

niferous ether; but when we have a thing elastic like jelly and yielding like pitch, surely we have a large and solid ground for our faith in the speculative hypothesis of an elastic luminiferous ether, which constitutes the wave theory of light.

### SCIENTIFIC SERIALS

*Bulletin de la Société de Géographie, Paris, 3 Trimestre, 1884.*  
—The principal portion of this number is occupied by papers of M. Huber, who spent the years 1878 to 1882 in Arabia on a scientific mission on behalf of the Department of Public Instruction. In the first he introduces 145 inscriptions which he found in various parts of Central Arabia on rocks. The second article is the first instalment (accompanied by a map) of an account of his numerous and extensive journeys in the same region, from Palmyra and Bagdad in the north, to Kheiber in the south. A glance at the route map shows that he has explored the greater part of this region during his prolonged stay there.—M. Petitin, in his account of his journey in Indo-China, gives a lengthy description of the difficulties and dangers which the traveller encounters in this peninsula. He was selected by Admiral de la Grandière when Governor of Saigon to make a geological investigation of Cochin-China, Siam, Hainan, and Formosa, but the death of the governor and the appointment of another whose views were different cut M. Petitin's explorations short. He saw enough, however, to give a brief account of the geology of Cochin-China, and to give the intending traveller much advice as to his arrangements and preparations. He also urges his countrymen to extend their dominion in the Indo-Chinese peninsula, especially in Tonquin, where the Red River affords them an opening into the heart of China.—M. la Mosllé's paper on the eastern provinces of Australia is little more than a lively account of a journey in Queensland, while the object of M. Simonin's article on the ports of Great Britain—especially London, Liverpool, and Glasgow—is not quite apparent, unless it be to urge his countrymen to go and do likewise with their ports.

*Verhandlungen der Gesellschaft für Erakunde zu Berlin, Band xi., Nos. 6 and 7.*—Herr Müller-Beeck, in the trade of Further India deals largely with trade routes into the Shan States and China. The Songkoi route into Yunnan he regards as one of great difficulty on account of the rapids. The delta also is constantly extending. Hanoi is now 110 miles from the sea; in the seventeenth century it was only half that distance. For half the year the upper part of the river is only navigable for boats of four tons, and when Manhao is reached, there is still a difficult land journey to Yunnan. The population also, he thinks, will form a grave obstacle to any regular trade by this channel.—Herr Buchta, in the Soudan and the Mahdi, deals purely with the political side of the Soudan question.—Prof. Seelstrang gives much interesting geographical and statistical information about the province of Santa Fé, in the Argentine Republic.—The usual notices of other societies and of new books conclude the number.

### SOCIETIES AND ACADEMIES

#### LONDON

**Linnean Society, November 20.**—Prof. P. Martin Duncan, F.R.S., Vice-President, in the chair.—Mr. A. Roope Hunt was elected a Fellow.—Mr. F. B. Forbes drew attention to specimens of pods and seeds used by the Chinese in place of soap. He stated that for ordinary detergent purposes an impure earthy soda and a lye made from ashes are employed. The leaves of *Hibiscus syriacus* and *Ginkgo biloba* are occasionally used for cleansing the head. The most favourite substance, however, is the fruit of certain Leguminosæ (Fei-tsoo-tow). The late Daniel Hanbury figures these seeds as a species of *Dialium*. Dr. Porter Smith says they are the product of the *Acacia concinna* (*Minosa saponaria*, Roxb.). Dr. Breitschneider asserts, on the contrary, that they belong to *Gymnocladus chinensis*, originally described by Baillon from pods only. Specimens at Kew lately figured in the "Icones Plantarum," are young leaves, fruit, and flowers from Foochow; those now exhibited (by Mr. Forbes) are, however, much finer examples from Ningpo and Wahu. The pods are roasted and kneaded into small balls used for washing clothes, and the head in bathing, but, on account of their unpleasant smell, they are prohibited in the public baths. The pods of *Gleditschia sinensis*, Lamk. (Tsao-chio) are used for the same pur-

