BOTANICAL TOUR IN PERTHSHIRE.
THE LIBRARY OF
THE UNIVERSITY OF CALIFORNIA

PRESENTED BY
PROF. CHARLES A. KOFOID AND
MRS. PRUDENCE W. KOFOID
BOTANICAL TOUR

IN THE

HIGHLANDS OF PERTHSHIRE.

BY W. P. AND A. I.

[Reprinted from 'The Phytologist.']

"The rugged mountain's scanty cloak
Was dwarfish shrubs of Birch and Oak,
With shingles bare and cliffs between,
And patches bright of Bracken green;
And Heather black, that waved so high,
It held the copse in rivalry."—Scott.

"Sweet smells the Birk, green grows the grass,
Yellow on Yarrow's banks the Gowan;
Fair hangs the Apple frae the rock,
Sweet the wave o' Yarrow flowan."—Old Ballad.

"O green, said I, are Yarrow's Holms,
And sweet is Yarrow flowing;
Fair hangs the Apple frae the rock,
But we will leave it growing."—Wordsworth.

LONDON:

WILLIAM PAMPLIN, 45, FRITH STREET, SOHO SQUARE.

1857.
TO THE

FRIENDS AND SUPPORTERS

OF

"THE PHYTOLOGIST"

THIS BRIEF ACCOUNT OF A VERY PLEASANT PEDESTRIAN EXCURSION

IS

Respectfully Inscribed

BY THEIR OBEIDENT SERVANTS,

THE AUTHORS.
The short Tour of which the following is but a short account, was undertaken without any professional or artistic intentions; neither to see fine scenery nor rare plants; neither to geologize nor to moralize. The primary object of the pedestrians was fresh air and exercise, combined with relaxation from care and labour. A secondary object was to seek—

"The hills of the North,
The land of blue mountains, the birth-place of worth;
Those mountains where Freedom has fixed her abode,
Those wide-spread glens where no slave ever trod,
Where bloom the red Heather and Thistle so green."

As part of the amiable fraternity who bear the vasculum and handle the spud, we may confess to a rather ardent desire of seeing, not merely the

"Land of brown heath and shaggy wood,
Land of the mountain and the flood,"

but also of collecting and admiring

"The bonnie flowers of Scotland,
All others that excel."

"The glowing Furze, the 'bonny Broom,'
The Thistle and the Heather,
The Bluebell and the Gowan fair,
Which childhood loves to gather."
The season of spring, late though it was in 1856, had left us, and leafy June was in the wane. The spring flowers of Scotland were nearly all numbered with the dead, and her summer beauties had been nipped by the norlan blast. The time had passed

"When blooms the Lily by the bank,  
The Primrose down the brae;  
The Hawthorn's budding in the glen,  
And milk-white is the Slae."

We were in the Highlands at that season celebrated by the great minstrel of Scotland thus:—

"When summer smiled on sweet Bow Hill,  
And July's eve, with balmy breath,  
Waved the Bluebells on Newark Heath;  
When throstles sang on Harehead Shaw,  
And corn waved green on Carter Haugh,  
And flourished broad Blackandro's Oak," etc.

Summer however rather frowned than smiled upon us. We saw the "Bluebells" indeed, and many other flowers equally beautiful; but we heard little of the throstle's song, and saw but little of the waving green corn.

But we did not go to Scotland to hear the birds sing, nor to see fair fields of either green or yellow crops. We could have seen and enjoyed all these at less expense much nearer our own hearths and homes. Our motives for peregrinizing were, as has been said, neither botanical nor pictorial; we went neither in search of plants nor of the picturesque: our objects were of a mixed nature: but enough, and perhaps too much, has already been said about them. As we have a page to fill up with something, we beg to inform our readers (we mean the readers of the 'Phytologist') that their patience will not again be so severely taxed. They will not henceforth be treated with "cauld kail
het agen;" Crambe non bis sed septies repetita. Botanical rambles or excursions will still have a place in the Magazine; indeed of papers in extenso we have none else of a similar length equally readable. But we hope to have no more series of papers on the same subject; a subject which becomes rather stale when it runs through the curriculum of seven of the twelve months. We hope to mend, better than sour ale in summer, and confine our excursions within moderate limits. There is one contribution also from Scotland in our number for December 1856, which we consider a good model, both as to the extent and style of a magazine article. On Irish botany we have several articles, which may be conscientiously recommended as being exactly what we like, and which we hope will be pleasing and instructive to our readers.

We do not expect new discoveries from tourists: they seldom have inclination to remain long enough in one place to be able to discover or to collect new facts. Resident botanists who have worked the ground over and over in all seasons and for many years, are the only men to whom we look for discoveries, either of plants new to their district or of any information in reference to the range and habitats of species already known to occupy their ground. Unhappily there are but few who would not rather contribute an entire Flora of their neighbourhood than a few facts about the extent and altitude of certain species, their rarity, or frequency, or entire absence. Yet such facts would generally be more acceptable to readers of botanical periodicals than long lists of plants generally are. As we have a few pages filled with what are called smaller-type articles, it is hoped that no one who has a fact to communicate will be deterred from sending it because it is incapable of being drawn out into a lengthy communication. Like the entire community
that lives on the bounty of others, our practice is “to receive thankfully the smallest contribution.” Would that the discoverers of single facts valued their discoveries as highly as we do; then we should have many contributions, more notes, and fewer lengthy articles. There is one special subject on which we are very desirous of receiving communications, that is, on the trees in churchyards. The sepulchral Yew is not the only tree planted among the narrow mansions of the dead. The gloomy Cypress is common enough in the modern cemeteries, with many other trees and shrubs and plants which are the usual ornaments of lawns and gardens. We do not intend however to catalogue these. Genuine ancient churchyard Yews, and such trees as may in certain instances supply their place, are the objects about which we solicit information.

But our paper is done; and it is better to leave off before the good-humour and patience of our readers be entirely done also.
BOTANICAL TOUR

IN THE

HIGHLANDS OF PERTHSHIRE.

CHAPTER I.

EDINBURGH.—ARTHUR'S SEAT.—ST. LEONARD'S CRAGS.—ROSLIN CASTLE.—ROSLIN CHAPEL.—HAWTHORNDEN.—THE FORTH.—STIRLING.—STIRLING CASTLE.—KING'S PARK.—DUNBLANE.

We left King's Cross, the Terminus of the Great Northern Railway, London, on the last day of June, 1856, at half-past eight o'clock in the evening, and arrived at Edinburgh by eleven o'clock next morning. The day began to dawn before we reached York, and when near Darlington we had a view of Penyghent, near Settle, the scene of former botanical explorations. About Edinburgh the vegetation appeared to us remarkably scanty. We hope our readers will not accuse us of drawing general conclusions from partial premises. Our visit to Edina was a short one, but we made good use both of our time and eyes. We strolled to the west by Bruntfield Links, the West Park, etc., and saw luxuriant grass grazed by the cows which supply the inhabitants with milk, and in which localities the portly and fair *blanchisseuses* both wash and bleach the linen of the citizens, but of interesting plants we saw no trace. The shore by Portobello was visited with similar success. The only plant of interest we noticed was *Geranium pyrenaicum*. Large-flowered specimens of *Geum urbanum* abounded, and we speculated about the probability of their being *G. intermedium*. But if these Scottish specimens
be this presumed species, where is *G. urbanum* to be found in Scotland? All the examples observed appeared to belong to one common type; and if so, either *G. urbanum* or *G. intermedium* is absent in those parts of Scotland which we traversed, or perhaps, with a modest conviction of our own somewhat lax observations, it should be said that we did not see well-marked examples of the two supposed species. Our account of the botany of the King's Park, inclusive of Arthur's Seat, St. Leonard's Crags, must be of the same negative character. As the park is distinguished by the singular absence of trees, so the rocks appeared to be as bare of vegetation. Several plants of *Dianthus deltoides* were collected, but all were of the common or usual form; the var. *D. glauca* was not visible. We cannot say that we were unsuccessful in our hunt after *Asplenium septentrionale*, for we did not look for it, prudently judging that we should lose our time and get wet feet "to the bargain." (We visited the park twice, and the second time was early in the morning, when the dew lay thick on the grass.) Plenty of *Geranium pyrenaicum* was observed in a very elevated part of St. Leonard's or Salisbury Crags, the part next to the palace (we are not quite clear about the nomenclature of these far-famed localities). On going up to the summit of Arthur's Seat we collected a few stunted and deformed examples of *Astragalus hypoglossis*. I believe this is the entire result of our botanizing in the King's Park; yet this locality, though rugged enough to please a hunter for the picturesque, is far from being a barren tract. The turf is close, and the herbage is as green "as grass can be," and the colour is a sufficient proof of the succulence of the pasturage. Yet the whole has, to eyes accustomed to the luxuriancy of the sweet south, a desolate, bare, and unpleasing aspect. That trees would grow here is very evident; for just outside the park wall, where the locality is more exposed to the unfriendly effects of the sea-breezes, there is a belt of thriving wood. A few trees scattered here and there would improve the landscape. They would break the long rigid lines of frowning, beetling rocks, and hide the somewhat dreary aspect of the bare hills. The greatest of Scotia's poets petitioned for trees to clothe the naked wildness of Bruar Falls. He gave utterance to what Bruar water might have said through its *water sprite*, if gifted with a sense of the beautiful and endowed with the gift of song. Would that he, the poet, had petitioned in
HIGHLANDS OF PERTHSHIRE.

behalf of Arthur’s Seat, which is seen by hundreds of thousands who never heard of Bruar and its grand Falls!

We next visited Roslin Castle and Chapel, together with Hawthornden, places eminent in the early history and classical reminiscences of this ancient kingdom. The very names of these places will cause life’s current to swell in the hearts of all lovers of Scottish melody, song, and poetry. But our business is with the botany; and the antiquities and the poetical associations connected with this spot must be left untold, as here they would be as much out of place as trees are out of the King’s Park at Edinburgh. If we were disappointed in realizing our botanical expectations about Auld Reekie, the woods of Roslin and groves of Hawthornden made ample amends for the meagre results of the earlier part of the day. The Roslin railway-station is within less than half a mile of the woods, and not a mile from the Chapel, which is one of the celebrities of Scotland’s metropolis. We reached the ground about twelve o’clock, and had six or seven hours to spend in botanizing.

