

be R. Prof. Minns, who has kindly studied these photographs, writes that the following group of six signs may suggest *αβρακ*; the sixth sign is, however, the number 6, which with another 6 and the final 5 make up the 30 of the text. The  $\beta$  following the group does not suggest any meaning. The following group of seven letters is read as salikis, followed by 6. The last group is read sulphouris, 5. It is obvious that this first attempt at reading the cipher is unsatisfactory, and as the "Epistola" must be reprinted with Bacon's alchemical works, I should be grateful for any help that can be given. Brewer in 1859 read No. 2 as KB/KA/φορος παδικis ε.Γ. vel PHOSRIS. S.,

Another interesting question is the equation of LVRV Vo Po, etc., to the letters of the Greek as a help to the reconstruction of the original passage.

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### The Pharmacological Action of Chloralose.

CHLORALOSE was introduced some years ago by Richet for experiments on animals. The chloralose used in our experiments was obtained from Messrs. Baird and Tatlock, Ltd., but its origin is unknown. We have been informed that it is prepared by heating an anhydrous mixture of chloral and glucose at 100° C. for about one hour. The residue is treated with a little water and then boiling ether, and the toxic isomer, parachloralose, is eliminated by crystallisation. The formula is  $C_8H_{11}O_6Cl_2$ .

When a solution of chloralose saturated at 40° C. is injected intravenously into the decerebrate cat, we have observed an extraordinary action on the nerves. On stimulation of the splanchnic nerve, the normal rise of blood-pressure is increased to an almost incredible degree. Repeated injection of 10 c.c. of the solution at intervals results in still further increasing the rise.

Its action on the somatic nerves is apparently of an opposite nature; for example, stimulation of the sciatic and anterior crural nerves gave no reflex results, thus demonstrating an inhibitory effect.

The full effect of chloralose in the respects mentioned is not manifested immediately. There is a gradual exaggeration of the rise with the lapse of time, the maximum result being obtained approximately thirty minutes after the injection.

This remarkable effect of the increase of the rise of blood-pressure due to stimulation of the splanchnic nerve is not seen if clips are placed on the adrenal veins. It is thus evident that the action of the drug is through the medium of the adrenal bodies, and it seems likely that it is that part of the rise of blood-pressure normally due to liberation of adrenin which is increased by the action of chloralose.

When the semi-lunar ganglia on both sides are removed and the fibres to the adrenal bodies are stimulated, the rise of blood-pressure is very markedly increased by the injection of chloralose into the adrenal bodies. Thus it appears we have in chloralose a marked stimulant to the adrenal bodies, and the action appears to be on a local mechanism consisting of the gland itself, and the nerve fibres reaching it from the semi-lunar ganglia.

Intravenous injection of a mixture of chloralose solution (saturated at 40° C.) and adrenin (1 in 100,000) causes the ordinary transitory rise of blood-pressure obtained by injection of adrenin alone to be converted into a large and long-sustained rise of blood-pressure. A similar curve is obtained when adrenin

is administered to a decerebrate animal under chloralose.

It has been suggested to us that this 'stabilising' of adrenin action by means of chloralose may be of therapeutic value.

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### Dug-out Canoe in Algoa Bay.

WITH regard to the recent correspondence in NATURE on the derelict canoe washed ashore in Algoa Bay, I have now received information from Lieut.-Col. M. L. Ferrar, Chief Commissioner, Andaman and Nicobar Islands, that it was reported in October 1925 that the sailing ship *Sree Shanascckthi* picked up three Nicobarese who were found clinging to a submerged canoe, which would have been of the ordinary size, holding six to eight people. These men belonged to Lapati, Car Nicobars. In the Albany Museum, Grahamstown, there are pieces of pumice from the Krakatoa eruption, that were washed ashore in South Africa; they have been preserved with all the barnacles and seaweed adhering, just as they arrived. I saw the Port Elizabeth canoe shortly after it had been pulled out of the water, and the encrusting material was identical in kind, showing both had been submerged for the same time, under similar conditions. Some part must have been above the sea for them to have caught the monsoon wind that drove them across. If the boat is from Car Nicobars, then it took sixteen months to come to South Africa, and somehow I think that four months is more likely correct. I am still inclined to place the origin in the Mergui Archipelago, because of the spoon-shaped fore-foot, and general shape.

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6 Boundary Road,  
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### The Two Calories.

THE suggestion made by Dr. Russell in his letter in NATURE of Feb. 4, that the kilowatt hour with its multiples and submultiples is the best unit of heat, is not new. Some years ago Ostwald proposed the unit of a kilojoule, and recalculated all the thermal data to the new unit. The figures will be found in his "Grundriss der allgemeinen Chemie," 1909. The reason why such a unit is not adopted in thermochemistry is that all the data would then depend on each redetermination of the mechanical equivalent of heat. The accuracy with which the latter is known probably does not, as yet, exceed one in a thousand, and thermochemists prefer not to have an error of this magnitude involved in determinations which are claimed to have an accuracy of one in ten thousand.

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### Eyeglasses and the Microscope.

WITH reference to T. H. T.'s suggestion (NATURE, Jan. 28, p. 137) for dealing with eyeglasses while using the microscope, I find it quite sufficient to remove the cap from the eyepiece of the microscope; this allows the eye to approach to the right distance and at the same time keep the vision corrected for astigmatism. Of course with modern students' microscopes, which usually are not fitted with eye caps, this cannot be done, and astigmatism has to be put up with.

T. J. BRIANT.