poses as *Gymnocladus*, those shown at the meeting being from Pekin and Shanghai district. One appears to answer to Dr. Hance's new *G. xylocarpa*. Bentham refers a South China tree to *G. sinensis*. Lamarck founded his species on a tree growing in the Jardin des Plantes, raised from seeds sent by Père Incarville 200 years ago from Pekin. It is doubtful if the northern and southern plants are identical. The pods are broken into small bits soaked in boiling water until an oily substance is floated, when they are ready for use. Another saponaceous substance is derived from *Sapindus makarosi* (the *S. chinensis* or *Kobriateria paniculata*, Lam.), specimens of which were shown from Ningpo.—Messrs. H. and J. Groves exhibited specimens of (1) *Chara connivens*, collected at Slapton, South Devon, the only known British station, for no trace of the plant is now to be found at Stokes Bay; (2) *Chara canescens*, obtained from a pool between Helston and the Lizard, West Cornwall, by Messrs. Guardia and Groves, and also at Little Sea, Studland, Dorset, by Mr. Mansell Pleydell.—Mr. Geo. Murray showed dried and moistened examples of an Algæ, *Glaucocapsa*, found by Mr. Prier in birds'-nest caves in North Borneo.—Mr. J. G. Baker read the following letter from Mr. W. Brockhurst, of Didsbury, dated November 17, 1884:—"On April 2 I had the pleasure of exhibiting to the Society a number of prepared specimens of the daffodil, which appeared to prove that double daffodil flowers might produce seeds, and I advanced some arguments, based upon the observations I had made, to show that they were spread over wide areas in a wild state of seeding. The specimens showed the seed-vessels filled with ovules, but this did not fully prove that ripe seeds capable of germination would be matured. I therefore carefully observed a number of flowers of double daffodils (*Narcissus telamoneus-plenus*), and marked them as they went out of bloom, to prevent any mistakes. One of these produced a capsule containing nine shining black seeds, which were gathered on June 24, and at once sowed in a pot, and covered with a sheet of glass. Of these seeds four have already germinated, and show grass-like growths an inch above the soil. This therefore completes the proof."—Mr. W. T. Thiselton Dyer pointed out and made remarks on some sterile runners of *Mentha piperita*, and the remains of flowers of *Epilobium hirsutum*, both taken from a wreath found by Prof. Maspero in a tomb near Thebes, and supposed to be of the 20th or 26th dynasty; Mr. Dyer also exhibited fresh flowers of *Ipomœa purpureo-carulea*.—Mr. Thos. Christy exhibited two specimens of *Lycaste Skinneri*, Lindl., one with two flowers on one stem, the other with an aborted lip adherent for the greater part of its length to the column. He also drew attention to samples of the tea (probably a species of *Ilex*) used largely in Bogota, but which is said to be deficient in flavour.—Mr. E. C. Stanford thereafter showed some of the products from seaweed, viz.:—Algin, the insoluble form of which (alginic acid) can be made into shirt-studs resembling horn, &c.; the soluble algin (or alginate of soda), which diminishes the brittleness of shellac, besides other uses.—A paper was read by Mr. E. M. Holmes on *Cinchona Ledgeriana* as a species. The author expressed the opinion that under the name of *C. Ledgeriana*, a number of varieties or forms, and probably some hybrids of *Cinchona Calisaya*, are now under cultivation in the British colonies. He believed that, if more attention were paid to the characters afforded by the bark of trees, taken in conjunction with the other botanical characters of flower and fruit, these varieties and hybrids would be more easily defined and recognised. He considers that the plant published under the name of *C. Ledgeriana* by Dr. Trimen was probably referable to Weddell's *Cinchona Calisaya*, var. *pallida*, as a horticultural form, for which the author proposed the name "*Trimeniana*."—A paper was read, notes on the habits of some Australian Hymenopterous Aculeata, by H. L. Roth. He states that the wasps of the genus *Pelopæus* (*P. latus*) build their nests on the walls, ceilings, legs of chairs, under the table, in cupboards, vases, between pictures and the walls, on curtains, in all sorts of crevices in the house, and on the roof. No place is safe from their intrusion. When a cell is completed, the wasp goes in search of spiders, and, seizing these, packs their half-dead bodies in the cell, lays an egg, and closes the cell-top; thereafter rows of cells are added to the primary one and dealt with in the same fashion, generally finishing with a streaked coating of mud, thus to deceive as to the real contents beneath. These wasps are infested with Dipterous parasites. Of the Australian ants, *Formica rufinervis* is numerous, bold, and destructive. They destroy the web of certain caterpillars and wriggle them out, when they fall a prey to a host of attendant