The plants of the greatest interest to us Southrons were Geranium sylvaticum and others, unknown in the extreme south of England. Even in the Craven district, where we had previously seen this fine species, it did not reach the luxuriance and beauty it attains in the Scottish woods. The size of the flowers, their ever-varying shades of brilliant colours, from bluish-purple to red, exceeded the finest cultivated or wild examples which we had seen. This beautiful plant adorned our path through all Perthshire till we had reached the culminating point of our tour; then it gradually gave place to its usually more lovely relative, G. pratense. May the readers of this and the succeeding papers on this subject have only as much pleasure in accompanying us, as we had enjoyment of the lovely Wood Geranium, which we met for the first time this season in the woods of Roslin! The Ferns here were magnificent in size, beautiful in form, and of the most lovely colours; but as no rarities in this Order were noticed, we pass them over. Equisetum sylvaticum, one of the handsomest of the genus, was observed in profusion. Luzulas were also in abundance and very luxuriant. On the old castle,—a very fine ruin, if a ruin can be fine,—situated in a charming spot, and a place of considerable strength in the olden times, several mural plants were collected as mementos of a day’s bo-
Botanical Tour in the

...tanizing, such as rarely occurs. Among these may be noticed *Hieracium murorum*, in full flower at this early period, *Cheiranthus Cheiri*, and *Scolopendrium vulgare*, a Fern which is by no means general in Scotland.

After paying our respects to Roslin Chapel, a marvel of artistic beauty, and of almost infinite variety in detail, "*sed his non est locus,*" we wandered into the classic shades of Hawthornden, and luxuriated among Ashes, Yews, Hollies, and other trees, many of them probably planted by the poet whose name and sonnets have conferred a world-wide renown on this place, so richly gifted by the hand of nature. The first plant we noticed was *Anchusa sempervirens*; but the locality is not unquestionable. This plant however retains the power of self-propagation for many years, we had almost said generations. The localities noticed by Ray did lately, and probably do still, produce the plant. It had all the appearance of being coeval with the wood where it was growing, and the wood may be coeval with Fergus, the first King of Scotland, who was a contemporary of the mythic heroes of Greece. *Stellaria nemorum*, *Campanula latifolia*, *Vinca minor*, *Myosotis sylvatica*, with its large and handsome flowers, *Polygonum Bistorta*, with *Equisetum Telmateia* and the elegant *E. sylvaticum*, rewarded our further search in these densely shady woods. By the roadside, near to Roslin Inn, several fine plants of *Myrrhis odorata* were observed, partly growing on the bank and partly in the cornfield. This plant is a common occupant of Scottish gardens of the humbler classes, and hence probably the botanical demur to its taking rank as a genuine native of our British soil. To this however it is unquestionably entitled: not on the authority of a few scattered plants in Scotland, in no part of which, so far as known to us, would we venture to pronounce it wild, as wild is usually understood in these our critical days; but on the authority of thousands of plants which fringe with their elegant foliage, or large umbels of erect fruit, the borders of the mountain streams in the West Riding of Yorkshire. In the adjoining cornfield, *Lithospermum arvense*, *Stachys arvensis*, *Viola arvensis*, var. (?), *Papaver Argemone*, and two at least of the annual *Fu-marias*, with several other more common cornfield plants, were growing very plentifully.

As a finale to our first day's botanizing in Scotland, and a very agreeable and successful one it was in all respects; the sta-
tion-master showed us some of his botanical rarities, which were no rarities to us. We exhibited some of our captures from Hawthornden woods, but found that he knew less about them than we did previously to our leaving London. Our knowledge of the vegetation of Mid-Lothian was far ahead of his; though we had botanized there only a single day and he had lived there all his days. There is this to be said in his behalf, that his days have been but few and ours have been many. And we are too often met by the conceited cui bono race of men, who sneer at our humble and amiable pursuits, not to feel gratified when a young man in the responsible situation of a station-master does not disdain to look into the collecting-box of an amateur. The arrival of the train which was to convey us back to the city, interrupted our agreeable tête-à-tête, and hindered our seeing the herbarium as well as getting a sly peep into the knowledge-box of our recently acquired and obliging friend.

Between Edinburgh and Stirling there is a steam-boat which plies twice a day in summer on the upper part of the Frith. By this means of transit the passenger enjoys the beautiful views alongshore on both sides of the Forth, from its mouth, where it is many miles wide, to the point where its banks are united by a bridge, not larger than the bridge of Kingston-on-Thames. Our object is not pictorial nor antiquarian; if it were, the luxuriant woods which fringe both sides of the estuary would be noticed, with the grand mansions, seats, and residences of Scotland’s titled and untitled aristocracy, which peep out every now and then from the bosoms of the dense masses of trees, beautiful as a leafy and moist June can make and keep them. Several unostentatious little towns dot the shores of the Frith. These are the hives of busy industry; and the most notable are the North and South Queensferry, Charleston, Culross, Borrowstounness (pronounced Bo’ness), Kincardine, Alloa, celebrated all over Scotland for its ales, and Carron, still more celebrated all over the world for its grates, hot-air stoves, and many things of a less harmless nature than cooking utensils. Blackness Castle, on the southern shore, is one of the few fortresses which Scotland jealously stipulated, at the Union, to be preserved as garrisoned places. Cambus Kenneth Abbey, or rather a part of it, still stands as a monument of the religious grandeur of Scotland, now no more.

Scotland has but few remnants of ecclesiastical edifices to
show; but to make up for these she has castles, fortalices, towers, and spences innumerable, and of all sorts and sizes, from the princely edifices of Taymouth, Dunrobin, etc., down to the less extensive but not less characteristic baronial erections of Castle Fyvie, Castle Fraser, and the Castle of Cluny. The genuine Scottish castles do not exist on the shores of the Forth, nor on those of the Tay either. Strathdon, the Straths of Dee, the banks of the Ury, Ythan, Ugie, etc., in the Garioch and Buchan districts of the north and east of Scotland, contain the most renowned castles of the Middle Ages; but modern refinements and the necessities of a more civilized age have, even in these, made innovations that impair their ancient characters.

But as we did not go to Scotland to look for a castle, as our great lexicographer went to look for a tree, we did not pay our respects to many of the baronial residences that lay in our way. To make amends for this the grand features of Scotland, her hills and streams, came in for a full share of our notice and admiration. In sailing up the Frith, the first grand object that attracts the notice of the lover of nature, is the Ochil Hills on the north side of the Forth, and the Fintry hills on the southern side: these hills do not form the basin of the Frith. The Ochils meet the Forth at or near Stirling, but are far distant from the river at its lower portion. The Fintry hills form a continuation of that great chain of hills of which Ben Lomond is the faciē princeps, and which towers above them as the Lombardy Poplar springs up among, and far above, the humbler Birches and Alders. The windings of this river have ever been famed since Wordsworth wrote and published that exquisite morsel of pretty poetry, 'To Yarrow Unvisited:' Who that has read this charming production does not long to feel somewhat of the poet's raptures who sang so sweetly one of Scotland's most renowned classic streams?

"From Stirling Castle we had seen
The mazy Forth unravelled;
Had trod the banks of Clyde and Tay,
And down the Tweed had travelled."

The views from the ramparts of Stirling Castle are very extensive and imposing: to the east there is a remarkable hill, called the Abbey Craig, which looks for all the world as if it had been
shorn through the centre, and one-half carried away no one
knows whither: though—

"The words that cleft the Eildon hills in three,
And bridled the Tweed with a curb of stone,"
could have had no more difficulty in carrying away the hills than
they had in separating them. It is proposed to erect on the re-
main ing half of the Abbey Crag a memorial to one of Scotland’s
greatest patriots and the valiantest and stoutest of her sons. The
blood flows rapidly in every true Scotsman's veins whenever
he hears the soul-stirring and simple melody of "Scots wha hae
wi' Wallace bled." The nobility, gentry, and commons of Scot-
land have erected several monuments to him who has as high a
place among the poets as the subject of the song quoted above
has among her warriors: both occupy the foremost places.
The reproach of Scotland’s having no monument to commemo-
rate her greatest warrior is now to be removed. Better late than
never; but the warrior’s and patriot’s noblest monument is the
memories and feelings, the minds and hearts, of his countrymen,
wherein he is, and ever will be, enshrined.

From the west-side ramparts of the castle there is a good
prospect of Ben Lomond, and, a little nearer and to the right
appear Benvenue and Ben-an, the two sentinels which guard
the Trosachs, the pass to Loch Katrine. Still further on the
right is Ben Ledi, the highest portion of the mountain barrier
that divides the Highlands from the level plains of Menteith,
Stratherne, and the other upper parts of the Perthshire Low-
lands. Ben Voirlich and Ben Cruachan, the former near Loch
Erne and the latter near Loch Awe in Argyleshire, are also
visible from Stirling Castle.

Stirling is an interesting ancient town. The important events
connected with it are neither few nor unimportant. The great
battle of Stirling, in which Wallace baffled the most heroic and
sagacious of England’s kings, was fought in a field which is
within half a mile of Stirling bridge; and the great battle of
Bannockburn, the result of which was the independence of Scot-
land, was fought a few miles from the town on the south; Sau-
chieburn, a stain upon Scotland’s fair fame, was also fought in a
valley upon the west, within a mile or two of the town.

The ecclesiastical and some other buildings of Stirling are in-
teresting memorials of bygone times. The situation of the town is commanding, scarcely yielding to that of Edinburgh itself. The botanical objects of interest about Stirling are not very numerous, but they are not quite absent. In the churchyard of the High Church (which, like several other large sacred edifices in Scotland, accommodates two congregations), there is abundance of Myrrhis odorata. This plant is as plentiful here as the goutweed, Agopodium Podagraria, is about most towns and villages in Scotland: this latter is the commonest of Scotland's umbelliferous urban or wayside plants, as Bunium flexuosum is the common umbellifer of her fields and woods. On the ramparts of the castle a solitary example of Vicia lathyroides was gathered; Tanacetum vulgare, Echium vulgare, and Rumex pulcher, near the old bridge,—this Dock is by no means general in Scotland, so far as our observation extends. A few other suburban plants were noticed.

After a very agreeable stroll of three hours' duration about the King's Park, the banks of the Forth, the bridges and environs of Stirling, we went by rail to Dunblane, famous for being once the See of the pious and liberal Bishop Leighton, whose memory has entirely perished in the scene of his ministerial labours. An interesting chapter might be written about Dunblane and its ecclesiastical divisions; but our business here is with the unities and beauties of Nature, and therefore we forbear to enlarge upon the disagreeable themes of civil and religious strife, of which this little city has been the passive witness for centuries.

As we commenced, strictly speaking, our botanical tour at Dunblane,—for here we first used, on an extensive scale, the conveyance wherewith Nature bountifully provided us,—our readers may look for a more detailed account of our proceedings on our onward progress.
On the 4th of July, at six o'clock in the morning, our pedestrian tour actually commenced. A Gillie-truish-an-arnish (Anglicè, a baggage-carrier) was procured for us by our obliging host of the Dunblane Arms, a most comfortable house, by the way, where the fare is excellent and the charges moderate. Our Gillie trudged along with the impedimenta (the impediments of travelling); his clatter was interesting, for he knew the Highlands of Perthshire, and the Lowlands too, it may be presumed. He was able to point out the chief mountains of the former, and the position and direction of the passes, lochs, and rivers of both. His acquaintance with the prominent outlines of the country was serviceable, for he knew all the towns of Perthshire, their distances and bearing from each other; and being besides a person of observant habits, he was pretty well qualified to aid those who wished to be acquainted with the physical, moral, and religious condition of the occupants of the country, as well as to see something of its picturesque beauties. From Dunblane to Doune the country is open, and has a bare appearance, fringed or dotted here and there with woods, rather than adorned with trees. The Scotch are a thrifty people. Trees are very useful as shelter, but they are often detrimental to the operations of agriculture. The country however is not unenclosed; but the fences have more of a useful than of an ornamental character. The road is of an up-hill and down-vale nature; nothing hinders the traveller from getting a glimpse of the scenery in all situations, and generally a good view is obtainable.

