"secrets." The woods chiefly employed in wood distilling are oak, beech, birch, thorn, crab or apple, hazel, alder, and ash. Great preference is given to holly and yew, whilst poplar, elm, and the whole of the coniferous order are avoided. The ovens or retorts are of various forms, and either of cast or of wrought iron, protected outside by brickwork against the dire effects of the fire. The condensers of iron and copper are constructed so as to permit the ready passage of very large volumes of gas, and to admit frequent cleaning. The temperature at which the distillation is conducted influences the amount of the products; as a rule, greater heat yields more of the so-called naphtha, and a lower temperature more acetic acid. The liquid products of distillation which form two layers, are differently treated according to the object the manufacturer has in view. After having given a lengthy description of the various products obtained in wood distilling, the author went on to say that some easier and more exact methods of estimating the commercial values of the various products ought to be introduced.—"On the effects of pressure on the absorption of gases by charcoal," by John Hunter. Very numerous experiments lead to the observations—first, that the amount of absorption increases with the pressure to which the gas is exposed; and secondly, the same change of pressure produces about the same amount of increase in the quantity of each gas absorbed.—"On the solubility of the phosphates of bone-ash in water holding carbonic acid," by E. Warington.

CAMBRIDGE

Philosophical Society, February 13.—"On the Great Trigonometrical Survey of India," by Colonel J. T. Walker, R.E. The author carefully described the process of carrying out the survey and the instruments in use, pointing out the various difficulties which were experienced, and the mode in which they were overcome. He also gave an account of the earlier efforts in this field and pointed out the importance of careful survey, and the mode by which accuracy in geodelic investigations was secured. In conclusion he discussed the mathematical difficulties which presented themselves, and a theorem which had been found useful in the reduction of observations.

NORWICH

Naturalists' Society, January 3.—The chairman read a paper by Mr. W. M. Crowfoot, on Spontaneous Generation. After distinguishing between the *origin* of life and the *nature* of life, two very distinct subjects, which have at all times been more or less confounded with one another, Mr. Crowfoot proceeded to review briefly the history of the theories concerning the nature of life as propounded by Hippocrates, Paracelsus, &c.; he then gave a condensed history of the views concerning the origin of life, and of the experiments of Redi, Needham, Pasteur, Huxley, and Bastian, and a *résumé* of the discussion which has been recently carried on in the columns of NATURE and elsewhere; concluding with some practical remarks on the nature of epidemic diseases, and the important results which may arise from such discussions. The thanks of the meeting were voted to Mr. Crowfoot for his very interesting paper, which was followed by an animated discussion.

DUBLIN

Royal Geological Society, January 11.—Rev. Maxwell Close in the chair. Edward Hull, F.R.S., read a paper on the Geological Age of the Ballycastle Coalfield, and its relations to the Carboniferous rocks of the west of Scotland.—Mr. John Leech read a paper on the moving bog of Castlerea, Co. Roscommon.

February 8.—Dr. Reynolds in the chair. The annual report of council, and statement of accounts for the year 1870 were submitted, and the following were elected as officers and council for 1871:—President, the Earl of Enniskillen, F.R.S.; Vice-presidents, Colonel Meadows Taylor, J. Emerson Reynolds, Sir Robert Kane, F.R.S., Rev. H. Lloyd, Provost T.C.D., F.R.S.; Sir Richard Griffith, Bart., LL.D.; Treasurers, William Andrews, and Samuel Downing, LL.D.; Secretaries, Rev. S. Haughton, M.D., F.R.S., and Alexander Macalister, M.D.; Council, Alphonse Gages, B. B. Stoney, W. Frazer, George Dixon, Alexander Carte, M.D., W. H. S. Westropp, C. R. C. Tichborne, Rev. Maxwell Close, Francis M. Jennings, Ramsay H. Traquair, M.D., R. Callwell, John Barker, M.D., John Ball Greene, Edward Hull, F.R.S., William H. Baily.—Mr. J. Scott Moore read a paper on a moulded piece of quartz, and exhibited a remarkable specimen of dendritic markings in granite.—A paper was read from Mr. G. H. Kinahan on foliation.

