

Wungu Mountains, some 6000 feet high, and Mr. Johnston thus described what he saw on ascending them:—

“We looked down on what I thought at first was a very broad sheet of water, surrounded on three sides by high ranges of mountains. But by degrees, with the aid of a field-glass, I discovered that what appeared to be a spacious lake in reality consisted of a narrow contorted strip of water on the one side, and between us and the water a wide extent of absolutely flat plain, so uniformly covered with blue-grey forest that from those heights above it was hard to distinguish it by its colouring from the real lake. When I had taken a number of angles from our camp on the mountain crest, we began a most arduous descent from the heights into the plain below. As we descended, our impressions and forebodings became of a somewhat dismal character. Everything around us bore witness to the dearth of water. On the other side of the mountain range we had left a country in the fully beauty of spring, intensely green with the gentle showers of the commencing rainy season, but here on the slope facing Rukwa, the farther we descended the more arid the country became. At the base of the mountains we crossed a three-mile stretch of level plateau, covered with the dismal grey growth of innumerable thorn-trees, so gnarled and contorted in shape, and provided with such cruelly ingenious hooks and barbs and stiletto-like thorns, that they might have been the enchanted forest round some wizard's lair.

“This plateau came to a sudden and abrupt termination, and from its edge we made a precipitous descent along a blood-red path into a blood-red ravine, the sides of which were fantastically planted and festooned with clumps of purple-green aloes, and those weird candelabra euphorbias with grey spectral stems, the segmented stalks of which looked like the tails of innumerable scorpions. Down through the dark gloomy depths of this cleft of the earth we floundered, slipped, and fell into the gorge of a dry river, cut deeply in a winding channel between precipitous red walls, the sides of which were scoured and polished and striated as if by glacial action. There were scattered stagnant pools of water in the red, red rocks and sand, and water oozed from places in the river bed when our porters dug below the surface. The trees clinging to the sides of the ravine were emerald green, with a metallic-tinted harsh verdure. Evidently this dried-up stream had once been an important river and a powerful torrent, and nothing is more remarkable in the vicinity of Rukwa than to observe the traces of a once abundant rain supply, which, from some unexplained cause, has—so the natives say—suddenly ceased during the last two or three years, as though the country had been literally blasted by some terrible curse.

“Crossing the dry bed of this river we entered on another level stretch of country gently sloping northwards, its surface uniformly clad with a forest of grey thorn-trees, but with the ground at their bases bespangled in a strange contrast with gorgeous flowers, which were almost unaccompanied by leaves, just the vividly-coloured petals rising from the hard grey soil.

“These consisted chiefly of purple, yellow, and white anemones, arborescent lilies, with white star-like flowers springing from a grey branching stem, and great heads of pink crinums resembling the ‘kafir lily’ of South Africa.

“We passed an occasional dry water-course choked with grey-green life-in-death vegetation, and then at length reached a broader dried-up stream-valley, with shadier trees and a stockaded village, the first we had met with in the land. . . . As soon as we got out of the broad, shaded stream-valley where the village was situated, we entered the frying, blazing heat of the parched plain, and found ourselves in a white, light, bright hell of dazzling sunshine. The shadeless acacias with their cruel thorns, the dry yellow grass, and the yellow withered *Borassus* palms, in no way mitigated the pitiless glare of the vertical sun, while a raging wind, hot as the breath of a furnace, swept over the plain and burnt the skin of our faces, so that we felt as if we wore tight masks. Every quarter of an hour the wretched caravan had perforce to stop and pant under the thin film of shade which might descend from the skeleton branches of a dead tree. At length, after frequent halts and protestations from the sun-stricken men that they could go no farther, we saw ahead of us an emerald-green line in the grey wilderness, which marked the presence of water. This turned out to be a welling, brackish pool thronged with bulrushes and reeds, a kind of circular spring of overflowing water apparently connected with the lake by a long lane of rush-choked marsh, very distinct from the arid plains of baked mud. We camped here, where the scenery

was a little less ghastly in its dead ugliness. The acacias exhibited a little green foliage among their thorns, and they were frequented by thousands of cooing doves, while the scanty bushes on the ground served as cover for many francolin and guinea-fowl. Game, in the shape of antelopes and buffaloes, was evidently abundant, and no doubt was attracted to the vicinity of this brackish pool by the flakes of salt which remained on the soil where the water had evaporated; and the game in its turn was followed by hyenas, lions, and vultures. The hyenas laughed and the lions roared outside our camp fires, and the next day I noticed many scattered fragments of bones and skulls in the vicinity, which were the relics of previous feasts on the part of these Carnivora.

