

success of the various excursions organised. The uncertainty of public affairs, moreover, has caused the French papers to give the most meagre reports of the proceedings; indeed only the titles of a number of communications are given without any attempt at a report.

On Friday M. Fremy was elected president for 1878 by a full house, and almost unanimously. The place of the next meeting will be Paris in all probability. Consequently an opportunity will be afforded to influential members of the French Institute to give a new impulse to the organisation of the French Association, and to remodel it more fully according to the pattern of its English sister.

A number of members of the British Association arrived at Havre at the beginning of the session, including Dr. Huggins, Prof. Sylvester, Messrs. Glaisher, sen. and jun. It has been regretted that no formal delegation from France was sent to Plymouth, as contemplated, and that no direct request was sent to Mr. Bell to bring over his wonderful telephone.

A committee was appointed at Clermont-Ferrand to report on the position of French meteorology. A report was drawn up pointing out the necessity of memorialising the French Government to establish a special meteorological institute. The report was not adopted by the Meteorological Section, and a new report will be drawn up, and was to be proposed on Monday. But the discussion will offer little interest, owing to the absence of the leading French meteorologists.

The mathematical and astronomical section has been well attended under the presidency of Professors Catalan (Liège University) and Sylvester, the former being acting president and the second honorary.

The Geological Society of Normandy has organised an exhibition of local geology in the old Palais de Justice, which may be considered as a model of care, order, and completeness. A number of large oil pictures have been executed to show the different stages of the evolution of life before the appearance of man on earth, from the age of coal-measures.

M. Gabriel de Mortillet, general secretary to the section of anthropology of the International Exhibition, has delivered a lecture on the organisation of that section. The Trocadero Palace will be devoted entirely to "Histoire de l'Homme." One of the aisles will be devoted to the ethnography of living savage nations, and will be considered as affording a fair representation of primordial ages. The other aisle will be entirely devoted to the history of the arts, which are supposed to represent civilisation in its highest state of development. The central part of the building is devoted to anthropological science, viz., European anthropology, prehistoric anthropology, demography, comparative linguistic, &c. Exhibitors of all nations will be admitted, and all the expenses of the exhibition will be supported by the French administration. The space allotted to foreigners for this exceptional exhibition will not be reckoned as part of the total space granted to their own nation in the Champ de Mars. M. Gabriel de Mortillet, Chateau de Saint Germain, Seine-et-Oise, will answer any letters addressed to him, and give practical directions to intending exhibitors.

The scheme, of which we gave details some time since, has been conceived by M. Krantz himself, who was desirous to see the science of man utilised as an introduction to the exhibition of the works of man.

ENGLISH NAMES OF WILD FLOWERS AND PLANTS¹

EIGHT years ago I was piloting a famous botanist from the east of England among the fields and lanes round Taunton, when he asked me the name of a plant which he did not at the moment recognise. I answered that it was the gipsy-wort, and received a prompt rebuke. "This is the third time," he said, "that I have inquired the name of a flower, and you have answered me in English. The Latin names are universal, the English at best are local. It is to be wished that all English names of plants could be forgotten, and their scientific names become popularised instead." Unquestionably a foolish utterance, it was of great service to myself, for it set me to consider the real value of these names which my pedantic guest despised, and from that time to this I have never encountered the popular name of any English wild flower without questioning it closely as to its etymological history and meaning, and noting the

¹ Lecture by Rev. W. Tuckwell before the Somersetshire Archaeological and Natural History Society.

passages in our literature where it occurs. It would be a great pleasure to me to believe that the knowledge gained by these inquiries, put together to the best of my power, could interest you to-night as much as it has interested myself.

It is no new thing to infer from the terms in use at the beginning of a nation's history the arts and customs of the nation using them. Thus the fact that in all or nearly all the Aryan languages the words for the Supreme Being, for the king, for brother and sister, for ploughing, grinding, building, closely resemble one another, is admitted to show that our common forefathers in times when they were still one people, and had not yet scattered into India, Persia, Europe, had the beginnings of religion and government, possessed the family life, knew the simple arts which are most needed for the comfort of home life. Let us see what light will be thrown upon the habits of our Teutonic forefathers if we apply their method of investigation to the popular names of plants.