Soon after seven o'clock we reached Doune, a half-highland, half-lowland town, of no great pretensions either for its size or its situation. Here the Teith, the most important tributary of the Forth, is a fine and rapid river; it sets in motion the immense wheels of the celebrated Deanston cotton-mills. The castle of
Doune stands on an elevated promontory at the confluence of the Teith and Ardoch. It is a massive edifice, surmounted by a spacious square tower, eighty feet in height, at one end of the front, and by another on the opposite extremity; the whole forms a large quadrangle. This ancient stronghold is an erection of greater extent and strength than of beauty; but it was once the residence of one of Scotland's earls, and the locality where the tragical event of the murder of the "Bonnie Earl of Moray" occurred,—a tragedy which is the subject of one of the beautiful songs and melodies of Scotland.

The Botany from Dunblane to Doune is like the country—not very interesting. In agricultural districts the botanical rarities are chiefly annuals. Scotland possesses but few of these,—much fewer than England. Annuals are however on the increase in both kingdoms. Only Scleranthus annuus and Chrysanthemum segetum were collected in our morning's walk between Dunblane and Doune, the latter not in flower. By the margin of the Teith, between Doune Inn and the Castle, we noticed Geum rivale, Enanthe crocata, and Agpodium Podagraria, a plant constantly present about hedges and waysides; also several Ferns; but nothing interesting was collected here.

Doune, as has been already stated, is only four miles from Dunblane and eight miles from Callander. The road to Callander lies along the left bank of the Teith, and passes through natural scenery which is passably pretty,—much more so than that between Stirling and Doune. But the weather was very unfavourable: only a few drops fell before six o'clock, but by eight o'clock the rain commenced in right earnest, and there were no tokens of its abatement. We might have remained at Doune, but the inn where we breakfasted had no attractions even on a rainy day. A rainy day at an inn, even if a comfortable inn, is one of the disagreeables which pedestrians sometimes experience. This inn at Doune was as uncomfortable as the weather. This, we can say from experience, is "the exception, not the rule." The inns in Scotland are as comfortable as the hosts are courteous. We say nothing about their charges: every man should live by his calling, and summer is the time when inns are most needed, because in this season travellers abound; it is the time of the innkeepers' profit, and a rainy season to them is like rain in harvest. It might be unsafe to publish a
catalogue of the miseries of an inn of the *bad sort*, and yet it would be cruel to wish even our enemy to learn them experimentally; therefore let those who wish to know what Highland inns were less than fifty years ago, read Dr. M'Culloch's account of the inn at Callander which he visited sometime in the first quarter of the current century. The inns at Callander have fully kept pace with the advancing civilization, conveniences, and elegances of the country in general, and of the Highlands in particular; but the inn at Doune still remains, to convince the incredulous Southrons that the Doctor was a faithful narrator of what he saw and what he suffered. It exists, it is to be hoped, as the solitary evidence that the accounts given of the Highlands, not more than thirty or forty years ago, were neither caricatures nor exaggerations.

A pitiless rain, which never ceased till several hours after we reached Callander, frustrated all our botanical expectations. This was however no great disappointment, because all the plants occurring between Doune and Callander, and many more than these, were seen over and over again in the course of our peregrinations. The most prominent plants, seen from the road, were *Iris Pseudacorus* (just coming into flower) and *Habenaria bifolia*, with her taller sister, *H. chlorantha*, which had been in flower for some time.

Our first walk from Callander, which was the centre of our operations for several days, was along the Lochearn road to Kilmahog, a hamlet adjoining the Pass of Leny, which we did not visit at this time, reserving it for a future opportunity. The road to Ben Lawers by Lochearn Head and Killin, passes through this Pass and along the northern shore of Loch Lubnaig, one of the finest walks in the Highlands of Perthshire. Although our object was chiefly to observe the vegetation of the Central Highlands, yet to pass by the celebrated picturesque objects which attract annually thousands of tourists of all grades,—from the man of title and property, with his escutcheoned chariot, to the humble pedestrian with his knapsack and on his legs,—would have evinced want of taste and curiosity both. In the summer season two or more coaches leave Stirling for the Trosachs daily; in fine weather the number of visitors is increased manifold. Such celebrities as the Trosachs, the Brig o' Turk, Benvenue, and Loch Katrine, being only nine or ten miles distant, could not be passed by un-
visited, and especially as an opportunity for botanizing would be afforded along the shores of Loch Vennachar, Loch Achray, and through the Trosachs.

Our short walk along the road from Callander to Kilmahog, only between two and three miles, did not yield much. The beauty and luxuriance of *Rosa villosa*, the common Red Rose of Scotland, got some considerable share of our admiration, and also its near connection, *R. tomentosa*, with white flowers, which have usually a slight tinge of pink. These are the common hedge Roses of the parts of Scotland which we visited. There was noticed besides these, a smooth and shining-leaved Rose, not then in flower, which might probably belong to the genuine Dog-rose series of this genus. *Spirea salicifolia* appeared frequently in the hedgerows and in other bushy, shady places. That it was truly wild in every station where it grew, is not affirmed; but it does not appear likely that it was ever planted for a hedge-plant, for which purpose it is worthless. It is also certain that the roads and the hedges too are of a very recent origin, though much of the hedge-stuff may be as ancient as the forests or woods through which these roads pass. These vales and passes were surely covered with woods, as they are still, except in spots that have been cleared for cultivation and for roads; consequently we may look for, and expect to see in the hedges, representatives of all the ligneous vegetation of the locality or district through which the road with its double hedge passes.

One of the most conspicuous plants in these parts is *Corydalis claviculata*, the white climbing Fumitory. This species, which with us in the south of England is an insignificant, humble object, imparting no character whatever to the scenery around, here covers the thatched roofs of cottages, creeps over ruins and rocks, somewhat like Ivy, and oftentimes completely covers, with its elegant foliage and its graceful flowers, large spaces of several square yards' extent. *Galium boreale* and several *Hieracia*, few of them as yet in blossom, fringed the margin of the beautiful and rapid stream which issues from Loch Lubnaig, "where Lubnaig's loch supplies the Teith." This river flows, or rather falls and rushes, through the Pass of Leny, and meets the western branch of the Teith which comes from Loch Katrine through the Lochs Achray and Vennachar. These two fine streams unite a little above Callander, and in their fork enclose, on two sides, a
beautiful meadow and some very fertile fields. The base of the famous mountain Ben Ledi, which is bounded by Loch Ven-
nachar on the south and by Loch Lubnaig on the north and north-east, is washed as well as bounded by these two branches, which, by their union, form the Teith.

In the evening we walked out across the Teith on the cow-
pasture lying to the west of Callander, between the road which is the nearest way to the Trosachs—but not the coach-road—and the road to Port Menteith. In the boggy places here, we collected *Pinguicula vulgaris, Narthecium ossifragum*, not yet in flower (4th of July), *Gymnadenia conopsea*, the most fragrant of our native Orchids, especially in a moist or dewy evening, and the Cotton Grass (*Eriophorum angustifolium*), a plant famous in Celtic poetry:

"Oh, what is fairer than the Canna, waving in the breeze,  
When summer laughs in flowery pride, and verdure clothes the trees?"

A greater minstrel than the author of these neat lines notices the *Canna* in another state,—

"Still is the Canna's hoary beard."

On the banks and along the bottom of a small rill adjoining, *Mimulus luteus* was well established; it was also observed in the ditch by the side of the Menteith road, but not so plentiful as in the above-mentioned locality, the little drain through the meadow.

Another very interesting walk from Callander is along the Comrie road, which leaves the village on the east and slants up the base of the hill which is crowned by Callander crags. This road crosses the Keltic burn, and passes through Glen Artney, having Ben Voirlich on the left and the Braes of Doune on the right. This is a very desolate tract, of great extent, but of a stern and inhospitable aspect. Peat-mosses, wide moors, bluff, round, heathery hills, and miles of very rough pasturage, comprise the scenery of this uninviting landscape. In this direction there is no cultivation visible. A very few *Rowan-trees* (Mountain Ash) skirt the kailyards of the few dwellings of the herdsmen; everywhere else, in this region, trees are as rare as they are in the King's Park at Edinburgh. On the Callander side of the hill, *Habenaria bifolia* and *H. chlorantha* were collected, the former in great force, the latter only sparingly; with these, *Orchis ma-
culata and *O. latifolia* abounded. Of all the Orchids none was so plentiful and beautiful as *Gymnadenia conopsea*; in an evening and early in the morning, the perfume of a bundle of these plants is exquisite. *Gymnadenia albida* here began to appear, but not so plentiful as the other above-mentioned members of this family. Near the Falls of Bracklin, a single specimen of *Habenaria viridis* was gathered in a pasture-field; this was the sole representative of the species noticed about Callander; it did not occur in great plenty anywhere. There occurred fewer examples of this Orchis than of any of the others which are common in Scotland. The variety of this genus, called *H. chlorantha*, was not very common; the rest were all about equally common: only *Orchis latifolia* did not perhaps attain a vertical range equal to that of *O. maculata* and *Gymnadenia conopsea*.

On the 5th we set out to walk to the Trosachs by the west or lower road, which crosses the Teith about the centre of the village, and, leaving the road to Menteith on the left, walked along the Coilantogle road. The botanical aspect of the vegetation on the wayside, tempted us into a wood about half a mile from Callander, and about midway between the bridge of Callander and the bridge near Coilantogle. In this wood, among other things of some interest, were collected *Trollius europaeus*, some in flower but most in fruit; also *Trientalis europaeus*, now very nearly out of flower, and *Vaccinium Vitis-Idaea*. *Vinea minor* was collected at Callander, but the reporter is not quite sure that it was observed in this wood. A very fine *Rubus* was observed here and in many other parts of Perthshire. The blossoms were pure white, and the erect habit of the plant, with its large flowers, rendered it there a very ornamental object. The common Orchids abounded here, as they did all along the roadsides from Callander to Loch Katrine. One of the most remarkable,—not for its rarity, for it occurred plentifully, but for its singularity, in having but a single flower at the extremity of the stem,—was a variety of *Orchis maculata*, which variety might be called var. *uniflora*. Plenty of the more common forms grew in the same spots, some with larger, some with smaller spikes.