“I was anxious to proceed direct to the lake from here, as we were only about three or four miles distant, but the Wungu people would not allow us to do so until we had first seen their Sultan, so we travelled in a north-easterly direction, always through this scorching, glaring wilderness, till we reached the bank of the Soŋwe River. Here I camped so that the men might be close to fresh water, but it appeared to us that even the water of the Soŋwe was brackish, though it was a running river. It seemed to have no effect in quenching one's thirst, and contained some irritating property which occasioned diarrhoea, and even dysentery. Leaving my men at the Soŋwe, I went with Mr. Nicoll and Dr. Cross to visit Mwinyi-Wuŋgu, who lived about a mile from its banks in a stockaded town. I can hardly describe the heat of the atmosphere in walking thither; it was like passing through fire. When we got into the town, we eagerly crept under the shade of the overhanging eaves of the houses, which extended so near the ground, for the sake of coolness, that one had to get down on all fours to get under them.”

As there was really a famine both of food and water in this dreadful wilderness, Mr. Johnston and his large party of men were compelled to hasten out of it, without his actually being able to get to the edge of the lake itself. What he has told us about this region makes us desirous of knowing more. It is a remarkable fact that, while in the Nyassa-Tanganyika plateau there had been no lack of rain, in the lake basin itself not a drop had fallen for three years.

THE BOTANICAL MYTHOLOGY OF THE HINDOOS.

AT a recent meeting of the Anthropological Society of Bombay, Dr. Dymoke read a very interesting paper entitled “The Flowers of the Hindoo Poets,” in the course of which he referred to the mythical conceptions which have gathered round trees and plants in the minds of the Hindoos. The ancient Eastern poets saw in the tree a similitude with the heavens and with the human form; in the “*Gitagovinda*” a comparison is drawn between the clouds and the thick dark foliage of the *Tamala*. These fancies gave rise to the numerous poetical myths concerning the tree of life, of knowledge, of the *Amrita* or *Ambrosia*, as well as those concerning cosmogonic and anthropogonic trees. The *Soma* or *Amrita* is represented as the king of plants, the eternal essence which constantly sustains and renews the life of plants and animals; it is the symbolical drinking of this eternal essence as a holy ceremony to which constant allusion is made in the Vedas:—

“We've quaffed the Soma bright,
And are immortal grown;
We've entered into light,
And all the gods have known.”

—*Rigveda*, viii.

The *Amrita* appears in various forms in stories and legends. A famous poet says that the drop (*Svedavindu*) which fell into the shell became a pearl; in the mouth of the black snake it became poison; and in the flower of the plantain, nectar. Several plants bear this name, and are supposed to be endued with an extra particle of the eternal essence; among others, the *Nem*, on which account the Hindoos, on their New Year's Day, eat the leaves of this tree upon the supposition that the *Amrita* contained in them will insure longevity. In Hindoo flower lore the large black bee (*Buramara*) plays an important part: he is the inconstant lover who delights in gathering sweets from every flower. The queen of Indian flowers is the lotus: the Hindoos compare the newly-created world to a lotus flower floating upon the waters, and it thus becomes symbolical of