The following words are common to all the Teutonic languages; must have been known, that is, to the race from which we ourselves, with the Germans, Danes, Swedes, and Norwegians, are descended, on their first settlement in Europe, and before they broke up into sub-divided nations. The first I will take is *birch*, the kind of which must, we find, have been used for boat-building and for roofing houses; for boat-building, since the word *bark*, from the same root as *birch*, stands for ship in English, Dutch, Icelandic, Danish; for roofing houses, since the Old English *beorgan* and the German *bergen*, also from the same root, mean to cover, protect, or shelter. From this simple word, then, we gather that our ancestors possessed the arts of building boats and of roofing or thatching houses. Houses could not be built without timber; and we find the word *tree* in almost every Aryan language standing for three things—for a tree, for timber, and for an oak, extending the use of oak wood for building purposes back to the first formation in Asia of our mother language, and presenting us with the additional facts that our European ancestors built of oak timber the houses which they roofed with birch. In *hazel* a fresh fact lies buried. It is in all Germanic dialects the instrumental form of *has*, command or *behest*, a hazel stick having been used, as Jacob Grimm informs us, in the earliest times as a sceptre or baton to keep order among slaves and cattle. Without dwelling on the fact that the old word *helsian*, to foretell, indicates the use of the hazel rod for purposes of divination, we have the additional probability revealed in a single word that our remote ancestors possessed slaves and cattle. In *hawthorn*, common to Swedish, German, and English, we have testimony to the use of a haw, *hæg*, *hedge*, or fence, "honouring the holy bounds of property," and consequently to the division and appropriation of land, in the earliest Teutonic time. My next word makes some demand upon your etymological credulity. Without tracing particulars, I will ask you to believe that the Sanskrit *Kshî*, to dwell, passes through various forms in one direction to the English *home*, in another to the word *heath*; now meaning the plant which grows wild on open land, standing originally for the land itself. "My foot," says Rob Roy, "is on my native heath;" and the same idea was enshrined in the same word to the first Teuton settlers. In the forest he fought his enemies, hunted his prey, hewed timber for his fences, and peeled bark for his roofs; his home was in the open land, or *heath*, from which, again, when ages had passed away and Christianity possessed the towns, he still worshipped his father's gods upon his father's heath, and gained, as Trench thinks, his ancient name of *heathen*. A sixth word lifts him higher than all the rest. The word *beech*, in Gothic, Old-High-German, modern German, Norse, Danish, Dutch, English, is identical with *book*, the Runic tablets of our ancestors having been carved upon this wood. In *sloe*, the wild plum, we have the root of *slay*, its tough wood having been used for bludgeons; *dog-wood* is *dagger-wood*, from *dag*, to strike; from *ash*, whose wood was therefore used for spear-shafts, came the Old English *æsc*, a spear; *sedge* is allied to *sæg*, a sharp small iron sword. And let us observe that while all these plants, bearing purely Teutonic names, extend far into Northern Asia, trees which stop short at a more southern limit—the elm, chestnut, holly, sycamore, plum, pear, peach, cherry—all have Latin names, showing that the Teuton squatters came from a colder country than that in which they are supposed to have settled near the Roman Provincials on the Lower Rhine. The knowledge that wheat, barley, oats, corn, rye, are all Teutonic words, completes the historical picture given by the first list of names. They show us a race of men coming from a northern to a southern region,

dwelling in timber houses, roofed and thatched, launching boats upon the rivers, possessing cattle and slaves, recognising the rights of property and the sacredness of home, fighting with cudgels, swords, and spears, familiar with cereal agriculture, in some way not ignorant of letters. All these facts, just hinted at here, but challenging minute investigation, we owe to a dozen common names of English plants, whose Latin equivalents teach and commemorate nothing of any national interest to ourselves.

