peculiar a characteristic as the nineteenth century's readiness to regard sexual indulgence as the chief of sins. Again, the sense of guilt has gone through cultural vicissitudes. Puritanism made it a moral good in itself. Psycho-analytic writers now speak as if it were merely pathological. But it has a valid function to perform: it can serve to deter us from a repetition of those acts which we ourselves condemn. In fact, in Dr. Thouless's opinion, the modern tendency to belittle the idea of sin goes too far. The fact of sin (whether we take a religious view of it or not) occurs whenever a man's voluntarily controlled behaviour falls short of his own accepted standards. Even in these modern times, we retain a vivid sense of sin when others commit it; nowadays a man is prone to repent of his neighbour's sin and to apply the light of scientific understanding to his own.

In general, Dr. Thouless believes that the psycho-analytic approach represented by Prof. Flugel's eight principles suffers from an intellectual bias. It describes moral betterment as if that were primarily a matter of getting better principles and moral ideas, and seems to neglect the problem of bringing actual behaviour into line with those moral principles. For this reason he proposed the ninth tendency already referred to—a progressive increase in the voluntary control of conduct. But, as he was careful to point out, this trend by itself does not ensure an improvement in conduct, since voluntary effort may be directed towards wrong ends. The ethical questions remain.

The meeting was left to decide whether, as Dr. Thouless suggested, the effort to discuss the nature of right and wrong in the new technical language of psycho-analysis is primarily a test of the adequacy of that language; or whether, as Prof. Flugel holds, certain psycho-analytic conceptions, such as that of the super-ego, actually throw new light on moral problems.

time, were for example on "Les glandes odorifères de Blaps mortisaga" (1886); a whole series on "La soie et les appareils séricigènes" (1890-94); and a careful histological study of "Les cellules musculo-glanduleuses de l'Owenia", a genus of Annelides (1898). When Carnoy died all too soon in 1899 Gilson pronounced the customary *Éloge*, and did it with grace and tenderness: he carried on *La Cellule* as sole editor until it came to an end, like much else in Louvain, during the War of 1914-18.

Gilson carried on the Department of Zoology well and efficiently, but did little more histological or embryological work after Carnoy's death. He had a family connexion with Ostend, and the latter years of his life were spent there; he began to interest himself in the local fisheries, and in course of time established a Fisheries Laboratory, and even issued a journal (*Annales de l'Institut*) in connexion with it. He was not one of the founders of the Conseil International, but he took part in our second meeting in Copenhagen (1903), and attended regularly thereafter. One of the first of his fishery publications was on the reproduction and migrations of the eel, a burning question at the time; another, about 1910, was an elaborate statistical study of the great plaice-fishery; yet another, and an interesting one, was on the 'Guai', or winter-herring of the Belgian coast. Other fishery papers mostly dealt with the busy fleet of motor and sailing cutters, trawling and shrimping off the Belgian coast, and landing, or still worse destroying, prodigious quantities of 'undersized' fish. A report which he made to the Council in 1928 was the complete account of such a fishery that had ever been drawn up, and the many million of small fish destroyed made a startling story.

Gustav Gilson married late in life, but very happily. He was reticent of speech, austere of manner, of grave and intellectual countenance; during fifty years acquaintance I found him a faithful friend, a real scholar and a true man.

D'ARCY W. THOMPSON.

OBITUARIES

Prof. Gustav Gilson

News comes from Belgium that M. Gustav Gilson, embryologist at Louvain, fisheries expert at Ostend, died last winter. He was eighty-two years old, and though he kept busy to the end the best of his work was done well-nigh sixty years ago.

Gilson was Carnoy's favourite pupil: when Carnoy started his famous journal, *La Cellule*, Gilson figured as co-editor, and the first number contained his "Étude comparée [or part of it] de la Spermatogénèse des Arthropodes". The next was by Carnoy himself, "Sur la cytodierèse chez les Arthropodes", in other words, on mitotic cell-division. It was a great enterprise to start this costly journal in a small university like Louvain; but natural science was no new thing in that University. It was there that Theodor Schwann wrote his "Observations microscopiques", and laid the foundations of the cell-theory. P. J. van Beneden had been professor there for forty years, and his "Ostéographie des Cétacés" was famous. His son Edouard was a leading embryologist of F. M. Balfour's time, and had just published a paper which became classical, on the egg of *Ascaris megalocephala*; but he left Louvain for Liège (as Schwann also had done), and Louvain and Liège seldom saw eye to eye. Other papers of Gilson's, more or less important at the

Mr. H. Tetley

MR. H. TETLEY, curator in zoology at the Bristol Museum and Art Gallery, died on September 26 at the relatively early age of fifty-four. Educated at Malvern College and graduating B.Sc. in the University of Leeds in 1916, he carried out postgraduate research in entomology in the University of Manchester. During the War of 1914-18 he served as a paymaster in the R.N.V.R. and on demobilization was appointed assistant demonstrator in zoology and curator of the zoological museum in the University of Sheffield.