spontaneous generation. The golden lotus of Brahminic and Buddhistic mythology is the sun, which floats in the waters which are above the firmament, like an earthly lotus in the deep blue stream below. From it distils the Amrita, the first manifestation of Vishnu. Brahma and Buddha (the supreme intelligence) were born of this heavenly lotus. Lakshmi, the Indian Venus, is represented sitting on this flower. The Hindoos see in the form of the lotus the mysterious symbol, *Svastika*. The allusions to this flower by Indian poets are innumerable. No praise is too extravagant for it; it is the chaste flower, and its various synonyms are bestowed as names upon women. The red lotus is said by the poets to be dyed with the blood of Siva that flowed from the wound made by the arrow of Kama, the Indian Cupid. The face of a beautiful woman is compared by the poets to a lotus blossom, the eyes to lotus buds, and the arms to its filaments. The bee is represented as enamoured of the lotus. Although a humble little flower, the *Tulasi* is almost as great a favourite as the lotus; it is addressed to the goddess Sri or Venus. The heart of Vishnu is said to tremble with rage if a branch of his beloved is injured. The plant must be gathered only for medicinal or religious purposes, such as the worship of Vishnu or Krishna, or the wife of Siva. It is a kind of amrita, symbolical of the eternal essence; it protects the worshippers and gives children to women. The plant is often worshipped as a domestic deity, and its branches are placed on the breasts of the dead. The Champa is chiefly celebrated for its overpoweringly sweet odour and golden colour; so strong is its perfume that the poets affirm that bees will not extract honey from it; but they console it for this neglect by dedicating it to Krishna, who loves garlands of yellow flowers as becoming to his dark complexion. One of the greatest favourites of the poets is the Asoka; its flowers, which are yellow when they first open, gradually change to red. In March and April it is in its glory, and at night perfumes the air with its delicate odour. The tree is the *kul* or anthropogonic tree of the Vaisya caste, who call it Asupala. The Kadamba (*Anthocephalus cadamba*) is sacred to Kali or Parvati, the consort of Siva; it has many synonyms, such as "protecting children," "dear to agriculturists," &c. It blossoms at the end of the hot season, and its night-scented flowers form a globular orange-coloured head, from which the white-clubbed stigmas project. The flowers are fabled to impregnate with their honey the water which collects in holes in the trunk of the tree. In Delhi the goldsmiths are fond of imitating the flowers. The well-known prickly gold beads so often seen in Delhi jewellery are meant for kadamba flowers. In this part of India the Marathas will not gather the flowers for profane purposes as it is their anthropogonic tree. The Kadamba Rajas claim their descent from it, as recorded in the following legend:—"After the destruction of the demon Tripura, a drop of perspiration fell from the head of Isvara into the hollow of a kadamba tree, and assumed the form of a man with three eyes and four arms. He became the founder of Vanavasi or Jayantipur." There are other versions of the story, but all agree in connecting the origin of the family with this tree, a branch of which is necessary to represent the Kai at a Marathi marriage ceremony.

UNIVERSITY AND EDUCATIONAL INTELLIGENCE.

CAMBRIDGE.—At the biennial election to the Council of the Senate held on November 7, the following were nominated (the * indicates retiring members):—Heads (2 seats)—*Dr. Atkinson, Clare, *Dr. Ferrers, Caius, Dr. Hill, Downing; Professors (2 seats)—*Dr. Cayley, Trinity, Dr. Sidgwick, Trinity, Prof. Ryle, King's; Members of the Senate (4 seats)—*Dr. D. MacAlister, St. John's, Dr. Forsyth, Trinity, *Mr. Whitting, King's, Mr. R. T. Wright, Christ's, Mr. E. H. Morgan, Jesus, Mr. C. W. Moule, Corpus, Mr. C. H. Prior, Pembroke. The voting was as follows:—Dr. Ferrers, 184, Dr. Atkinson, 137; Dr. Cayley, 191, Dr. Sidgwick, 127; Dr. D. MacAlister, 158, Mr. Whitting, 156, Dr. Forsyth, 153, Mr. Wright, 117. These were elected. Dr. Hill received 109 votes, Prof. Ryle, 103, Mr. Prior, 111, Dr. Lea, 82, Mr. Morgan, 81, Mr. Moule, 71. The newly-elected members hold office for four years. The result is interpreted as a gain for those who favour the modern development of the University.

It should have been stated that the election of Fellows referred to in our last number took place at St. John's College.

