

information is desirable, and that recommendations to this end should be put forward.

The report submitted by the Committee of Experts as to species recommended for inclusion in the Annex of the Convention on the occasion of its next revision was accepted. This contained proposals for the transference of certain species mentioned in the Annex from Class B to Class A, thereby affording them greater protection, and included among others the giant eland (*Taurotragus derbianus* (Gray)), black rhinoceros (*Rhinoceros bicornis* Linnæus) and secretary bird (*Sagittarius serpentarius serpentarius* Miller). The report also suggested the inclusion in both classes of certain species not heretofore included in the Annex. For inclusion in Class A were recommended among others the red wolf (*Canis simensis* (Ruppell)) and bongo (*Boocercus eurycerus* Ogilby) and the African peacock (*Afropava congensis* Chapin), so recently discovered to science, northern secretary bird (*Sagittarius serpentarius gambiensis* Ogilby), African broadbill (*Pseudocalyptomena graueri* Rothschild), Abyssinian ground chough (*Zavattariornis*

stresemanni Holtoni), the flightless rail of Inaccessible Island (*Atlantisia rogersi* Lowe) and the so-called fishes of the grottoes of Thysville, African species of the genus *Cæcobarbus*. The last-named was the only case for the protection of fish brought to the attention of the Committee. The species being blind and of great zoological interest, it is the opinion of the Committee that it should receive as complete protection as possible.

The Conference agreed to recommend that a further meeting be held in London in 1939, concurrently with the meeting of the proposed International Conference for the Protection of Fauna and Flora of Tropical Asia and the Western Pacific. On the proposal of Mr. de Water, it was agreed to express the hope that it would be possible for the Governments concerned to arrange for the attachment to their respective delegations of officers in charge of the principal national parks, such as the Kruger National Park, and the Parc National Albert, whose expert advice would greatly assist the work of the Conference.

Impact of Chemistry on Biology

THE forty-second Bedson Lecture was delivered in the Chemistry Lecture Theatre, King's College, Newcastle-on-Tyne, on May 19 by Sir Henry Dale, who spoke on "The Impact of Chemistry on Biological Science". Sir Henry pointed out that the two sciences of biology and chemistry were developed during the nineteenth century independently of each other; tremendous advances have been made in more recent times as the two subjects have become closely interwoven into the science of biochemistry.

Since the end of the last century, organic chemistry has developed along two main lines: (1) the synthesis of new substances of little direct relation to biological science, and (2) the isolation and identification of substances from 'vital' chemistry. Progress has been slow in the chemistry of the animal body, and the lag between chemical recognition and the assignment of a definite biological function to compounds isolated is well exemplified by the fact that although creatine was isolated from muscle in 1832, it was not until 1927 that a definite role in muscle metabolism was assigned to this substance.

The comparatively new science of bacteriology had its origin in the work of Louis Pasteur, an organic chemist whose interests developed along 'biochemical' lines until he eventually became a complete biologist.

The investigation of protein chemistry by Sir Frederick Gowland Hopkins which led to his attempt to make a 'perfect' diet by mixing the correct amounts of fats, carbohydrates and proteins gave rise to one of the most sensational discoveries in recent years, the vitamins. In a very short time, many of these compounds have been not only isolated, but also in some cases have been assigned a definite chemical formula which has been proved by synthesis.

Several enzyme actions have recently been investigated from a chemical point of view, and it seems extremely probable that enzyme and coenzyme phenomena will shortly be explained as chemical actions, closely connected in some cases with the vitamins.

The discovery of the natural stimulants formed by the animal body, the hormones, has opened up an important new field of biochemical research, in which great advances have already been made. Several of these compounds have been isolated and synthesized, such as, for example, thyroxin and adrenaline, and the sex hormones have been shown by synthesis to be closely connected with inert sterols present in animal tissues.

Finally, even the transmission of nerve 'messages' has been shown to involve reversible physico-chemical changes in which simple organic compounds play a part.

Pre-Roman Provence

EARLY in April of this year, it was announced that archaeological discoveries, which are of no little importance, had been made near Saint-Rémy, a small town a few miles from Arles in Provence. Provence, the original 'Provincia' of Rome's extra-Italian expansion, is rich in monuments, which, if Roman in origin, are none the less Greek in spirit and conception. This is a legacy from the Greek colonists from Phocæa, who founded Marseilles about 600 B.C. and extended their influence over the whole

region, which was later to be known as "The Province". Intermarriage with the natives left an indelible mark on the physique of the population, more especially to be seen in the beauty of the Provençal women.

Although the district around Arles was termed "Grecia" until the fourteenth century, little is known that is of purely Greek culture, nor has it been determined with precision how far and to what degree Greek influence pervaded the country. The importance