

Early Science at the Royal Society.

April 13, 1664. Dr. Wallis gave his and Dr. Christopher Wren's judgment concerning three manuscripts of Mr. Horrox for the restitution of astronomy. Their joint opinion was that as to the English piece it would not be fit for publication, because it contained only broken incoherent things, set down by the author only for his memory, as they came into his mind, and brought for the most part into the Latin in their proper places, and sometimes with retractations and alterations upon second thoughts of what he had at first set down in English. But they looked upon the Latin pieces as the beginning and attempt of an excellent work for the restitution of astronomy, and which served to shew, how great a loss it was that Mr. Horrox died so soon, since it appeared from this and that concerning his observation of Venus.

1668. It was ordered—that the president be desired to signify to the society, that considering the want of experiments at their public meetings the council had thought proper to appoint a present of a medal of at least the value of twenty shillings to be made to every fellow, not curator by office, for every experiment, which the president or vice-president shall have approved of; and that the president be likewise desired to advise with Mr. Slingsby about the impress of such medals.

1681. Several debates arose about the use and abuse of snuff-powder, and several instances mentioned of the bewitching custom of taking snuff, tobacco, &c.

1687. Dr. Papin produced the model of his cyder-press, which was contrived to apply the weight of the atmosphere to a press; and the use thereof was shown to the satisfaction of the Society.

April 15, 1669. Sir Robert Moray produced the skin of a Moor tanned, which he said was offered to be sold for five pounds; and being thought proper for the repository, it was ordered that the treasurer should pay that sum for the purchase of it.

April 17, 1679. Dr. Croune gave an account of Mr. Reusden's book on bees; that the part of it about the education of bees contained many good observations well made and related.

April 18, 1672. Mr. Hook was ready to make an experiment by a prism, viz., to destroy all colours by one prism, which had appeared before through another: but there being no sun, as was necessary, the experiment was deferred.

1678. Discourse was made concerning several ways of sounding the depth of the sea. . . . It was moved, that some experiments should be made at the column [Monument] on Fish-street-hill, of the velocity of the descent of heavy bodies, and what the resistance of the air is to that motion.

April 19, 1665. Sir Robert Moray presented the society from the King with a phial of Florentine poison, sent for by his Majesty from Florence, on purpose to have those experiments related of the efficacy thereof, tried by the Society. It was ordered that most humble thanks should be returned to his Majesty by the president and Sir Robert Moray, in the name of the society, for this honour and favour; and that experiments should be immediately made with the said poison. . . . Accordingly a thread was dipped into it, and drawn with a needle through the skin of the neck of a pullet, which within two or three minutes was thereby so stupified, that it fell down, and remained in that condition for about half an hour; but then began to stir again, recovering at last perfectly before the society rose. There were other experiments.

Societies and Academies.

LONDON.

Optical Society, March 13.—Miss H. G. Conrady: A study of the significance of the Foucault knife-edge test when applied to refracting systems. An attempt to explain the various appearances observed led to the construction of accurate three-dimensional models of pencils of light afflicted with aberrations present singly or in pairs. These models were based on equations for the geometric interpretation of the Seidel aberrations. With the aid of these models the test appearances were explained.—B. K. Johnson: A reflecting spherometer. The optical spherometer described is one in which an auto-collimating method is used in conjunction with a microscope for determining the radius of curvature of convex and concave surfaces, both spherical and cylindrical.—R. Kingslake and L. C. Martin: The measurement of chromatic aberration on the Hilger lens-testing interferometer. An account is given of the experimental determination of the longitudinal chromatic aberration and secondary spectrum of telescope object glasses, using the Hilger lens-testing interferometer. The amount of mirror displacement necessary to give the same interference pattern for different wave-lengths of light is measured by a screw micrometer.—L. C. Martin: Note on a convenient bench for testing object glasses. The arrangement is suitable for the familiar auto-collimation star test. The bench is sloping so that comparatively large glasses can be taken, and the necessary plane mirror rests safely in its support under gravity and without strain. Fine mercury globules scattered into black velvet form excellent artificial stars when illuminated by condensed light from a pointolite or gas-filled lamp. The images are observed with a suitable positive eyepiece.

British Mycological Society, March 15.—Mr. J. Ramsbottom, president, in the chair.—Miss E. J. Welsford: Diseases of cloves. Clove trees in Zanzibar suffer from two diseases. The most serious is caused by a fungus attacking the fibrous roots, destroying them and passing into the thick lateral roots and the collar. Since the lateral roots of the clove lie near the surface and extend to a considerable distance, there is contact infection. Effective methods of eradication are (1) the cutting down of a diseased tree and burning stumps and roots; (2) isolating infected areas by means of ditches cutting through lateral roots; (3) dressing with 1 lb. of lime per square yard. The second disease is a "die-back" due to a member of the Mycosphaerellaceæ. Entrance into the leaf is dependent on the presence of the epiphytic alga *Cephaleuros mycoidea*. The disease can be checked by spraying with Bordeaux mixture or copper acetate solution.—Miss M. Brett: A species of *Sterigmatocystis* normally producing large numbers of sclerotia and few conidia was investigated culturally. Conidial development is encouraged at the expense of sclerotial formation by exposure to light, increased osmotic pressure, acidity of the medium, a temperature above 35° C., and by carbon and nitrogen in the medium in unsuitable forms. A reduced form of conidial fructification is commonly formed under certain unfavourable nutritive conditions and the sclerotia remain immature or are totally inhibited.—J. Peklo: An account of the work of Kruis and Šatava on reduced forms of yeasts and the alternation of generations. Ascospores of yeasts if isolated and grown give rise to dwarf cells, which form colonies quite different from the normal cells in many ways and remain constant over a number of years: they do not form asci. When dwarf cells copulate they