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Mr. Frank McClean, M.A., of Trinity College, has offered securities of the value of £12,000 to be held in trust for the University by Trinity College, for the purpose of founding three "Isaac Newton Studentships" in Astronomy, Astronomical Physics, and Physical Optics. The students are to hold their emoluments for three years, to be Bachelors of Arts, and of high mathematical attainments.

R. S. Cole, B.A., of Emmanuel College, has been appointed a Junior Demonstrator of Physics at the Cavendish Laboratory, in the place of Mr. L. R. Wilberforce, promoted to be Demonstrator.

The General Board of Studies propose the foundation of an additional Demonstratorship in Physiology, under Prof. Michael Foster, without stipend from the University Chest.

SOCIETIES AND ACADEMIES.

LONDON.

Royal Microscopical Society, October 15.—Dr. C. T. Hudson, F.R.S., President, in the chair.—Mr. G. F. Dowdeswell's note on a simple form of warm stage was read, and the apparatus exhibited.—The President said he had with great regret to record the deaths of two honorary Fellows of the Society—Prof. W. Kitchen Parker, F.R.S., and Mr. J. Ralfs. In place of these two gentlemen Dr. H. B. Brady, F.R.S., and Prof. W. C. Williamson, F.R.S., were nominated.—Mr. Mayall said he must ask the indulgence of the meeting to enable him to clear himself from possible ambiguity. In notifying the fact that at the first photographic trials of the new objective of 1.6 N.A. the visual and actinic foci had been found by Mr. Nelson and himself to be not coincident; and that when the objective was returned to Jena immediately after, Dr. Czapski found the foci were coincident; he had hazarded what he had imagined would appear a mere playful admission of the state of general puzzlement of both sides by suggesting that "the transit of the objective from London to Jena had somehow got rid of the 'chemical' focus." That sentence had unhappily been construed both in England and abroad into a reflection upon the good faith of Dr. Czapski, or Dr. Abbe, or the firm of Zeiss. Whatever blame was due to himself for the ambiguity of the expression, he must, of course, accept. At the same time he thought the Society would be interested to learn that upon his conveying his explanation to Dr. Czapski and Dr. Abbe, those gentlemen had expressed their complete satisfaction with it. He believed that the existence of a "chemical" focus was probably due to a slight difference in the adjustment of the front lens, especially, as Dr. Abbe had pointed out, in view of the fact that with an objective of such large aperture the colour correction was, as it were, "balanced on a needle-point" in the matter of an alteration in the distance of the front lens from the posterior combinations; and that a very minute alteration in that distance, though producing no perceptible difference in the visual image, was quite competent to lengthen or shorten the focus of the violet rays to such an extent as to exhibit a "chemical" focus non-coincident with the visual focus when tested photographically.—The President gave formal notice that a special general meeting would be held in the Library at 5 p.m. on Wednesday, October 22, for the purpose of considering alterations in the by-laws, the terms of which he read.—Mr. G. C. Karop exhibited and described an improved students' microscope, made by Swift and Son. The new instrument embodied Mr. Nelson's "horse-shoe" stage for convenience of readily seeing the condenser, and for estimating by the touch the approximation of the focus on the slide, and on which the Mayall mechanical stage was easily applied, together with a centring sub-stage focussed by sliding on the tail-piece, the whole of superior workmanship and design, and supplied at a moderate outlay.—Prof. J. W. Groves communicated a note by Mr. P. C. Waite on a new method of demonstrating intercellular protoplasmic continuity. A specimen in illustration was exhibited.—Mr. J. D. Aldous exhibited some early forms of microscope slides made of boxwood, similar to those formerly made of ivory, with the objects between pieces of talc.—The President called attention to some original drawings of a new Rotifer by Mr. W. B. Poole, of South Australia; also to a specimen of *Helistes mucicola* exhibited by Mr. G. Western.—Mr. E. M. Nelson exhibited upon the screen a series of thirty-one photomicrographs, which he described.—Dr. H. B. Brady's paper on a new type of Foraminifera was taken as read.