Early Science at Oxford.

March 23, 1685–6. An abstract of Mr. Bent's travailes in France, was communicated by Mr. Welsteed, and read.—Mr. Walker delivered in papers on an empiricall way of curing ye Cramp by a piece of ye root of fflag, and on Second-sighted men in Scotland, concerning whom Dr. Garden was desired to give his opinion.

March 24, 1684–5. Mr. Dalgarno advocated the bringing of a Philosophicall Language into practice. He also presented a compendium of a book, not long since printed by him, entitled *Didascolcophus*, which among other things undertakes to prove, that the Eye & Hand are more useful organs of knowledge, than the Tongue and Ear. This gave occasion to some discourse concerning the Vigour and improvement of some one Sense, upon the Defect, or non-employment of one or more of the others; upon which subject Mr. President was pleased to informe us, that Mr. Whaly (the deaf gentleman, whom he taught to speak) could, when within doors, distinguish a coach from a cart in ye street by the motion, it made; when those, who were in company with him, could not discern whether it were the one, or the other, by the noise, it made.

March 26, 1684–5. Ye Rt. Honorable the Lord Visct. Weymouth, in answer to Dr. Plot's queries, concerning ye splitting of Trees by ye late Frost, wrote that great damages in this kind have befallen ye timber trees in most of ye northward midland counteys, but very little or none in ye western counteys of England.

Ordered that ye thankes of this Society should be returned to Mr. Molineux of Dublin for his ingenious discourse concerning ye Petrifications of Loughneagh: in which it having been affirmed, that these petrifications are sometimes found in ye earth near ye Lough, it was queried, whether ye earth, in which these petrifications are sometimes found, may be supposed to have been thrown up from ye Lough? It was then proposed by Dr. Beeston, that ye Petrifying Springs in, and near Oxon, should be strictly examin'd, particularly as to their chymicall principles; and that enquiry should be made into ye severall steps, and progress, of their respective petrifications.—Mr. Packer, Physitian of Reading, gave an account of some observations he made lately in ye dissection of a Bear; particularly that there was no *Cæcum*, & that ye æsophagus consisted of so narrow a channell; and ye stomac, and entrails, are so well fixed in ye abdomen, that it was altogether impossible, they could at any time fall into ye mouth, as it was formerly supposed it might be in some postures of this animall. It was ordered, that thankes should be returned to Mr. Packer, and that he be desired to continue a correspondence with us.

March 27, 1688. Dr. Plot gave the Society the sight of a Paper written for his Majesty's use, about felling Timber in Staffordshire, where they bark their trees in the spring and cutt them down in winter, which hardens the timber, soe that the outside is as hard as the heart of the tree. For felling wood in winter he brings the authority of the antients, Pliny, Theophrastus, Cato, &c. for the advantage of it. He shewed how the barking of it in the summer farthers the hardening by closing the pores in the evaporation of the juice by the heat of the sun. There is no objection against it but that t'will be more troublesome to fell the Timber so hardened, and to bark it standing, and so dearer, but the goodness will sufficiently answer the price.

Societies and Academies.

LONDON.

Royal Society, March 12.—Sir Charles **Sherrington**: Remarks on some aspects of reflex inhibition. Attempt is made to schematise in a diagram certain features of the interaction of central inhibition and excitation. Assumption is made of an inhibitory agent liberated centrally which neutralises chemically an excitatory agent when this latter is present, but the liberation of which is not dependent on pre-existence of the excitatory agent. Tetanic inhibition is dealt with as due to iterate production of the inhibitory agent, with exhibition of temporal summation and "recruitment." Central after-action, both inhibitory and excitatory, is attributed to temporary persistence of a residuum of the liberated inhibitory or excitatory agent. The schema is designed to meet in particular the experimental data furnished by the knee-extensor under crossed excitation and ipsilateral exhibition. It does not attempt to deal with late successive effects such as successive induction and rebound.—E. G. T. **Liddell** and Sir Charles **Sherrington**: Recruitment and some other features of reflex inhibition. Under mere prolongation of an otherwise unaltered stimulus of the inhibitory afferent nerve, the central inhibitory process recruits more motoneurones as it proceeds. The "stimulation-plateau" of the reflex contraction is more easily inhibited than the "after-discharge plateau." Experiments suggest that a reflex maintains maximal response of the individual "motor-unit" by a degree of central excitation which is commonly "supramaximal," *i.e.* of intensity above the lower limit required for evoking the unit's maximal response. In the excitatory reflex a mechanism proximal to the motoneurone axon seems to react in an "all-or-none" manner when exposed to inhibition.—D. T. **Harris**: Studies on the biological action of light. Ultra-violet radiations exert a stimulant action on the gaseous metabolism of small animals, and on the movements of the frog's isolated stomach. This action is completely annulled by the presence of visible radiations, an action which seems to be physiological antagonism rather than physical interference. Exposure of an animal to mixed radiations of a powerful source of light depresses its heat production to an extent greater in pigmented animals than in albinos for the same rise of temperature in the surrounding medium. Thermo-electric measurements indicate that pigment, nevertheless, possesses high absorptive properties. Pigment appears to protect an animal against the lethal action of certain photo-dynamic substances.—H. **Hartridge** and F. J. W. **Roughton**: The kinetics of hæmoglobin. III. Velocity with which oxygen combines with reduced hæmoglobin. The reaction between oxygen and reduced hæmoglobin is very rapid, the time required for half-completion being 0·01 to 0·001 sec. The velocity-constants obtained at P_H 7 and P_H 10, with different concentrations of hæmoglobin and oxygen, agreed in showing that the reaction is bimolecular. The dissociation curve for dilute hæmoglobin solutions is approximately hyperbolic. The quotient of the two velocity-constants, oxidation and reduction, is practically equal to the equilibrium constant. The presence of hæmoglobin aggregates would not be expected to affect the velocity of oxidation, so long as the part of the molecule with which the oxygen combines is sharply localised and far removed from the aggregate-forming portion. This affords an explanation of the low-temperature coefficient obtained.—S. B. **Schryver**, H. W. **Buston** and D. H. **Mukherjee**: The isolation of a product of hydrolysis of the proteins hitherto undescribed. By