These names, and a few more, are as old as the English language; but from the Conquest to the sixteenth century botanical inquiry ceased in England, and the rest of our popular names are little more than three hundred years old. Most of these come to us from the Greek and Latin; but some of them are so corrupted as not to be easily recognisable. Any scholar will detect in *acacia* the Greek word for *guilelessness*; in the *amaranth*, with which Milton's worshipping archangels wreathed their brows, the Greek for *unfading*; in the *periwinkle* the *pervinea* used to *bind about* the head; in *lettuce*, the meaning of *milky*; in *geranium*, the descriptive name *crane's bill*. In the *plane* he will see the *Platanus* of the poets; in the *rose*, the *Rhodon* of Homer and the *Rosa* of Virgil; in the *sycamore*, the wild fig of the Bible, transferred in mediæval miracle plays to the tree which now bears the name; in the *vine*, the *oinon* and *vinum*, whose Sanskrit root is still present in our words *twine* and *twist*. He will understand that the *basil* which poor simple Isabel planted in the pot which held her murdered lover's head was the *royal* plant, used perhaps of old in some royal bath or unguent; that the *angelica*, which now flavours our soups, and was once a specific against the plague, was given to mankind by angels; that the *belladonna* was applied as a cosmetic to make ladies beautiful for ever; that the *cyclamen*, which still grows wild in Devonshire, owes its name to its prominent circular tuber. He will not so readily discover that the *tansy* of our cottage gardens is the Greek *athanasia*, immortality, administered to Ganymede that he might become fit for his life in heaven; that the common milfoil *yarrow* is the *hieru*, or holy herb, pledged to heal all herbs with its fragrant leaves; that *nasturtium* means *nose-twister*, from its pungent smell; that our Quaintock *whortle-berry* is a corruption of *myrtillus*, *myrtle-berry*; that *eglantine* is *aculeata*, the prickly rose, or sweet-briar; that the herb *Bennet* or *avens*, is the *benedicta*, *blessed* herb, kept in houses to prevent the entrance of the devil; that the *hip* of the dog-rose is a form of the Greek and Latin words which people afflicted with sore throats know as *fujubes*; that *liquorice* is an Anglicism of the Greek *Glycyrriza*, *sweet-root*; that the *larch* is from the Latin *lar*, a *house*, in consequence of its use in building; that *lavender*, from the Latin *lavare*, to wash, was in the twelfth century Scotch and northern English for *washerwoman*, because then as now its sweet spikes were laid amongst fresh linen; that the *service-tree* is the Latin *cervisium*, *beer*, its leaves having been used to flavour ale before the virtues of the hop were known; that the little *spainancy-root* was the ancient remedy for the disease *Kyananche* or *dogchoker*, which we know in its modern sound as *quinsy*; that the *mushroom* is the *muscarius* or *fly-bane*, because a particular agaricus, pulverised and mixed with milk, was used in Southern Europe as we now use the poison called "Keating's Insect Powder." Least of all will our scholar be quick to admit that the *narcissus* owes nothing to the love-sick youth over whom Ovid sung and Bacon moralised, but is connected with the Greek *narkodes*, sluggish, a derivative from *narkê*, the torpedo, itself sprung from the Sanskrit *nark*, *hell*; cited by Sophocles (Cid., Col., 682), as crowning the goddesses of Hades; gathered by Proserpine before her wedding tour into the same dark region, because its heavy odour (for by it the ancients meant the hyacinth) blunts the nerves and makes men sleepy and torpid. I can find comparatively few names which we have borrowed from the French. *Dandelion* is, of course, the lion's tooth; why, botanists are not agreed. *Mignonette* is applied by us to a very different plant from that which bears the name in France. *Woodruffe*, known to travellers in Germany [as flavouring the pleasant drink called *Maitrank*, takes its last syllable from *roue*, a *wheel*, its verticillate leaves being set like a wheel or rowell on the stone. *Pansy* is *pensée*, thought, from its significance in the language of flowers: "There's pansy," says Ophelia, "that's for thoughts." *Gilliflower* is *giroflee*, from *caryophyllum*, a clove, a name originally given to the carnation, but now transferred to the wall-flower. *Tutsan* is *toute-saine*, the oil in its leaves having made it a remedy for wounds. Most curious of all is *Apricot*, from *abricot*, which at one time I contentedly referred to the Latin *abricus*, *sunny*, ripening as it does on sunny walls. It is, in fact, traceable to the Latin *præcoqua*, *early*, the fruit

being supposed by the Romans to be an early peach. The Arabs took the Latin name and twisted it into *al burquq*; the Spaniards altered its Moorish name into *albaricoque*; the Italians reproduced it as *albicocco*, the French as *abricot*, and we get it next in England, curiously enough, as *apricock*, so spelt in Shakespeare's time, and finally as *apricot*.

