

perity, science is all-important and, in Prof. Findlay's opinion, representatives of scientific institutions on the Parliamentary and Scientific Committee are playing a particularly important part in keeping the Government informed regarding the discoveries and applications of science to human and industrial well-being, and in providing a scientific method of approach to the problems of national administration, a method infused with the spirit of truth rather than of prejudice or party partisanship.

Prof. Findlay stated that the roll of membership of the Institute has increased by 523 to 9,227, and the register of students by 205 to 1,225 during the past year. He also referred to the greater collaboration among the various organizations of chemists and the better co-ordination of their activities, in which representatives of the Institute have continued to play their part. He congratulated the Chemical Council on having gained from industrial firms and private subscribers greatly increased financial support for chemical publications. During the sixty years since the Institute was incorporated by royal charter, its membership has increased twenty-fold and there has also taken place remarkable expansion of the activities of chemists. The time has now come to reformulate its aims and interests and to adapt its organization so as to be more effectively to achieve its aims and fulfil its responsibilities; proposals for modifying the charter and by-laws are to be laid before the members in due course. Reference was made to the retirement of Mr. Richard B. Pilcher, who had been secretary for fifty years and for forty-five years registrar and secretary, and the appointment of Dr. H. J. T. Ellingham as secretary and Mr. R. L. Collett as registrar. Prof. Findlay was re-elected president.

Pedigree of Fossil Man

PROF. RUGGLES GATES has produced a very concise and interesting article on the pedigree of fossil man (*Amer. J. Phys. Anthropol.*, 2, No. 3; Sept. 1944). He reviews the opinions of others, discusses modern tendencies and viewpoints, and summarizes his own conclusions. So long as the data supplied relative to the finds of prehistoric man are reliable, the conclusions arrived at by the physical anthropologists must, of course, be treated with great respect. But unfortunately, really well-authenticated and documented discoveries of prehistoric skeletons are more than rare. For example, Prof. Ruggles Gates says: "The evidence of the Committee which investigated the Swanscombe parietal and occipital shows that stratigraphically it is one of the best authenticated of all human remains, and geologically the evidence of the age of the gravels in which they were found is very complete". In the sense that the exact horizon whence came the bones is known, this is certainly true; but it is not enough, for in those Swanscombe gravels both Acheulean and Clactonian industries occur mingled. To say the least, it is still possible that the prehistoric folk who made the *coup-de-poing* industries were entirely distinct from those flake-tool makers who produced the Clacton, Levallois and other flake industries. A study of distribution maps strongly suggests that such a distinction should be made. Now the early flake-tool folk were the ancestors of the Mousterians, that is, of Neanderthal man, whereas the *coup-de-poing* makers appear to have quite another story—perhaps an African one—and it is thus still impossible to be certain to which of these two cultural facies the Swanscombe bones belonged. It is not until problems like this—

purely matters for the prehistorian to settle—are resolved that the physical anthropologist can satisfactorily do his job. Bearing in mind this warning note, Prof. Ruggles Gates's paper makes interesting and informative reading. He is trying to give answers to just those questions many would like to have elucidated; among other interesting conclusions he places Neanderthal man, in accordance with Weidenreich, in the chain of development from *Pithecanthropus* and *Sinanthropus* to "the modern type of man". Not all anthropologists would agree.

Length of Small Intestine

THE capacity of the human body to withstand remarkable injury or loss of what may seem to be essential organs is continually astonishing those who have to deal with injuries sustained in war and peace or with the results of surgical operations. C. C. Holman (*Lancet*, 597, Nov. 4, 1944) has reported the instance of a woman who, having survived the removal of her uterus and of the breast for cancer ten and six years earlier respectively, had to sustain, at the age of fifty-six, the removal of twenty feet of her small intestine: a lateral anastomosis was performed between the jejunum and the transverse colon. The patient recovered and three months later had gained 2 lb. in weight. A year after the operation she weighed rather more than before her operation and was doing the parish work as a clergyman's wife.

In an Annotation on this case, the *Lancet* says that people have survived, for several years at least, with only 3 ft. of combined duodenum and jejunum and no ileum. It has been calculated (H. E. Haymond, *Surg. Gynec. Obstet.*, 61, 693; 1935) that removal of up to one third of the total length of the small intestine could be followed by return to normal function; but that poor results might follow removal of more than half of it, or eleven feet in average people. It is pointed out, however, that the length of bowel removed gives no true indication of the length which remains, because the total length of small intestine varies between 10 ft. and 28 ft. 4 in., according to J. Bryant (*Amer. J. Med. Sci.*, 167, 499; 1924), who measured the small intestine at autopsy in 160 adults. When the gut is alive, it is a great deal shorter, possibly half the length measured at autopsy or less. Another case, reported by J. A. Cosh in the same issue of the *Lancet* (p. 596), was less fortunate. This was a man aged sixty-seven, from whom all the small intestine was removed except the duodenum and about 3 ft. of the jejunum. For about eight months he had fairly good health, but then became ill and died twelve months after the operation.

Announcements

PROF. BENGT EDLÉN, of Lund Observatory, Sweden, has been awarded the Gold Medal of the Royal Astronomical Society for the year 1945 for his identification of the origin of the principal lines in the coronal spectrum.

THE Council of the University of Sheffield has appointed Dr. Harry Moore to the chair of glass technology in succession to Prof. W. E. S. Turner, who is to retire at Christmas 1945; Dr. H. A. Krebs to the newly created chair of biochemistry; and Mr. A. E. Bender to be research biochemist in the Department of Pathology, to work in association with the Sheffield Radium Centre.