PERTHSHIRE

Society of Natural Science, February 2.—Dr. Buchanan White, president, in the chair. Mr. C. Fleckstein read a paper upon the Zoology and Botany of the Ancients. The paper, which was of general interest, was confined almost entirely to a consideration of the knowledge of natural history possessed by those nations termed *par excellence* the *ancients*, viz., the Greeks and Romans, and related chiefly to the researches of Aristotle and Pliny. Mr. W. Herd read a paper upon the Lepidoptera of Moncrieffe Hill and its neighbourhood. It was illustrated by specimens of the insects mentioned, and contained the results of Mr. Herd's own observations of the habits of the less common species found in the district selected.

DIARY

THURSDAY, FEBRUARY 23.

ROYAL SOCIETY, at 8.30.—On the Mutual Relations of the Apex-Cardiograph and the Radial Sphygmograph Trace: A. H. Garrod.—On the Thermo Electric Action of Metals and Liquid: G. Gore, F.R.S.

SOCIETY OF ANTIQUARIES, at 8.30.—On the Topography of Jerusalem, with special reference to the results obtained by the Palestine Fund Committee: Thomas Lewin, M.A., F.S.A. (Second paper.)

ROYAL INSTITUTION, at 3.—Davy's Discoveries: Dr. Odling.

LONDON INSTITUTION, at 7.30.—On the Action, Nature, and Detection of Poisons: F. S. Barff, M.A., F.C.S.

FRIDAY, FEBRUARY 24.

ROYAL INSTITUTION, at 9.—On Rumford's Scientific Discoveries: W. Mattieu Williams.

QUEKETT MICROSCOPICAL CLUB, at 8.

ROYAL COLLEGE OF SURGEONS, at 4.—On the Teeth of Mammalia: Prof. Flower.

SATURDAY, FEBRUARY 25.

ROYAL INSTITUTION, at 3.—Socrates: Prof. Jowett.

MONDAY, FEBRUARY 27.

ROYAL GEOGRAPHICAL SOCIETY, at 8.30.

LONDON INSTITUTION, at 4.—On the first Principles of Biology: Prof. Huxley. (Educational Course.)

ROYAL COLLEGE OF SURGEONS, at 4.—On the Teeth of Mammalia: Prof. Flower.

TUESDAY, FEBRUARY 28.

ROYAL INSTITUTION, at 3.—Nutrition of Animals: Dr. Foster.

WEDNESDAY, MARCH 1.

ROYAL MICROSCOPICAL SOCIETY, at 8.—Notes on the Microscopical Examination of Waters for Domestic Use: J. Bell.

SOCIETY OF ARTS, at 8.—On the Patent Laws and their Administration, with a view to the Adoption of Practical Amendments: A. V. Newton.

ROYAL SOCIETY OF LITERATURE, at 8.30.

LONDON INSTITUTION, at 4.—On the first Principles of Biology: Prof. Huxley. (Educational Course.)

ROYAL COLLEGE OF SURGEONS, at 4.—On the Teeth of Mammalia: Prof. Flower.

THURSDAY, MARCH 2.

ROYAL SOCIETY, at 8.30.

SOCIETY OF ANTIQUARIES, at 8.30.

LINNEAN SOCIETY, at 8.—On the Tamil names of Plants: Rev. S. Mateer.—Contributions towards a knowledge of the *Curculionidæ*: H. P. Pascoe.

CHEMICAL SOCIETY, at 8.

ROYAL INSTITUTION, at 3.—Davy's Discoveries: Dr. Odling.

LONDON INSTITUTION, at 7.30.—On the Colonial Question: Prof. J. E. Thorold Rogers.

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ERRATUM.—Page 266, second column, lines 15, 16, for "three times" read "*g* times."