Many curious bits of myth and history reveal themselves as we excavate down to these old meanings. The *peony*, or healing-plant, commemorates the Homeric god *Pæon*, the first physician of the gods, who tended the bellowing *Ares* when smarting from the spear of *Diomed*. The *centaury* is the plant with which the centaur *Chiron* salved the wound inflicted by the poisoned arrow of *Hercules*. The *ambrose*, or wormwood, is the immortal food which *Venus* gave to *Æneas*, and *Jupiter* to *Psyche*; the Sanskrit *amrita* which *Kehama* and *Kailyal* quaff in Southey's splendid poem. The *anemone*, or wind-flower, sprang from the tears wept by *Venus* over the body of *Adonis*, as the rose sprang from his blood—

αἷμα ῥόδου τίκτει, τὰ δὲ δακρυὰ τὰν ἀνεμώνων.

The *daphne*, *syringa*, and *andromeda* tell their own tales: the last, which you may find in the peat-bogs round *Shapwick* station, is due to the delicate fancy of *Linnaeus*, who first discovered and named it, blooming lonely on a barren, rocky isle, like the daughter of *Cepheus*, chained to her sea-washed cliff. The *Juno rose*, or tall white lily, was blanched by milk which fell from the bosom of *Juno*, the tale being transferred in Roman Catholic mythology to the *Virgin Mary* and the milk-thistle. The yellow *carline thistle* is named after *Carl the Great* (in Mr. Freeman's county I must not call him *Charlemagne*), who, praying earnestly for the removal of a pestilence which had broken out in his army, saw in vision an angel pointing out this plant as a heaven-sent cure. The *herb Robert* healed a disease endured by *Robert, Duke of Normandy*, still known in Germany as *Ruprecht's-plage*. The *filbert*, though this is disputed, commemorates the horticultural skill of one king *Philibert*. The *treacle mustard*, a showy crucifer resembling wallflower, was an ingredient in the famous *Venice treacle*, compounded, as you will remember, by *Wayland Smith* to treat the poison sickness of the *Duke of Sussex*. The word *treacle* is corrupted from the Greek *theriacum*, connected with wild beasts, whose blood formed part of the antidote. It was at first made up by the physician to *Mithridates*, King of *Pontus*; and is still in many parts of England known as *mithridate mustard*. The *flower-de-luce*, or *fleur-de-lys*, is the flower of *King Louis*, having been assumed as a royal device by *Louis VII.* of France, though legend figures it on a shield brought down from heaven to *Clovis*, when fighting against the *Saracens*. It is probably a white iris.

Not a few strange superstitions and beliefs are embalmed in well-known names. The *celandine*, from *chelidon*, the swallow, exudes a yellow juice, which, applied by the old birds to the eyes of young swallows, who are born blind, or have lost their sight, at once restores it. The *harok-weed* has the same virtue in the case of hawks. The *fumitory*, *fume terre*, was produced without seed by smoke or vapour rising from the ground. The *devil's-bit* is a common scabious, with a premore or shortened root, which was used so successfully for all manner of diseases, that the devil spitefully bit it off, and for ever checked its growth. The *eyebright*, or *euphrasy*, was given to cure ophthalmia.

"Michael from Adam's eyes the film removed,
Then purged with euphrasy and rue
The visual nerve, for he had much to see."