After spending half an hour in botanizing among the trees, we rejoined the road and travelled onwards, crossing the western branch of the Teith by the bridge near Coilantogle, and, a little further on, met the coach-road to Loch Katrine by Kilmahog,
the northern and most picturesque of the two roads leading from Callander to this celebrated locality. The northern road was not new to us, and the one we chose was not only so, but it shortened our journey two miles. The road skirted along the eastern shore of Loch Vennachar, and we were induced to look into the lake for aquatics. None however were visible, except a few plants of *Littorella lacustris*. On the roadside, where the road impinges on the wooded hill, a solitary plant of *Hypericum Androseænum* was observed, the only example of this fine species noticed by us in all our walks onward and aside, forwards and backwards, and these amounted, on a rough calculation, to upwards of 250 miles.

The absence of wayside (viatical) plants, which abound in the south of England, was one of the singular features of all our walks in Scotland. A botanist could scarcely walk twenty miles in England without seeing some examples of *Hypericum perforatum*, the most common of the genus in the midland and southern counties. *Hypericum pulchrum*, in Scotland, takes the place which *H. perforatum* holds in England. *H. pulchrum* is not uncommon in the south and centre of our island, but the localities where it is found, heathy, bushy, open places, are the exception and not the rule in England. In travelling from London to the south and south-west, where heaths abound, *Hypericum pulchrum* also abounds; but in travelling from London to the north and east, the same plant is scarce, because heathy places are so. *H. perforatum* is not uncommon in the east of Scotland; yet in Perthshire it was so uncommon that a single example was not seen in walks amounting in all to 250 miles, as has been already stated. Again, an *Orchis* by the wayside in England is about as rare as a white crow: this phenomenon is occasionally seen in chalk-districts; but to meet with half-a-dozen species of this Order in Scotland, either on the roadside or in the adjoining pastures, within a few yards of the road, is as common an occurrence as blackberries in September.

The Brig o’ Turk (by the way, there are two Brigs o’ Turk, like the *Twa Brigs of Ayr* and the two bridges of Stirling, the ancient and the modern one,—we stick to the former), the Trosachs, and Loch Katrine are classical objects,—scenes that have been described by the greatest master of descriptive poetry; our puny attempts at description would be an impertinence, or something
worse. But our readers may be told that the guide-books are in error when they tell us, that "near the east end of Loch Achray the road (to Loch Katrine) crosses, by the Bridge o’ Turk, a stream which issues from the vale of Glenfinlas, a desolate tract of ten miles in extent." But there are two Brigs o’ Turk, as there are two Simon Pures in the Play, "A bold Stroke, etc.," and the ancient one, which crosses the river not far from the Brig o’ Turk Inn, is the real one. This inn has for its sign a representation of the headmost hunter, and the two well-known lines as a motto,

"And ere the Brig o’ Turk was won,
The headmost horseman rode alone."

And there he is represented, as John Gilpin is before the Bell at Edmonton, while performing his equally celebrated ride to Ware. This road and this bridge, mentioned by the guide, were not when Sir Walter wrote his famous epic, which incited so many admirers of picturesque scenery to visit the spot, so romantic naturally, and rendered still more interesting as the imaginary scene of the spirit-stirring deeds and descriptions of that fascinating invention, "The Lady of the Lake." The Brig o’ Turk, won by the venturous headmost horseman who rode alone, is the old bridge which unites the banks of the stream which issues from Loch Katrine, flows through Loch Achray, and enters the upper end of Loch Vennachar below this ancient bridge. The Bridge of Turk of the guide-books is of course not older than the road to Loch Katrine, and this road was not made for several years after Loch Katrine had attained all its celebrity. Guides are not always to be trusted. But we saw the Old Brig, not its representation at the inn only, and "seeing is believing."

Loch Katrine and Loch Lomond may be, at little expense of toil and money, both visited in a day. A steam-boat sails from the lower or Trosachs end of Loch Katrine, to the upper end at Stronachlocher, where there is a landing-place and an inn; this voyage is accomplished in about an hour. The steamer waits here about a quarter of an hour and then returns. This little trip affords the tourist, from the boat’s deck, a very comfortable view of Ellen’s Isle, the noble conical elevations of "the bold Cliffs of Benvenue," on the south or left-hand side, when the spectator is looking up towards the upper or western end of the Lake,

"While on the north, in middle air,
Ben-an heaved high his forehead bare,"
In the distant west, the Alps of Arroquhar, beyond the lofty Ben Lomond, form a grand termination to the view; whilst close at hand, among the cliffs and defiles of Benvenue, are seen the Pass of Beal-an-Duine, where Fitz-James lost his "gallant grey;" and the Cor-nan-uriskin, "the Goblin's Den," in which Douglas concealed his daughter when he went to yield himself to his sovereign. On the right, stretching along the lake, are the Braes of Strathgartney, grazed by hundreds of cattle and thousands of sheep,—a peaceful scene.

From the inn at Stronachlocher, by the Pass of Inversnaid,—through which a good road passes, and on which there are now, in the season, vehicles of many descriptions,—Loch Lomond may be reached in an hour. Here there is a steam-boat waiting to take on board the tourists from Loch Katrine. These may proceed to Glasgow or ascend Ben Lomond, visit the celebrated pass and village of Aberfoyle,—the scenes of Baillie Nicol Jarvie’s exploits with his fair cousin, Helen Mc‘Gregor,—or return to the Trosachs or Brig o’ Turk inns. As we had walked from Callander, a distance of nine or ten miles, and had to return by the same simple conveyance, we were contented with a view of the fine mountains that skirt both sides of Loch Lomond at its upper or northern end, and returned in our steamer to the Trosachs, and remeasured back our way to Callander. The botany of this episodical tour, "in search of the picturesque," was not of a very interesting nature, with the exception of the first mile of our way, when we diverged to our left into the wood that skirts the way between Callander and Coilantogle bridge.

In the evening, a visit to Callander Crags was not much more productive. It is true, fine views of Ben Ledi, Loch Vennachar, Cambusmore, the vales of Forth, Teith, Stirling, etc., were obtainable. Some Hieracia and a Potentilla, which we fondly fancied might be P. opaca, were the only spoils which we bore away from the base of these barren rocks. A walk along the eastern branch of the Teith, and through the cornfields below Bochastle, yielded a few plants of some interest, viz. Crepis paludosa, Galium boreale, Galeopsis versicolor, and our old acquaintance Myrrhis odorata, in abundance.

The 6th of July was the day of rest, and we attended divine service in both the churches of Callander, viz. the National or Established Church in the morning, and the Free Church in the
afternoon. Monday the 7th was a rainy day, a day of Highland rain, so well described by Dr. M'Culloch, who recommends the tourist in the Highlands, if he carries an umbrella, always to carry it open; for if he does not, he will be wetted to the skin by a sudden splash or sheet of water before he has time to undo the loop of his paraplue. In the Doctor's time umbrellas were folded up in a ring, not by a loop and button as now, and the time of slipping up the ring would not, at an average, be one-tenth of that required for detaching the loop from the button; yet in that short interval of time, a Highland shower found its way through all the ordinary protective media, and reduced the hapless pedestrian to the uncomfortable condition of "a hen in a rainy day." For the benefit of future botanical tourists, we subjoin the Doctor's rather exaggerated account of a Highland shower.*

In the evening we lectured on Botany to the boys and girls of the school, and to one or two good-natured people who condescended to listen to what was expressly adapted to the capacity of a juvenile audience. On the 8th we paid another visit to Loch Katrine, wandered along the shores of the lake an hour or so, and retraced our steps to Callander. The next day, which was to be our last day at Callander, an expedition to Menteith was both planned and executed by a walk over the hills, as nearly as possible, in a south-westerly direction. The distance to the village and Loch of Menteith from Callander is seven miles; half of this distance was walked, before we saw either the lake or the church, across a trackless, high, moory waste, with here and there only a sheep-track to guide us. From these hills we had very extensive and some very interesting views. The chief of these were the Ochils, the Fintry Hills, Stirling and its romantic Castle, the Forth (with its widened expanse of water), glittering

* Highland Rain.—"I thought that I had known Highland rain in all its forms and mixtures and varieties in Skye, Mull, at Killin, on the top of Ben Lawers; but nothing like the rain on Ben Ledi did I ever behold before or since. In an instant, and without warning or preparation, the showers descended in one broad stream, like a cascade from the clouds, and in an instant they ceased again. If the lowlander carries an umbrella, it may be useful for him to know, that if there is a button to undo or a ring to slip off he will often be wet through before either can be effected. There is an interval of fair weather; even the cloud which is to produce the rain is not very obvious, when, in an instant, and without a sprinkling or even a harbingar drop, the whole is let go on your head as if a bucket had been emptied on it."
under the sun-beams, Alloa, famous for its ale, Carron, for its cooking-stoves, and Kippen, celebrated for its facetious and home-draughting king. We reached Menteith, after a toilsome walk "through the moors, among the heather," in about three hours. The Crowberry (Empetrum nigrum) was the sole interesting novelty of this long walk; but we lighted on some ornithological specimens, and in particular upon a covey of the birds that feed on the berries of this plant. The poor little things had not long left the shell.

By the churchyard of Menteith, opposite to the inn (an inn is an important house in the Highlands, for there inns are few and far between), we noticed some plants of Valeriana pyrenaica, which had no appearance of being natural in that spot, although, as reported, it may exist in some of the many woods with which that neighbourhood abounds. By a wall in the village Malva moschata was observed. This plant must be placed in the same class as the Valerian above mentioned, "not wild in Scotland, so far as known to us." Several plants of Malva sylvestris were seen in gardens, or where they had been certainly planted; but a single example of any wild Mallow never occurred to us in Scotland. We know that our common Mallows, viz. M. sylvestris, M. moschata, and M. rotundifolia, are registered as the spontaneous productions of the country about Edinburgh, Glasgow, and Aberdeen; but we did not see any of them except those above mentioned, and they were evidently stragglers, if not the descendants of the formerly-cultivated individuals. Our time at Edinburgh was very short; but large and striking plants, like those of the Malvaceous Order, could not have been passed by unnoticed, if they existed there as they, or two of them at least, do about every town and village in the south of England. In Perthshire we ignore the Mallows entirely, because we believe Nature ignores them; and in reference to the Valerian of Menteith, we may bring in the verdict which a Scotch jury is allowed to give when the evidence is conflicting or unsatisfactory, viz. that the claims of Valeriana pyrenaica, as a wild plant in Scotland, are "not proven" by the evidence which we have to offer. In a meadow adjoining one of the cottages at Port Menteith, fine specimens of Sedum Telephium were collected. This plant is probably wild, though it is often kept in cottage gardens: its vulnerary or sanative virtues are perpetuated in its vernacular name,
“Live-Long,”* which may have been conferred on it because of its life-prolonging properties. As our intention was to start the next day for Killin, we made the best of our way homewards by the road, in order to rest ourselves, and prepare for a longer walk than any of our previous walks since leaving Edinburgh.

