published splendid volumes about them and the parallel collection in Yale. From there he has gone on to deal with fossil mammals in general, having now published more than four hundred papers about them. All this work is of the highest quality, accurate and reliable in statement of fact, and he has used these facts in discussion of problems of many kinds, the classification and interrelationships of mammals, studies of past geography on which they throw light, and in the consideration of theories of evolution and the mechanisms which have brought it about. He has himself made extensive and dangerous journeys in pursuit of fossil mammals and the study of the conditions under which they existed.

Prof. Arthur Stoll

PROF. ARTHUR STOLL of Sandoz A.G., Basle, Switzerland, has recently been elected a Foreign Member of the Royal Society in recognition of his outstanding studies on the chemistry of natural products. His work has been mainly concerned with the elucidation of the structure of natural products of pharmacological importance and is characterized by the difficulty of the problems which have been selected and the great experimental skill which their study has demanded. Stoll received his early scientific training at the Eidgenössischen Technischen Hochschule in Zurich where his first researches were carried out with Prof. Richard Willstätter. This work was concerned with the determination of the structure of chlorophyll and the mechanism of carbon dioxide assimilation; it is regarded as one of the classical achievements in plant biochemistry. When Willstätter became director of the Kaiser Wilhelm Gesellschaft Institut in Berlin in 1912, Stoll was appointed as his personal assistant, and in 1915 this collaboration was continued when Willstätter succeeded Baeyer at Munich. This association and friendship had a great influence upon Stoll's subsequent work, and Sir Robert Robinson in his Willstätter Memorial Lecture has referred to the debt which chemists owe to Arthur Stoll for the help and hospitality in Switzerland which he extended to Willstätter when the latter was expelled from Germany in 1939.

In 1917, Stoll left Munich and joined the Pharmaceutical Department of Sandoz A.G. Since then his researches have extended over a range of important natural products. He played a leading part in the elucidation of the structure of lysergic acid and the ergot alkaloids which are so important in obstetric medicine and psychiatry. More recently he has been concerned with the chemistry of *Veratrum*, *Rauwolfia* and certain tropane alkaloids. The determination of the structure of cardiac glycosides from *Digitalis* and the active principles of *Senna* were extremely difficult problems experimentally and are of considerable interest. Stoll has also identified various compounds with novel structures in his studies of certain antibiotics. Stoll is associated with nearly three hundred publications, many of which are landmarks in research on natural products. The articles in the Festschrift published in celebration of Stoll's seventieth birthday on January 8, 1957, indicate the important influence which he has had in this branch of chemistry. Stoll has received many honours and in 1955 he was president of the International Union of Pure and Applied Chemistry.

Bonding of Bone Fractures with Plastics

THE following cablegram was received at *Nature* office on June 16 from Bernard Bloch, assistant orthopædic surgeon in Sydney Hospital: "Ethoxyline resins have been used successfully in bonding fractured bones in live sheep. These adhesives have proved non-toxic, and microscopically new bone has grown freely through and around the plastic. The affected animals have been able to run about within two days, and the fractured limbs have clinically united within ten days without any plaster casts or supports. In conjunction with Dr. F. L. Connors, of the New South Wales University of Technology, a full research scheme is under way including the use of resin-impregnated glass filaments and other adhesives".

The Computer Journal

THE first issue of *The Computer Journal* (1, No. 1. Pp. xvi+48. Subscription price per year, 50*s.*; 7 U.S. dollars. Single copies, 15*s.* London: British Computer Society, 1958) was published in April. It is to be issued quarterly by the recently formed British Computer Society and its aim is "to provide a permanent record of papers and notes of lasting interest to all who are engaged in the development and use of computational machinery and related techniques". In doing so, it will undoubtedly satisfy a genuine need. The publication of interesting developments in numerical analysis and, more recently, in high-speed computing techniques has hitherto not been at all satisfactory; important techniques have often remained unpublished because the basic mathematics was not in fact new, while those that have been published have been widely scattered due to association with problems in very different fields. The editors comment on the wide diversity of subjects covered by the contributions to the first issue, but for this they make no apology and none is needed. If future expansion warrants it, a division could always be made into two series covering scientific applications and business applications, but it is precisely because papers on a wide variety of topics with a common basic interest can now be gathered together within one cover that computer