The *Judas-tree*, with its thorns and pink blossoms, was the tree on which *Judas* hanged himself. The *mandrake* gathered round itself a host of wild credulities. It was the *atrofia mandragora*, a plant nearly allied to the deadly nightshade, but with a large forked tuber resembling the human form. Hence it was held to remove sterility, a belief shared by *Rachel* in the *Book of Genesis*, and was sold for high prices in the middle ages with this idea. In fact, the demand being greater than the supply, the dealer used to cut the large roots of the white bryony into the figure of a man, and insert grains of wheat or millet in the head and face, which soon sprouted and grew, producing the semblance of hair and beard. These monstrosities fetched in Italy as much as thirty gold ducats, and were sold largely, as *Sir T. Brown* tells us, in our own country. It was thought that the plant would only grow beneath a murderer's gibbet, being nursed by the fat which fell from his decaying body: hence it formed an ingredient in the love-philtres and other hell-broths of witches; and, as it was believed that the root, when torn from the earth,

mitted a shriek which brought death to those who heard it, all manner of terrible devices were invented to obtain it. The readers of Thalaba will remember the fine scene in which the witch Khawla procures the plant to form part of the waxen figure of the Destroyer. I have seen the plant growing in the Cambridge Botanical Gardens; it is not uncommon in Crete and Southern Italy; its fruit is narcotic, and its name is probably derived from *mandra*, an inclosed, over-grown place, such as forms its usual home.

The medical beliefs revealed by many names are not less curious than their legendary associations. It was the opinion of the old herbalists or simplers that God had not only provided special plants as a cure for every disease, but had made their curative power evident by stamping them with some resemblance to the malady they were meant to heal; and this faith, known to students of our older botany as the "Doctrine of Signatures," lurks or reveals itself in many an English name. The *lung-wort*, spotted with tubercular scars, was a heal for consumption; the *liver-wort*, liver-shaped in its green fructification, was a specific for bilious maladies; the scaly pappus of the *scabious* for cutaneous eruptions; the throat-like corolla of the *throat-wort*, or Canterbury bell, caused it to be administered for bronchitis; the saxifrage, cleaving the hard stones with its penetrating fibres, was efficient against calculus; the *scorpion-grass*, now known as the forget-me-not, whose flower-spike dimly resembles a scorpion's tail, was an antidote to the sting of that or of other venomous creatures; the *moon-daisy* averted lunacy; the *birth-wort*, *kidney-wetch*, *nipple-wort*, *spleen-wort*, were all appropriated, as their names suggest, according to resemblances, real or fancied. The pretty toad-flax of our walls and hedges owes its name to a strange mistake. Believed to be the cure for a complaint called *buboes*, it received the Latin name *bubonium*. A confusion between *bubo* and *bufo*, which is Latin for a toad, gave birth to its present name; and stories were not long wanting that sick or wounded toads had been seen to eat of it and to recover health.

Similar distortions occur in non-medical names; and it is most curious to notice how soon a story springs up or a belief asserts itself in confirmation of the mistaken identity. The common *fumitory*, which we have already noticed, received its name of *fume-terre*, earth smoke, from its causing the eyes to smart and water when applied to them, as smoke does. The meaning was lost as time went on, and was supplied by the belief that it was produced without seed by smoke or vapour rising from the earth. *Buttercup* was said to give colour and flavour to butter, as being eaten by cows, when in blossom, the facts being that it is a corruption of *button-cop*, button-head, and that cows eat the grass all round it, but always, if possible, avoid it. *Meadow-sweet* is a corruption of *mead-wort*, *honey-wine plant*, a beverage being still extracted from it by cottagers. *Bulrush* is *pool-rush*, as growing in pools, not in mud; *snap-dragon* is *snout-dragon*, from its shape; *marigold* is *marsh-gold*; *sweet-william* is *willie*, a little eye; *pink* is the low German *pinksten*, Pentecost, from its flowering at Whitsuntide, the name being transferred first to the colour of the flower, then to a method of working flowers on muslin, called pinking; and so to the sword-stab in a duel, piercing or pinking an adversary as the needle pierced the cambric. *Nightshade* is *night-scada*, soother, or anodyne; *samphire* is St. Pierre, from its love of rocks; *sanicle* is St. Nicholas, the restorer of the three murdered children, from its healing powers; *poplar* comes from the Indian *popul*, whose leaves when varnished and painted closely resemble those of the large Spanish poplar; *primrose* was anciently the *daisy*, and is called by Chaucer *primerole*, from the old French *primeverole*, the first spring flower; *primerole* was changed to *primrolles*, that to *primrose*, the first rose of spring; and it was not till the sixteenth century that it attached itself to the familiar flower which now bears its name. *Covslip* is more strange still. It was originally *hose-flap*, and belonged to the mullein, whose great flannely leaf might well be likened to the flap or skirt of a woollen under-garment. Later on it was transferred to the wild primula of our meadows, and the mistake was stereotyped by the unlucky botanist, who in ignorance of its origin gave the name of *oxlip* to its pretty congener, the *Primula elatior*. The *Jerusalem artichoke* is a sun-flower, not an artichoke; but the tubers resemble the artichoke in flavour. From its Italian name *girasole*, turn to the sun, came Jerusalem; and by a further quibble the soup made of it is called Palestine soup. The *forget-me-not* was originally the *germander speetwell*, whose blossoms, falling off and flying away as soon as it is plucked, gave emblematic force to the name. It was known in the days of