One of the last and pleasantest walks we had about this town was to a place not half a mile below the bridge of Callander, called the Camp. A camp it may well have been in the olden times: its rampart and fosse still exist as memorials of a warlike age, but the interior is like a lawn. Many plants grow here, though we only noticed the following: *Geranium sylvaticum*, as usual very fine; *Hieracium prenanthoides*, not yet in flower; and *Meconopsis cambrica*. We were delighted to recognize this old acquaintance, which we had observed in the days of “auld lang syne,” when we ran about the Braes of Cowie, Feteresso, and Dunnottar, and in our simplicity did not know that this rare plant was not as common as the White Saxifrage (*S. granulata*) or the Red Campion. In the camp at Callander it was growing at the very bottom of the fosse (ditch). We would not venture to say that it is what is generally understood by “truly wild,” but it was certainly naturalized and well established. We have seen it in Wales, where it certainly is *wild*, and it is probably so in Devon and Cornwall. Why not in Scotland? The evidence is not entirely satisfactory.

* A correspondent suggests that this title is rather indicative of the vitality of the plant itself, than of its ability to confer longevity on those who employ it as a specific. We have heard of its repute either as a vulnerary or a medicinal herb.
On the 10th of July,—a beautiful morning, but rather chilly, for there had been a sharp frost, not an unusual occurrence in these mountainous localities,—we started at four o'clock. The sun was already up, and shining on the head and shoulders of Ben Ledi, “that raised its ridge in air;” but the genial effects of solar heat were unfelt in the valley where we were, and the benumbing effects of the chilling, damp, frosty atmosphere were felt at our finger-ends. The great length of daylight, even at Edinburgh, was one of the phenomena not unobserved. In the beginning of July the light at nearly eleven o’clock in the evening was quite equal or greater than the light at nine P.M. in London. The sun, after setting, is several degrees nearer the horizon in Scotland, than in the south of England. The sun’s dip under the horizon is as much less in the Scottish capital, as the latitude of London is less than that of the former; or, in other terms, the difference of latitude will be the difference of the sun’s horizontal depression in the two places respectively. But there is another minor cause of the excess of the twilight in Scotland above that of London, viz. the greater purity of the atmosphere. The causes of greater atmospheric purity are not so simple as the above-stated cause of long twilight; but the facts are well known.

The road lies along the left bank of the eastern branch of the Teith, by the little hamlet of Kilmahog, where the celebrated Pass of Leny commences. This Pass is formed by a spur of Ben Ledi on the West, and a similar spur of Benvoirlich on the east. The river rather rushes than runs through this defile. It forms a series of rapids, or a succession of abrupt falls, for the space of about a mile: where it issues from the lake it is as placid as the Loch itself. The road is a good one, as all the Highland roads
are, thanks to General Wade, who made these good roads, or instructed the Highlanders in the art of road-making, an art in which they have ever since excelled. After emerging from the Pass, the lake, or at least the larger half of it, displays its loveliness to the traveller, who here has a grand view of the lofty Ben Ledi, from its base, washed by the lake, to its summit. On this side the elevation is abrupt and steep, and it is along this, the eastern side of the lake, that the road is made. On the east, the view is bounded by the long grassy slopes of the chain of Benvoirlich. Trees are rather scanty, especially on the Ben Ledi side of the Loch; but notwithstanding the somewhat bare aspect of the shores, the scenery here is very admirable. It combines many of the elements of beauty and some of sublimity. The mighty mass of the chain of mountains on the west, and the extensive views on the east, partake of the latter character—the sublime; while the beautiful is well supported by the placidity of the unruffled surface of the fine lake reflecting the beams of the morning sun, by the quiet pastoral beauty of the Benvoirlich side, by the cottages and small farms, few and far between, and by the hanging woods that fringe the mountains at the upper end of the view. These, combined into one whole, formed a prospect not readily effaced from the recollection of those who had the pleasure of seeing it; especially when accompanied with other agreeables, such as good companionship, fine weather, the pleasure of past recollections, and the future anticipations.

After passing the bend of the lake, the road enters a dense forest of Pines, Oaks, Birches, Beeches, and other trees, which clothe the south-western brow of the huge Benvoirlich. Here the Loch contracts; and here we had the pleasure of collecting, or rather of beholding (for they are awkward species to collect, and burdensome to carry), both the White and Yellow Water-lilies, which ornament several parts of Loch Lubnaig. When in leaf only, these two fine aquatics may be distinguished by the shapes of the foliage and by the position of the posterior lobes of their leaves. In the White Water-lily the leaf is rounded-ovate (egg-shaped), usually purplish below (on the under surface), the lobes at the base are almost parallel, and the leafstalk is cylindrical. The leaves of the Yellow Water-lily (the floating leaves) are ovate, rather pointed at the apex, and having the basal lobes slightly divergent; the petiole is rather angular than cylindrical, especially in the upper part.
During this morning’s walk we had the pleasure of seeing *Saxifraga aizoides*, for the first time during this tour. It appeared in the bottoms and on the banks of all the little rills and brooklets that flowed downwards from the mountains into the rivers and lochs of the vales. This was an additional new feature to the roadside scenery. *Geranium sylvaticum* had been our constant attendant in all our walks about Callander, and the Lady’s Mantle, *Alchemilla vulgaris*, ornamented every wayside. On the borders of Loch Lubnaig we were greeted by this other beauty, the Yellow Saxifrage, which cheered us on our way, as an earnest of the rich prizes that awaited us on reaching the culminating point of our journey.

The country here is solely pastoral and woodland. The mountain of Ben Ledi is far too steep for cultivation; and its base is but very thinly furnished with trees. On the Benvoirlich side there is much natural and plantation wood, both in the Pass of Leny and further on, on the brows overhanging the upper end of the lake. And the green mountain-side, sloping upwards from the road on the right, is quite open, and supplies pasturage to immense herds of cattle and flocks of sheep. Numerous rills and streams descend, crossing the road, and flow into the lake.

It was past six o’clock by the cottage chronometers, ere the poor village or hamlet of Strathire was reached; and our alimentary organs reminded us that we had not yet breakfasted. There are two public-houses here; but neither of them had a sufficiently inviting aspect to induce us to break our fast in them. So we walked on, two or three miles further, to the King’s House, on the Braes of Balquhidder, and there rested and refreshed. This inn, which has been lately rebuilt and enlarged, was erected originally by General Wade. And as the military, or the King’s servants, were the sole travellers needing refreshment on that road, it got the appropriate name of the King’s House, because built at his expense and for the accommodation of his servants.

This inn is situated near the summit of the Pass, a couple of miles from the church of Balquhidder, where, in the churchyard, the celebrated Rob Roy is buried. It is ten miles from Callander, four from Lochearn Head, and twelve from Killin. The views from this elevated station are much admired. Close at hand are the green Braes of Balquhidder, so celebrated in Scottish song, and not less deserving of celebrity for their excellent
pastures and numerous herds of Highland stots and queys that graze thereon. The conical-peaked mountains of Ben-can and Ben More were very remarkable objects in the direction of north-west. The views in the direction of Loch Lomond and Argyle-shire are very extensive and grand. The road for a mile or two passes along a kind of table-land commanding very wide and beautiful prospects, and then the declivity to Lochearn Head begins, and the direction of the hills which bound Lochearn opens out, and the lake itself expands in all the quiet, secluded beauty of a Highland loch.

Lochearn is the apex of the fine fertile vale of Strathearn, one of the richest straths in Scotland. There is not much fertility on the north-west end of the lake, where we were. The ground capable of bearing any profitable alimentary produce, is very limited—only a narrow fringe along the borders of the Loch and at the margin of the little stream that feeds it. The husbandry is not superior to the soil. Luxuriant specimens of vegetation we did not see, but we saw noble specimens of humanity. A brawny native, in full Highland costume, nobly displayed the physical qualities of the Celtic race. It is however more than doubtful if the dominant portion of the inhabitants of the Highlands be Celts. There may be some Celtic blood in their arteries and veins, as there is British blood mingling with the vital fluid in the circulatory system of the Sassenach of South Britain. But the Campbells, the Stewarts, the Grahams, the Murrays, the Menzies, and probably the heads of most of the powerful families in the Highlands, are of the Saxon race: originally not Celts at all, but who speak the Celtic language, wear the dress, and practise many of the customs of this ancient race. From these considerations it was inferred that the fine example of the

* The term Strath properly signifies a valley of considerable width and length through which a river flows; in modern phrase it is called a river-basin. It is said to be derived from the Celtic Strath, a country confined by hills and on both sides of a river. Strath may have some relation to the Latin stratum, whence is derived our word street, a way or thoroughfare; ways or roads being usually constructed along the banks of rivers. Strathmore, the great vale at the foot of the Grampians on the east, is a compound word signifying the Great Strath; mor, in Celtic, is great. Glen is a narrower vale. Correi is a very narrow ravine, but usually wide enough to afford a way up and across the mountains. Correi is from the same root as the Latin currus, "I run," either because water runs in it, or it may afford a space for walking on or climbing in; for it would in some cases be dangerous to run in Highland Correis.
species Highlander, that we saw at Lochearn Head, was originally of the Saxon race. The genuine Highlander is a sparer man, with
less muscular development, than his Saxon lord; he is also char-
acterized by more agility of body, and by a more expressive and
intellectual countenance. As our object was botanical, and not
ethnological, these disquisitions are tabooed. Retournons à nos
moutons: or, in plain English, let us "stick to our text."

We had been conversing with the postmaster of Lochearn
Head about the common Carvi of Scotland (Carum Carui). This
obliging official was assuring us that it did not grow wild in his
vicinity (it was observed in his garden), and we were talking on
the general subject of the wildness of species in general, when
the gigantic Highlander above-mentioned put an end to our
discussion.

It is a widely-spread opinion that all cultivated plants, whether
they be of a nutritious, medicinal, or other useful character, were
originally wild; and, like all domestic or domesticated animals,
did originally exist no otherwise than in a wild state, growing
spontaneously and being capable of self-propagation, without the
agency or labour of man. The origin of this opinion is unknown
to us, but we know that we do not hold it, because it is untenable,
incapable of proof, and unphilosophical: we know the effects, but
not the causes of vegetation. We have food-producing plants as
well as useful domestic animals, and we believe that they were cre-
ated by God for the sustenance and the accommodation of man;
and it is believed that no cause is assignable for their existence, but
the creative wisdom of the Almighty and All-wise Creator. God
gave man, on his creation, the seeds of herbs and the fruit of trees
for his subsistence; He gave man a place wherein these food-
bearing plants might be produced, with a charge "to keep and
dress" the same. If our cereal Grasses had had to be reclaimed
from the wild species of Triticum, Hordeum, Avena, Secale, etc.
(from the wild Grasses of our hedges, woods, and fields), and
our fruit-trees, from the Sloe and Crab-trees of our woods and
hedges, the human race would have perished long ere these re-
claimed species could have supplied them with necessary food.
Let the supporters of this popular opinion experiment on the
Wild Carrot and Wild Parsnip of our fields and waysides, and
tell us how many years elapsed ere they had an edible Carrot or
Parsnip from that source. We know that domesticated plants
as well as domestic animals may be improved, yet their distinctive natural characters remain the same. It may be submitted that there is no evidence that domestic animals and cultivated plants ever existed, or could exist, without the aid of man. Cereal plants could not long exist unless the soil were kept clear of weeds; they would soon be choked by the myriads of hardier plants which, in their turn, would be superseded by other forms of vegetation. Few garden flowers grow wild in a neglected garden. How long would the capercailzies and pheasants of our lowland woods, and the hares and rabbits of our hills, exist, if the vermin (the beasts and birds of prey) were not kept under by the establishments of game-keepers and trappers which are everywhere maintained by the owners of the soil and the protectors of the game? It is not to be gainsaid that wild plants (plants naturally wild) are transferred to gardens, and do become useful and ornamental objects of cultivation. But, on the other hand, it is firmly asserted that the vulgar notion that all our fine flowering plants were originally wildings, and that all our Cereal, Leguminiferous, and esculent plants, of whatever sort they be, were, at some remote period, only existent in a wild or natural state, is not only unsupported by any reliable evidence, but is now incapable of satisfactory proof.