After a serious illness—the effects of which really undermined his health for life—Tetley was appointed in 1927 to take charge of the Zoological Department of the Bristol Museum and Art Gallery. There he overhauled the extensive collections, prepared and arranged new exhibits, and instituted the organization of records concerning the local distribution and occurrence of many groups of animals. It was a severe blow to him when in 1940 many of these records and much of the collections were destroyed by enemy action. He was especially conversant with local birds and mammals, and his publications reflect these interests. Many of these papers were published in the *Proceedings of the Bristol Naturalists' Society*, and by far his most important work was an

extensive paper on the "Land Mammals of the Bristol District" published in 1940. Papers on British polecats, the Scottish fox and wild cat were published in the *Proceedings of the Zoological Society* between 1939 and 1941 and various notes appeared between 1933 and 1942 in *British Birds*.

Tetley was a first-class observer in the field, and was always ready to place his comprehensive knowledge of local animals at the service of interested inquirers. Many of his papers bear witness to these detailed observations, while others give evidence of his bibliographical researches and are fundamentally compilative in character.

He held several offices in the Bristol Naturalists' Society, being president at the time of his death. He was a fellow of the Zoological Society of London and was recently engaged upon collecting details for the third volume of the International Wildfowl Inquiry Committee and the University of Bristol sub-Committee of the Nature Reserves Investigation Committee. For several years he had been special lecturer in systematic zoology at the University of Bristol,

where he also rendered valuable service in connexion with the Wilesworth Library of Ornithology.

Dogged by ill-health, never strong and robust, Tetley carried out his duties faithfully even under adverse conditions. Of a gentle disposition, though rather non-receptive to new ideas and policies, he was held in high esteem by local naturalists, and the sympathy of his colleagues and friends is extended to his widow and two children.

F. S. WALLIS.

WE regret to announce the following deaths:

Prof. C. G. Barkla, F.R.S., professor of natural philosophy in the University of Edinburgh, on October 23, aged sixty-seven.

Dr. Olaf F. Bloch, formerly chief chemist of Ilford, Ltd., on October 19, aged seventy-two.

Prof. M. R. Wright, M.B.E., emeritus professor of education, University of Durham (King's College, Newcastle upon Tyne), on October 10, aged ninety.

NEWS and VIEWS

Prof. H. T. Flint

PROF. H. T. FLINT, the new occupant of the Hildred Carlile chair of physics in the University of London in succession to Prof. W. Wilson, was one of the latter's colleagues at King's College, London, in the days immediately following the War of 1914-18. Like his predecessor, he is chiefly interested in the theoretical aspects of physics and has made many highly original and important contributions to relativity and quantum dynamics. He showed that Wilson's quantum conditions fix an upper limit to the number of the chemical elements and gave an explanation of the existence of the elementary charge. The introduction of a matrix-length into the geometry of the microphysical world and of the imaginary gauge is due to him, and his work has anticipated much of recent nuclear field theories.

Prof. Flint's activities are by no means confined to theoretical subjects. He has recently devised a new method of measuring dielectric constants and absorptions, which has the merit of eliminating errors due to fluctuating input and enables dielectric properties in the region of centimetre, or even millimetre, waves to be investigated. He is also an expert on the manipulation of radium for hospital purposes. He is the author of well-known works on wave mechanics, geometrical optics and, in collaboration with Dr. Worsnop, of a much used text-book of practical physics.

International Convention for Civil Aviation

A WHITE PAPER, issued recently, lays down the British Government's policy for the future control of civil aviation. It visualizes a radical change from the pre-war outlook, proposing a new air convention covering six main objectives to be secured by international agreement. Proposals have already been made by the Canadian Government, and other Commonwealth Governments are known to hold favourable views. Previous to the War, regulation

by agreement was confined to technical aspects covering safety, the right of innocent passage across territory and access to aerodromes. This convention, although ratified by thirty-three States, was never adopted by the United States, the U.S.S.R. and China. Many countries heavily subsidized their air-transport companies, either for national prestige or war potential, and consequently bargaining for international flying rights became political and gave rise to much friction. The new proposals would cover the economic and commercial, as well as the technical aspects, and thus by agreement avoid the political and narrow national outlook in administering air transport over world routes.

The British Government suggests that the proposed convention will secure the following objectives: (1) meet the needs of the world for plentiful, efficient and cheap air transport; (2) maintain equilibrium between the world's air transport needs and capacity; (3) ensure an equitable participation of each country in the world's whole air transport scheme; (4) eliminate wasteful competition and in avoiding unnecessary expenditures and fixing rates of carriage, limit the need for, and to control, subsidies; (5) standardize technical matters dealing with the safety of flight; (6) contribute to world security by encouraging international travel and exchange. It is suggested that the administration should consist of an international air authority, with operational executive panels, probably regional, and sub-commissions to deal with technical matters. The authority would consist of representatives of the ratifying States, and would need to be placed in proper relationship to any world security organization as may exist. The composition of the executive and technical bodies would have to be by mutual agreement between the air authority and the ratifying powers. The Government has explained that these proposals are a broad outline only, and may need to be modified in the light of views expressed by other countries.