chivalry as the "flower of souvenance," and was embroidered into the collars of the knights, a fact still recalled by its German name *Ehrenpreis*, prize of honour. About 200 years ago we find the name given to the ground-pine, *Ajuga chamaepitys*, whose nauseous taste once realised can never be forgotten. Finally it was seized upon by the river-side *Myosotis*, and forthwith sprung up a charming legend, created obviously to suit its latest identification, how that while two lovers loitered by a lake, the maiden saw and longed for the bright blue flowers, the knight plunged in to get them, but, unable to regain the shore, had yet agility enough to fling them into his lady's lap, and then with a last devoted look and the words "forget me not," sank below the waves for ever.

Many names of plants contain the geography of their origin. The *Canterbury bell* is obvious, so is the *Guelder rose*. The *Alexanders*, a rare plant round Taunton, but growing in great quantities at Blue Anchor, comes from Alexandria; the *candy-tuft*, from Candia; the *elecampane*, from Campania; the *medick*, from Media; the *carraway*, from Caria; the *walnut* or *Welsh nut* from the north of Italy, called *Walsh* by the Germans. *Peach* is *Persicus*; *shalot*, *Ascalonicus*; *spinach*, *Hispanicus*; the *damson*, rightly spelt as *Damascene*, tells its own tale, which is less clear in the case of the *Dame's* or *Damascene* violet, a corruption extended and perpetuated, as often happens, by its Latin equivalent, *matronalis*.

All first attempts at classification, etymological or other, leave a large margin of miscellaneous items refusing to be ticketed or systematised; and there remain a few names falling under none of the categories which I have cited, yet too interesting to be omitted. Such is *apple*, retaining its form in the Teutonic, Celtic, Sclavonic, and Lettish languages, and springing apparently from the Sanscrit *ap*, water, which reappears inverted in the Latin *pa* of *Padus*, *po* of *Poto* and *Pomum*, meaning therefore the water fruit or juice fruit. Such again is *daffodil*, the *daffadownilly* of Spenser and other poets. It is a combination of *sapharoun*, or saffron lily, with *a-phodelus*, the old English *affodilly*. With the taste for alliteration often shown in popular names the sapharoun lily blending with the affodilly became by a mutual compromise daffadownilly, whence daffodilly and daffodil. *Foxglove* is the *fox's glew*, or tintinnabulum, a ring of bells hung on an arched support. *Bedstraw* was a plant much used for couches before mattresses were invented, and a species which when dry yields a pleasant scent is still called *lady's bedstraw*. *Carnation* is *coronation*, its flowers being used as crowns or chaplets, just as *campion* is *champion*, gathered to crown the champions in a tournament. *Cress* is possibly from *cross*, its petals being cruciate; possibly from *crescere*, to grow, in token of its rapid increase. It was used in Chaucer's time under the form of *kers* to express any insignificant quantity.