We had now zigzagged about two-thirds of our way to Killin. Our way from Callander to the Braes of Balquhidder was in a nearly direct course north-west. Beyond this the road bends north-east to Lochearn Head. From this point our course up Glen Ogle to the summit of the Pass was north-west. When this was reached, our way again turned in a north-easterly direction to Lix, where the great road from Stirling to Fort William branches off to the left; and our course was then about north-east, following the line of Glen Dochart, which forms a continuation of the vale of Loch Tay.

On the roadside through the Pass of Glen Ogle, another acquisition was made: Alchemilla alpina was noticed here for the first time. On the table-land at the summit of the Pass we came upon a small alpine loch, of which the name has escaped us. Here, and in the brook which issues from the said lake and flows into the Dochart, we looked for alpine aquatics, but without success. The Pass of Glen Ogle is remarkable only for its great extent. It contains of course a brook or stream, one of the never-failing
characters of a Highland pass. The vegetation and the general aspect of the surface are in perfect keeping with the desolation and sterility of the whole scene. At the Lochearn end of the Pass there are a few fields, and the brook is fringed with some green meadows and inches; but long ere the summit is reached brown Heath and barren rocks are almost the sole produce of this vast wilderness. Our road, by a very steep declivity, descended into Glen Dochart, which we entered at Lix toll-bar, where the Fort William road goes up the Glen to the west, and the Killin road down by the river-side to Loch Tay. On the banks of the Dochart, a large and rapid river, the road leads the traveller to Killin, which is only between two and three miles distant from Lix. Carduus heterophyllus, a beautiful object, with leaves at least a foot long, and large purple blossoms, ornamented the banks of this beautiful stream. Galium boreale, Geranium sylvaticum, Petasites vulgaris, Valeriana officinalis, Geum rivale, and many other more common species, abounded by the waysides; and our never-failing companion, the Yellow Saxifrage, fringed the little mossy banks, and carpeted the bottoms of all the rills and brooklets that trickled or trotted down from the heathy, hilly wastes on our right. Killin, the extent of our journey for this day, was reached about two o'clock.

After refreshment and rest, we went out and surveyed the picturesque situation, and the grand surrounding scenery of Killin. This place, justly celebrated by all tourists, is built on both sides of the Dochart, which, at this village, has a considerable resemblance to the Dee at Llangollen in North Wales. Here the river passes over a series of ledges of rock, and just under the bridge there is a considerable fall and rapid. Here the river encloses the burial-place of the Lairds of Macnab, a clan once celebrated about Killin, but who are all now located in Upper Canada, where the representative of the family has been of late years conspicuous for his loyalty and patriotism. Their ancient patrimony about Killin, Kinnell, Auchmore, and Acharn, has contributed to augment the immense possessions of the Marquis of Breadalbane, who is now lord paramount round Loch Tay.

Killin occupies the spit of land between the rivers Dochart and Lochay, which bound it on the south and north, and between the lofty hill Shroineach Lochan on the west, and the two rivers, which unite before entering the lake, on the east. The hill im-
mediately above the village on the west is clothed with a dense wood, which reaches nearly to its summit on the eastern side; and the woods of Finlarig and Auchmore clothe the bases of the hills which skirt Loch Tay on both sides of this its upper end. The grand chain of the mountains of which Ben Lawers is *facile princeps*, the most eminent, bounds the left or north-eastern bank of Loch Tay; the mountain-range on the opposite or south-eastern side is represented by Ben Chonzie. The distance from the bridge of Dochart on the south to the bridge of Lochay on the north is about a mile; and this is the extent of the village, which is rather open, for in this space there are several places where there are no houses.

On a meadowy margin of the river Dochart, before it receives the Lochay, *Plantago maritima* was observed in considerable quantity, also *Polygonum viviparum*, the latter very luxuriant. On the mountains this plant is plentiful, but generally very small, seldom exceeding a few inches in height; here it was between one and two feet high, and leafy in proportion, with a very long spike. By the side of the stream *Geranium pratense* was also observed for the first time. This fine plant we subsequently found in abundance in Glen Lochay.

Our first expedition from Killin was up the left side of the river Dochart for a mile or two; and here we thought we detected *Alisma natans*, neither in flower nor in fruit: hence this point must be regarded as uncertain. If it was this plant, it was the only interesting alpine aquatic observed in our Highland tour. From the bank of the river we ascended the very steep hill of Shroineach Lochan, but noticed scarcely anything which we had not previously observed. On the high rocks grew in luxuriant patches *Epilobium angustifolium*, which had not yet (the 11th of July) expanded its bright purple blossoms. A fine object it is, on these alpine craigs, when it is in full flower, which is about a month later than the period when we observed it here.

The views from the summit of this mountain were very extensive, embracing the greater portion of Loch Tay, its bounding mountain-chains, Glens Dochart and Lochay, Ben More, and the far more distant hills of Athol and of the West Highlands. The descent from the summit was not easily accomplished, nor without some slight injury to our muscles. The road—for there is a cart-road leading over the mountain to the peat-moss—is a
zigzag, like that at Clifton, magna componere parvis. The English zigzag has the advantage in breadth and smoothness, but its Scottish rival excels in extent. The distance from the table-land to the summit of Clifton high rocks may be about 300 feet: to the summit of Shroineach Lochan the altitude is probably nearly ten times as much.

The distance from the summit of this hill to the village of Killin is probably a mile, but as steep as the ascent to Twll-du in Caernarvonshire. The zigzag road is at least three times as long, and not remarkable for the equality of its surface. The zigzag road from the summit of Clifton Downs is wide and level; a coach-and-six may be driven on it with safety. The zigzag road near Killin is narrow, rutty, and rough. The hill is worth ascending, for the sake of the ample view obtained from its top. The botanist need not trouble himself with a vasculum, for it is not a rich botanical locality.

On the 13th, Boreland Falls, on the Lochay, about two miles from Killin, were visited. Along the roadside which leads up the Glen several examples of Geranium pratense were observed, and G. sylvaticum did not occur so frequently nor so abundantly as it had heretofore. A very large and old stock of Ribes rubrum was also noticed. During the whole course of our walks through the parts of Perthshire already visited, or which we subsequently visited, no Ribes occurred so frequently and in so considerable quantities as R. Grossularia. This species, as a British plant, is ignored by most botanists. Judging however from what we saw, it is very much more common than any British species of the genus. Ribes rubrum and its varieties are occasionally met in upland woods; but R. Grossularia was nearly, but not quite, so common as Rubus idaeus, the common Raspberry, and in Scotland this plant is as plentiful as blackberries are in England.

After visiting the Falls and emerging from the plantation in which they are, we rejoined the road, and walked along it as far as the open pastures, a mile or so beyond the Falls. Here we diverged to the right, up the sloping side of Craig Chaillach, which bounds one side of Glen Lochay, as Shroineach Lochan bounds the other; and we kept ascending till we were probably about a thousand feet above the bed of the river. In marshy places at this altitude plenty of Tofieldia palustris was growing,—a new acquisition, which gave us much pleasure.
Our nearest way home led us through a very dense and steep pine-wood, in which we indulged ourselves with the vain hope of collecting Linnea borealis, which does grow in fir-woods, or rather in a fir-wood, at Finlarig. A soaking rain however soon compelled us to abandon all our expectations, and we reached home in a non-enviable plight. Woe betide the imprudent wight who ventures into the Highlands without a good supply of warm clothing, considerably more than he can comfortably wear at one time! The trouble, and eke the expense, of conveying an important part of the contents of an ordinary wardrobe, are no slight impediments to travelling. Anciently, in military phrase, these and other necessaries were called, and properly called, impediments (impedimenta), because they hindered or impeded the movements of the army. But the comfort of dry and warm clothing, a change of raiment from the feet up to the head, from the subecula, the innermost tegument, to the tunica, the outermost, is cheaply purchased at the cost of a few shillings. Some pedestrians are seen there with their well-assorted packs, which are conveniently and comfortably disposed between their shoulders; and these trudge along as independently as if their baggage was no impediment to them, but a part of themselves. Pedestrians however who have seen sixty summers can rarely spare so much corporeal strength as is requisite for burden-carrying; and therefore are fain to ease their backs and shoulders at the expense of their pockets. During our three or four weeks' tour in the Highlands we were often wet, sometimes soaked through; yet we never suffered perceptibly from colds and rheumatism, which often follow these involuntary applications of the hydropathic system. If the tourist have no change of clothes, or only an inadequate change (which is next-door to none at all), let him take our advice, which is, to go to bed, and there remain till all his things are completely dry. If the weather clears up, one may walk in his wet toggery till quite dry, without any risk. But sitting in wet clothes, either with or without a fire, is fraught with peril to the health of the tourist.

The 13th was Sunday, and we rested and attended divine service in the churches of Killin.

We spent three Sundays in Scotland, not in populous towns, but in large country villages, and remarked that this holyday was uniformly observed with great solemnity. People accustomed to
the more imposing ecclesiastical observances and usages of other
countries might find the services of divine worship in this country
rather meagre, abrupt, and conducted with perhaps too little re-
verence. No one can complain of breaches of the fourth com-
mandment in Scotland. The day is reverenced; all work is sus-
pended, and all the proprieties are strictly observed. Most of
the people attended service in one or other of the churches. It
was very interesting to see the small companies, all well attired,
coming down the glens to church. Many came from a great
distance. The parish of Killin is about thirty miles long, and
from eight to ten miles wide, consequently some are nine or ten
miles distant from their place of worship. There are two ser-
vices in the middle of the day, without any interval. The first is
in English, the second in Gaelic. The latter is the language of
poetry as well as of religion, and it is deeply rooted in the affec-
tions of the people. A large proportion of the people understand
English, and they come to the first service. The exclusively
Gaelic people, or those who know both languages, attend the
second service. In the afternoon all return home as devoutly as
they assembled. It is rare to see people idling about the streets
or in the fields, or to notice children playing, on the Lord’s day.
In the remote parts of Scotland, Sunday is strictly a Sabbath, a
day of total cessation of labour. How they employ the day
within doors, we venerate the sanctity of the domestic hearth too
highly to venture to surmise. It may be said, and truly, that
the public solemnities of the day were reverentially kept; and
further, that there were no external indications of what might be
justly deemed inconsistent with these strict religious observances.
The term Sabbath is as common here as that of Sunday is in
England. To the majority of the people it is a Sabbath, a day
of rest. To the majority of the English it is a Sunday, a plea-
sure-holiday.

