

the late Stellenbosch of Plettenberg; teeth of two adult and one baby burials from the Early Mossel Bay of Matjies River Shelter; teeth from one burial of the same layer, Plettenberg Bay; teeth from about fifteen burials, with cremated heads, near the top of the Mossel Bay layer; teeth from more than a dozen adult burials in the Wilton-without-pottery layer. *In not one of this large collection of teeth is there the slightest sign of dental caries.*

After this the deposit changes completely; it now consists almost wholly of shells (largely *Mytilus*) instead of ashes; and, from now onwards, caries is very common.

The indication from this area therefore bears out the experience of European anthropologists—that caries is a comparatively modern disease and that no skull showing this condition can be regarded as ancient. Will anthropologists, in view of these facts, revise their views on certain South African finds—I may be allowed to mention particularly the Broken Hill and the Springbok Flats skulls?

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Bloemfontein, July 28.

<sup>1</sup> Keith and Dreyer, *Roy. Soc. S. Africa*, 21, Pt. II.

### Nomenclature of Corpus Luteum Hormone

DURING the past year, the progestational hormone has been isolated from the corpus luteum in pure form and its constitution established. Heretofore, two different names have been used in the literature for this hormone (progesterin, luteosterone). For the sake of international uniformity, we agree to use hereafter in the scientific literature only the name *progesterone* for the pure hormone. As is known, the pure hormone exists in two different forms, one melting at 128° (uncorr.) and the other at 121° (uncorr.). The higher melting form (Compound B of Wintersteiner and Allen<sup>1</sup> and Compound C of Slotta, Ruschig and Fels<sup>2</sup>) will be known as  $\alpha$ -progesterone, and the lower melting form (Compound C of Wintersteiner and Allen and Compound D of Slotta, Ruschig and Fels) as  $\beta$ -progesterone. We hope that these names will be generally accepted in the scientific literature.

Breslau.  
Danzig Langfuhr.  
Rochester, N.Y.

W. M. ALLEN.  
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K. H. SLOTTA.

<sup>1</sup> O. Wintersteiner and W. M. Allen, *Biol. Chem.*, 107, 321; 1934.  
<sup>2</sup> K. H. Slotta, H. Ruschig und E. Fels, *Berichte der deutsch. chem. Gesell.*, 67, 1270; 1934.

### Points from Foregoing Letters

In reply to Mr. Buchanan-Wollaston's criticism of British statistical methods, Prof. Karl Pearson enumerates some of the uses of the  $P$ ,  $\chi^2$  test, which was devised to find whether a given curve used in graduating observations was a good 'fit'.

When blood from two individuals is mixed, clumping of the red corpuscles may occur, a fact of great importance in blood transfusion. Human beings have been classified into four groups  $A$ ,  $B$ ,  $AB$ , and  $O$ , according to their behaviour when mixed. Dr. J. F. Edwards and Dr. I. M. H. Etherington propose a new theory of blood group inheritance, depending on two linked pairs of Mendelian factors, the hypothesis of 'crossing-over' being discarded.

Dr. J. Davidson gives a chart showing the rainfall-distribution ratio in South Australia in relation to the recent outbreak of the migrating grasshopper, *Chortoicetes terminifera*, showing the necessary soil moisture needed for the development of eggs of that insect.

Further investigations to determine the steps by which the hemicellulose constituents of the wood of the oak are formed from starch are reported by W. G. Campbell.

X-ray investigations show that the electrolytically deposited 'explosive antimony', so-called because it crystallises more or less explosively when scratched or heated, is identical with the amorphous films of antimony produced by distillation in a high vacuum. Dr. J. A. Prins suggests that they represent a super-cooled liquid state.

As a step towards the spectroscopic analysis of amino-acids, Norman Wright and W. C. Lee have determined the Raman spectra of the light scattered by solutions of glycine, alanine, tyrosine and cystine.

Dr. J. Thomson discusses the mechanism of the initiation of the high-frequency glow discharge in hydrogen. From the results of his experiments, he concludes that there is space-charge present before the discharge begins and that this produces a non-uniform electric field. The experiments are consistent with a simple theory of ionisation by electronic impact. The ionisation potential of the gas may, in certain circumstances, be deduced from the results.

The observation is made by Dr. C. L. Wilson that as the boiling point of hexadeuterobenzene is lower than that of ordinary benzene, benzene behaves in a manner analogous to hydrogen fluoride, hydrogen iodide and acetic acid.

Dr. Dingle admitted that Dr. Sterne had obtained a unique solution of an apparently inconsistent problem of Dr. Dingle's, in inverse probability; but contended that Dr. Sterne's combination of the data had nothing to do with probability. Dr. Sterne disagrees with this contention, claiming that he uses "probability" only in a simple, usual and significant meaning of the word. Dr. Dingle still holds to his position, which he promises to maintain in a forthcoming article.

The non-protein radical of the enzyme catalase (found in liver and in most living tissues) has been isolated by Dr. Kurt G. Stern, who shows that it is derived from  $\alpha$ -etioporphyryn III; this is also the case with the component  $c$  of cytochrome, a cell-pigment, originally found in muscle, which plays an important part in the utilisation of oxygen by living tissues.

ERRATUM. The approximate velocity of slow neutrons as indicated by the experiments of Dr. O. R. Frisch and E. T. Sørensen, mentioned in this column in NATURE of August 17, should have been 2,000 metres per second instead of 200.