"Of paramours ne raught he not a kers,"

from which comes, perhaps, our vulgar phrase, "I do not care a curse," though a yet ruder parallelism has since been manufactured to confuse its spelling and its etymology. *Nettle* is from *ne*, to spin, indicating that its coarse fibres were used for thread in early times, an idea borne out by Hans Andersen's beautiful tale of the wild swans, in which you remember that the princess was permitted to redeem her brothers from their transformation by weaving them shirts of nettles. *Shanrock* is from an Erse word signifying the *little trefoil*. The story of its theological use by St. Patrick is of modern date, and it has been taken by various writers to represent the *water cress*, the *wood sorrel*, the Dutch *clover*, and the *black medick*. Irishmen are divided in the present day between the two last, which are sold on St. Patrick's day both in London and Dublin. The *snowdrop* is so-called from its resemblance to the large eardrops worn by ladies in the sixteenth century, and represented often by painters of that period. The *tobacco* was the Indian name for the pipe in which the weed was smoked, not of the weed itself; and *potato* belonged at first to a tropical convolvulus, and was transferred by mistake to the well-known esculent. The *goose-berry* was the *cross-berry*, from its triple spine, which frequently takes the form of a cross. The *hollihock* is the *cauli-hock*, *hock* being an old name for the mallow, to whose order it belongs, and *cauli*, meaning cabbage, either from its lofty cabbage-like stalk, or, as in cabbage-rose, with reference to its rich double bloom. The *laburnum* closes its petals at night-fall like a tired labourer, and the *ozier* is named from the *oosy* beds which suits its growth.

I bring my list to an end, not because it is exhausted, but for fear my hearers should become so. I have picked only the most suggestive and curious of our many floral names, leaving an

abundant gathering to many gleaners. One branch of the subject I have barely touched, the superstitious practices attaching to many of our wild plants, though not surviving in their names. I have left alone the interesting question of Bible plants, of the hyssop, the juniper, the mustard-seed, the lilies of the field, the burning bush, the shittah, the almond, the gopher, the curiously mistranslated cab of dove's dung, with the light thrown upon their identity by the names given to them in the commentaries in our older translations. Nor can I do more than hint at the rich store of literary allusion to our wild flowers which abounds in all English poets, and the beautiful thoughts suggested to many of them by some particular plant. I should have liked to read you Chaucer's lines upon the daisy, Herrick's on the daffodil, Burns's on the dog-rose, Shelley's on the sensitive plant, Southey's on the holly, Wordsworth's on the lesser celandine, Longfellow's on the compass-plant. I should like to open volume after volume of Elizabethan and of later days; to enumerate and discuss the flowers with which Ben Jonson bids us "Strew, strew the smiling ground;" the "pretty paunce and chevisaunce," of Spenser; the "quaint enamelled eyes" that decked the laureate hearse of Lycidas; "the silver globes of guelder rose" which won the heart of Cowper; the "hawthorn bush beneath the shade" of Goldsmith's lovers; the "slight hairbell" which raised its head, uncrushed by the airy tread of Ellen Douglas. I should like to remind you of the lessons in natural theology which Paley drew from the "little spiral body" of the dodder seed; of the star-shaped shadow of the daisy which Archer Butler showed to Wordsworth, or how Linnaeus, when he first saw the wild broom in flower,

"Knelt before it on the sod,
For its beauty thanking God."

Above all I should love to turn with you the page of Shakespeare; to read of the grey discrowned head of Lear wreathed with "rank fumiters and furrow weeds;" of Perdita at the shearing feast disparaging the streaked gilliflowers as Nature's bastards; of poor distraught Ophelia distributing her rosemary and herb of grace; of Puck telling how love in idleness was purpled with love's wound; of Titania gently entwining the "female ivy and sweet honeysuckle" round the sleek smooth ass's head of Bottom; of Helena and Hermia, "a double cherry seeming parted, two lovely berries moulded on one stem." For I should lay on you a spell mightier than I can forge myself; I should invoke allies before whom we all bow as the source of our intellectual happiness and growth; I should remind you how the most creative minds have drawn nutriment from these tenants of our hedgerows and hill-sides, and how the knowledge of their lore helps us in its turn to interpret the sweet thoughts and apt illustrations of the poets they inspired and delighted: how, if the aspirations of my Cambridge botanist were fulfilled; if the daisy could become the *bellis*, the strawberry the *fragaria*, the honeysuckle the *caprifolium*, the heather the *calluna*, the parting genius of romance and myth and association and folklore would be sent sighing from the domain of botany; and the richest and most attractive of the natural sciences would become the dullest and the most neutral.