In populous places in England, thousands and tens of thou-
sands seek recreation in the country, to which access is now easy
by railways and navigable rivers. Probably an equal number
stay at home, to cook and eat a hot, heavy dinner. And many
of the latter class spend their afternoons and evenings in the
public-houses; not a few of them unwashed, unshaved, and un-
shifted. Probably our Scottish neighbours are over-strict in
their religious observances, and probably we are too lax. It may
be observed that neither they nor we ourselves apply the proper term to this sacred day, for sacred it is: its sacred character is sanctioned and established both by the laws of the Church and the laws of the land. Yet it is not the Sabbath, which is still observed by our Jewish brethren, and which is equivalent to our Saturday: its proper Christian name is the Lord's day. Sunday is its heathen name, the name by which it was known before the introduction of Christianity. It is to be feared that, as its proper name is now disused both by the Sabbatarians and by their antagonists, so its proper nature and purpose are also misapprehended. *Sed non nostrum est tantas componere lites*: "we will not judge between the contending parties."

CHAPTER IV.

KILLIN.—GLEN LOCHAY.—FINLARIG.—BORELAND FALLS.—SHROINEACH LOCHAN.—KINNELL.—BEN LAWERS INN.—BEN LAWERS.

The 14th of July was fine; and in the morning we started to go up Glen Lochay in quest of the rare *Cystopteris montana*, a plant only recently known as a British species. Breadalbane is the only district in Scotland where it is known to occur, and its collection is still interesting. Its locality was previously ascertained as accurately as possible. One or several of the numerous ravines or correis that intersect the mountain at right angles to Glen Lochay, are said to produce this rare Fern. These correis, or *correys*, are all watercourses, or the beds of torrents that sometimes, in summer, contain but little water. The term, which is Gaelic, is evidently from the same root as the French *courir*, to run, which is from the Latin *curvo*, I run.

This word *run* is truly characteristic of the streams here, whether they be great or small. In the south of England there are rivers with a current so slow that it is occasionally impossible to tell which way the water flows; for this fluid seldom *runs* in the south and east of our island. But in Scotland it is never difficult to ascertain the course of rivers; for they always flow, often run, and sometimes rush with headlong impetuosity. Caesar, in his Commentaries on the Wars in Gaul, informs his readers that the Arar is so sluggish in its motions that it is impossible to tell by the eye in what direction it flows (*in utramque partem fluat*). We were once in the same predicament about the course of the Medway, between Edenbridge and Ashurst, in Kent. A straw dropped into the stream from the bridge, in a brief space indicated the course of the stream, and ours also.

These *correys* extend from Glen Lochay up the hill which separates this Glen from Glen Dochart; and by following them up to the ridge, and descending on the other side, Glen Dochart may be reached.

This rare Fern has certainly been found in the correys that
are at right angles to, and on the right bank of, the river Lochay; but it may be, and probably has been, found on the Ben Lawers side of this glen. It is found on Ben Lawers. The rain compelled us to retrace our steps, and hindered our seeing it in the correys of Glen Lochay. The same day one of us visited the old fir-wood of Finlarig; an equally fruitless visit, for our search for Linnaea borealis was in vain. Though we were disappointed in the chief object of our long walk up the glen, a few novelties rewarded our perseverance.

Meum athamanticum, "the Highlander's Tobacco," was one of our captures. The Highlanders, however, disowned "the soft impeachment;" they recognized the plant, but ignored the name. The search for Linnaea in the woods of Finlarig resulted in our gathering of Oxyria reniformis and Saxifraga oppositifolia, just out of flower. There is a fine burn rushing through the wood with many a rapid and cascade, and on its green banks the bonnie flowers are plentiful. Whether Linnaea borealis be of the number or not, it was then rather too early to see. But if any botanist goes to look for the plant in the upper part of this wood, we recommend the right side of the burn, not above a stone's throw below its entrance into the enclosure. If he has more definite instructions for the Linnaea, and consequently no occasion to use these, he may still find in this spot something interesting to a botanist; and if not, he will, in the ceaseless roar of the headlong, rushing brook, in the beauty of the scene, and in its peaceful seclusion, find something exceedingly pleasing to a lover of nature. This lovely spot is but a very short distance from Killin: not above two miles.

On this day (14th July) Campanula rotundifolia was observed in flower for the first time. It was barely in flower about Killin on the 17th; but on the 19th, when we went to Kenmore, it was found in full flower. This little fact shows that the temperature about Killin is less favourable to early vegetation than that of the other end of the lake is. The appearance of the crops at the upper and at the lower end of Loch Tay, showed us that productions of more importance were affected by the same causes, whatever they may be, which influenced the flowering of the Blue-bell of Scotland.

The 15th, St. Swithin's, was, as usual, a rainy day. This superstition is not prevalent in Scotland. In that ancient king-
dom the Saints are quite forgotten; and the days on which they are commemorated in England, and in Christendom generally, are there neither religiously nor superstitiously regarded. In the Highlands of Perthshire, neither St. Paul nor St. Swithin rule the clouds and winds, as they are vulgarly supposed to do here. There, all the influences of the Saints are attributed to the moon. That this luminary plays an important part in the regulation of the temperature, the rain, the wind, and other atmospheric agencies, is as seriously believed in Scotland as the *jus divinum* of Presbytery is by a true-blue Presbyterian.

The 16th was like its predecessor, but not quite so unfavourable. We were able in the afternoon to visit the ruins of the ancient castle of the Campbells, and the mausoleum of the remote and more recent members of that ancient and noble family. We of course heard the account of its being burnt down; and the present erection, with provident foresight, has been built fire-proof. The remains of the illustrious dead are disposed in suitable catacombs, which are bricked up when the bodies are interred. We did not linger long among the narrow "mansions of the dead;" and, as the subject is a *sombre* one, no more need be said about it. But Finlarig Castle and the Marquis's Mausoleum are the chief lions of Killin; and here it would be considered disrespectful, and a grievous offence, to leave them unvisited. The grave of Fingal and the burial-place of the Macnabs are invested with a poetic and sacred interest, and strike sympathetic chords in the heart of a believer in Ossian and in a genuine descendant of the Macnabs. The Campbells and their retainers in like manner venerate the very burial-place of their chiefs. At Finlarig we collected *Mæhringia trinervia*, Clair. (*Arenaria trinervis*, Sm.), a plant not of common occurrence in these parts.

As our botanical discoveries at Killin were not very important, the following subjoined list is given as the result of better observation than ours, or at least of more successful researches:—*Draba rupestris*, *Stellaria cerastoides*, *Dryas octopetala*, *Epilobium alsinifolium*, *Sedum villosum*, *Saxifraga cernua*, *S. rivularis*, *Linnea borealis*, *Erigeron alpinus*, *Saussurea alpina*, *Azalea procumbens*, *Gentiana nivalis*, *Veronica alpina*, *V. fruticulosa*, *Listera cordata*. Several of these we know grow near the summit of Ben Lawers; others probably may be collected on Craigchailleach, Craignahain, and on other rocks on this chain nearer to Killin. These
plants are deservedly of great interest, but they do not occupy so prominent a position in the landscape of the region where they grow as they do in the estimation of the botanist. In the evening we lectured to the pupils of the Parochial School, and the clergyman honoured the occasion by courteously presiding.

On the 17th, a fine morning, we took leave of Killin, having been there just a week. It is true, we did not do much in the botanical way, but we learned much that was interesting about the physical, moral, and religious condition of the population. The walk along the left bank of Loch Tay from Killin is not very picturesque, at least for the first four or five miles: plantations circumscribe the prospect rather more than is agreeable. Near Killin a view of the lake is to be enjoyed only here and there, where there is a break in the woods which surround its sides. Two or three miles from Lawers the road passes over an open country, and the scenery improves. The people, in little companies, were going to church, and this very much increased the interest of the walk. In Scotland the Thursday before the administration of the holy sacrament is a day of preparation. In the church of Lawers this ordinance was to be celebrated next Sunday. This is the sole grand festival of the Scottish Church, and it is hallowed by two days' preparation, Thursday and Saturday; on the former of which all work is suspended, as it is on the Lord's-day, and on Saturday all attend Divine service in the middle of the day; and, as the following Monday is a day of thanksgiving, many such solemnities would be exceedingly inconvenient. Yet when it is considered how eagerly old and young avail themselves of this solitary opportunity of testifying their obedience and their love to the sacred Author of this holy rite, it does appear to be a subject of regret that this can only be done once in the long period of twelve months. Here we enjoyed an extensive view of Loch Tay, which was on our right, and of the majestic Ben Lawers, which was on our left, with its massive roots extending across our road, and terminating in the shore of the lake. Ben Lawers Inn was reached about eleven o'clock, after a pleasant walk of about three hours.

On the roadside we observed Habenaria viridis, Gentiana campestris, and Sedum anglicum, with many other interesting species noticed before.

Ben Lawers might have been ascended from Killin with some-
what less walking than we incurred. There is a road to Glen Lyon branching off the Killin and Lawers road, about two or three miles from the former place. By walking along the Glen Lyon road till opposite the summit of Ben Lawers, the mountain would have been reached in less time than we spent in walking to Lawers from Killin. The Glen Lyon road may be compared to the hypotenuse of a right-angled triangle, and we should have walked by this line instead of by the two sides of the same: it is a mathematical axiom that any two sides of a triangle are greater than the third side, and consequently the way from Killin by Lawers to the mountain is somewhat longer than that by the Glen Lyon road: *quod erat demonstrandum*. But as few roads are made as straight as mathematical lines (no Highland roads are so), it is not easy to calculate the distance that might be saved by adopting any assumed line of travel. Time is the sole practicable measurement of distance where there are no roads, or only defective or partial ones; and as we did not go the Glen Lyon, but the Lawers road, the saving which would have been the result of going straight from Killin to Ben Lawers cannot be truly stated. While at the former place we heard that it was no unusual feat to walk from Killin to Ben Lawers and back again in a day: women did it. We did not hear if botanists did it. The distance is said to be eight or nine miles; but as the Scotch, like the Irish, give good measure of distances, especially when the quality of the road is but indifferent, we will estimate the distance from Killin to the summit of Ben Lawers at ten miles. This distance and back we could easily have accomplished; but our object, of course, was somewhat more comprehensive than the reaching of the summit, and trying to see Edinburgh and Stirling, and the German Ocean and Aberdeen, and Ben Nevis and the Islands of the far West.