In conclusion, let me disclaim all merit of originality in the ideas which have been put before you to-night. I have but attempted to bring together, with the interest attaching to cumulative illustration, conjectures which have been started and discoveries which have been worked out by others. Scattered through the old-fashioned tomes of Coles, Lyte, Parkinson; through the pleasant pages of Loudon, Pratt, Johns; and above all in that most valuable work on popular botany which we owe to our Somersetshire naturalist, Dr. Prior, you will find all or nearly all that I have advanced. The flowers were plucked by other hands; mine has been only the *pia dextera* to sort and wreath them.

NOTES

WE greatly regret to record the death of Mr. J. P. Gassiot, D.C.L., F.R.S., which took place on the 15th inst., the opening day of the Plymouth meeting of the British Association, at the age of upwards of eighty years. Sir Wm. Thomson referred to Mr. Gassiot at the concluding meeting of the Physical Section in terms of the highest appreciation. His experiments with the vacuum tubes, an account of which will be found in the

Royal Society's publications, extended over many years, and he varied them in very many ways, in order to throw light on the theory of the stratified discharge. Mr. Justice Grove worked a great deal with Mr. Gassiot, who continuously for many years experimented with a battery of high potential, beginning with a battery of 500 water, and ending with 3,500 *Leclanché* cells. He spared no expense or trouble in his own researches, and in making known to Englishmen the researches of continental physicists by the purchase of similar apparatus to that they had employed. At his scientific gatherings one met the eminent men of all nations, and in the early days of the British Association they generally assembled after the meetings at Clapham Common. Before his death he distributed the greater part of his apparatus; much of it was given to the Cowper Street Middle Class School, and his vacuum tubes (in very great numbers) to Mr. Spottiswoode. He was a generous patron of science, and a helper of scientific men. He has munificently endowed the Kew Observatory and the Cowper Street Middle Class School, and was the founder of the Royal Society Scientific Relief Fund. His untiring activity enabled him to take an active part in the administration of some of the largest public companies, and though in years he lived a very long life, by his activity he may be said to have lived twice as long. He was the intimate friend of Faraday, and most men of eminence in England and abroad; those living will recall, when they hear of his death, the many pleasant and profitable hours spent at Clapham Common.

WE learn from a correspondent in Alexandria, under date August 12, that the obelisk is now nearly quite inclosed in its iron casing, and its launch may take place in another fortnight or so. "It is now receiving an outer skin of strong thick planks, to protect the casing from injury when it is rolled down the inclined plane into the sea. Two delicate engineering operations have to be got over before it is ready for the launch. The first is to let down the obelisk on to its bed in the cylinder, and that accomplished, to complete the riveting of the lower plates, and then let the whole down on to the ground; for at present the obelisk and cylinders are supported above the ground independent of one another. There will be no ceremony at the launch as the state of the sea may prevent the operation at any fixed time; and a calm day will have to be selected. The *ste* will take place when it is ready for sea after being docked in the Great Harbour. It has yet to have a rudder and bilge keels fitted, besides the cabin, wooden deck, mast, sail, &c. It will be painted bright-red and bear the name of "Cleopatra." If met at sea, it may be taken for a torpedo boat, and avoided accordingly. One side, the part which remained undermost, is in beautiful preservation, but other sides are more or less eroded; [still, when erected and seen at a distance the hieroglyphs will probably appear more sharply defined than when seen close and in a prostrate position."

PROF. E. S. MORSE, of Salem, Mass., is now busy with dredge and microscope in Japan, having fixed his headquarters at Inoshima, seventeen miles south of Yokohama. Recently he ascended one of the highest of the Japanese mountains, about 100 miles from the coast, and found opportunity there for dredging Lake Chiuserji, a body of water 4,000 feet above sea level. Its fauna was ascertained to be quite peculiar. Prof. Morse will return to the United States in time for his usual courses of lectures during the coming autumn and winter; but afterwards, in 1878, he expects to go back to Japan, having accepted an engagement in the Imperial University of Tokio, as professor of biology. He has also projected a summer school of natural history, to be conducted on the coast near the university; his text-book for beginners in zoology is to be translated into the language of Japan, and animals native to that country are to be