About ten hours would have been requisite for botanical purposes, and in that space of time we should have walked about twenty miles more. This, with the journey back to Killin, would have required more muscular exertion than we could safely undertake, and more time than even a summer’s day could supply. The ascent from the inn at Lawers is not perhaps the nearest (shortest) course that could be selected from the road. There is a point, a mile or so on the Killin side of Lawers, which appears to be nearer to the summit than the inn is; but here there is no resting-place for
the traveller. The ascent might be easily made from the other, or Kenmore end of Loch Tay. In summer there is a coach by Aberfeldie, Kenmore, Killin, Tyndrum, Inveraven, etc., to the head of Loch Lomond. This coach passes Lawers in going to Killin, etc., about ten o’clock. The traveller might have his breakfast comfortably at Kenmore, and come within three or four miles of the top of Ben Lawers by ten o’clock, leaving him a good long day for his botanical pursuits. Clever, clean-limbed youths from the adjoining cottages are said to reach the summit of the mountain in an hour; but suppose the ascent to occupy an hour and a half, there are still eight or nine hours for botanizing. The botanist will do well to secure his quarters for the night at Lawers Inn, from which, if his time and the weather permit, he may ascend the mountain ad libitum. If he has once fairly seen the mountain, its appendages and approaches, in a moderately clear day, he may ascend it alone without any apprehensions of either losing his way or coming on steep, rocky precipices down which it might be impossible to descend. But for botanizing on Ben Lawers at the least expenditure of time, exertion, and money, we prefer a plan broached by one of our Scottish correspondents, and published in the 302nd page of the ‘Phytologist’ for 1856. The outlines of the plan proposed, but not yet carried out, so far as we know, was to associate a certain number of active botanists, who were to be provided with a portable tent, supplying sufficient accommodation for passing the night on the mountain.

When we returned homewards by Aberfeldie, we called upon a botanical friend, who told us that he and some others passed a night on Ben Lawers, with no protection from the cold but what a projecting rock might have afforded. This is a sacrifice of comfort which only a very ardent botanist can make. But with a small tent, which a stout youth could carry up to or near to the summit, and with a supply of provisions and a little fuel, the night, or even several nights, might be passed on this inhospitable-looking locality. Many sheltered nooks, or cavities, are to be found, dry enough for spreading a heather-bed on, and the protection of a tent would suffice to preserve several persons from the effects of the cold, which at that altitude is very intense. In this latitude and in summer the nights are very short; properly speaking, there is no night there during several weeks, and the cold before sun-rising, though severe, is but of short duration.
A still more comfortable method of ascent might be devised, though not so efficient for botanical purposes, as the nocturnal *bivouac* on the mountain. A horse and cart, with a driver to take care of the quadruped during the ascent of those parts inaccessible to any kind of carriage, might be obtained at Killin for ten shillings. Provisions, with a kettle for boiling water (an Englishman cannot travel without a teakettle, this is a necessary part of his equipage), some fuel, and other trimmings, might be all conveyed in the cart, which would also supply conveyance for the weaker members of the fraternity. If the party were to start about one o'clock on a fine summer morning, they would be in time to see the sun rise from the summit, and would have all the day before them for botanizing; but for the solitary botanist we do not know any more independent and pleasant way of realizing a day's recreation on this, the prince of botanical localities, than that which has been pointed out above, viz. to get as near the mountain as possible by coach, ascend, botanize, and descend to Ben Lawers Inn, and to start, after a night's rest, on a fresh expedition, either up the hill again or along its ridge, in the direction of Glen Lochay and Killin.
CHAPTER V.

BEN LAWERS.

From Ben Lawers Inn the easiest route up the mountain is, first, the high-road near the turnpike (toll-bar), and there turn to the left taking the peat-road which leads up the hill in a direction parallel with the Den of Lawers. There is a path somewhat shorter than along the high-road, viz. across some fields, passing by two or three straggling cottages on the Killin side of the Den. The Den may be entered near the wood about a mile from Lawers Inn. But walking by the side of the brawling torrent is often difficult, and sometimes dangerous; for the rocks often impinge upon the space between the steep brae and the stream, leaving in some parts but scanty footing for the adventurous pedestrians, in others entirely blocking up the way, and rendering a retrograde movement necessary for those who think "discretion the better part of valour." We dipped into the Den, and traversed a part of it, but finding it both a tedious and toilsome medium of advance, we quitted it, and clambering up the steep wooded side, took to the moory, heathy ground on the left,—a dreary and desolate scene, but a very suitable approach to the mighty Ben Lawers, an appropriate foreground to the scenery before us, a magnificent propylæum into one of the most august of Nature's temples.

After scouring through this long heath, and leaping over many a peat hag, and trusting to many treacherous bogs, which sometimes gave way and spattered us with black, cold, miry sludge, we got a glimpse of the dark waters of Loch-na-Gat, which we soon found to consist of two lakes, the outer one smaller than the inner, and both connected by a short, narrow strait. Round about the head of this lake or lakes stand the majestic heads and peaks, the massive buttresses of Ben Lawers. There flows into the upper end of Loch-na-Gat a rather large stream, which has its source in the north-east side of Ben Lawers: this we crossed,
and, leaving the loch behind us, struck straight onwards to Stoich-an-Lochan, an eminence nearer to the Lake than the real Ben Lawers, and bearing the reputation of one of "the richest botanical fields in Breadalbane."

In passing over the wide peaty heath we had already collected several rarities, not rare here, but rare to dwellers in the fertile South, some of them quite new to us freshmen who botanized here for the first time. The more interesting of these were Rubus Chamaemorus, not in fruit nor in flower, but just in the transition state, with its calyxes quite empty, the petals, like the last rose of summer, "all faded and gone." A rarer and more interesting species was noticed, not in great quantities nor of a large size, viz. Cornus suecica, a plant which reminded us of the hills of Forbes, near the old castle of Kildrummy in Aberdeenshire, where, in 1820, we first observed this charming little object. There the plants were more plentiful and of a larger size than those we picked from the extensive table-lands which skirt the summits of Ben Lawers. Another acquisition was Gnaphalium supinum, which grew profusely on bare, turfy, or earthy spots, or on dry places, as stated by the late Wm. Gardiner. Saxifraga stellaris did not make its appearance till we had reached at least the altitude of the lake. Solitary individuals of this species were occasionally found near the bases of the mountains, probably washed down by the strong currents which rush violently along the hollows or drains in the upper parts, where it grows; but its home is far above that of the pretty yellow Saxifrage, the S. aizoides, which grows at the very bases of the hills and mountains. The latter ornaments the glens. Wherever there is a flashy, springy place, a drain, a ditch, or a mountain-rill, there is this pretty plant, its green, shining, fleshy leaves contrasting beautifully with its deep yellow flowers.

Eriophorum vaginatum, E. angustifolium, with its variety E. gracile, Juncus castaneus, and some other Junci, not yet determined, were collected. Vaccinium uliginosum, which we expected to find in these wet, moory spots, did not occur; it should have been in fruit when we were there, about the middle of July.

On approaching the steep rocks a little above the base of Stoich-an-Lochan, the lofty eminence nearest to Loch-na-Gat, we were conscious of being in a spot where the vegetation was not only different from what we had hitherto seen, but was as
abundant as it was rare and beautiful. Cerastium alpinum, in two very dissimilar and apparently distinct forms, covered the green grassy sward with which the stones and rocks, the débris of the mountain, are surrounded or partly covered. One of these forms is bushy in its habit, of a hoary aspect, densely invested with a shaggy or woolly covering, rather dwarfish in stature, and bearing on the erect stalks one or two large white flowers. The other forms, except in the magnitude of the flowers, differed but little from C. triviale, which also abounds there. The capsules were not far enough advanced to enable us to detect any distinctive character in this organ. The leaves had the same shape, and the stems the same erect, slender, and unbranched habit, which often characterizes C. triviale. The flowers alone obviously distinguished it from that species. About the stones and hollows in the little craggy places which environ the base of this immense almost perpendicular rock, Polystichum Lonchitis, Polypodium Dryopteris, and Cystopteris fragilis abounded. The latter Fern appeared in almost every possible variety of form and size, from an inch to above a foot high, from a large, dilated, luxuriant frond to a stunted size, somewhat resembling Woodsia hyperborea in substance and outline. Of P. Lonchitis there were no very luxuriant specimens at this early period; the longest of them were only about a foot long. Though we have often seen larger fronds, we have never seen them in greater profusion than they are here.

Higher up, on the ledges and in the crevices of the lofty rocks, several old acquaintances were recognized. One of the most conspicuous for its foliage, and which gives a character to this savage landscape, is Sedum Rhodiola, only some of it in flower, seated often on inaccessible cliffs, and enjoying the dripping moisture which abounds on these crags. The last time we saw this plant, growing wild, was on the Foalfoot of Ingleborough. There the plant had long passed its prime (we saw it in September); here it appeared in all the loveliness of its early bloom.

But the most showy flowers of these craggy rocks were those of the Trollius europaeus, a plant which had shed its flowers in most localities of a moderate altitude, and was now in fruit. Here however its yellow blossoms, of extraordinary size and brilliancy of colour, remained to remind us of the great elevation to which we had reached, and the much lower temperature of the atmo-
sphere by which we were surrounded. Humbler situations at the foot of these crags reminded us of the same facts. Here the Wood Anemone, the Wood Sorrel, and the Golden Saxifrage (*Chrysosplenium op.*) were still, at this late period, in full flower, though in a more southern latitude and at a lower elevation the two former had been long decayed. Several plants of a very common character were growing *check-by-jowl* with the lofty and rare occupants of these awful precipices, just as is sometimes noticed in every-day life, or on certain occasions, Mr. Snob presumes to ‘rub shoulders’ with Mr. Swell, and even assumes to be on familiar terms with him.

We observed the *Tussilago* of our clay-fields sheltering with her ample leaves the large, pure white blossoms of Our Lady's Cushion (*Saxifraga hypnoides*), and the common Wild Angelica (*A. sylvestris*) shooting up its tall stem, and overhanging the beautiful velvety masses of *Silene acaulis*. The great Cow Parsnip or Hog-weed, the rank and common plant of our meadows and hedges, was associated on these rocks with the elegant silvery foliage of the Alpine Lady's Mantle. We were very much gratified by finding upon these rocky heights *Adoxa Moschatellina*, a plant which had hitherto in our reminiscences been associated with the beautiful rural scenes of England. Here it was flourishing in its great perfection as we had ever seen it in the months of March and April under hedges and copses in Surrey and Essex.

But the most charming occupants of these awfully wild cliffs are *Veronica saxatilis* and *Myosotis suaveolens* (*M. alpestris*). The intense and lovely colour of these floral beauties cannot be described. We had seen them in cultivation; but “quantae mutatae ab itis!”—“how degenerated!” Some enthusiasts say that it “is well worth a long day's journey to get but a look at the large, brilliant blue,” but very delicate flowers, of the Alpine *Veronica*. This season it was pretty plentiful. It does not dry satisfactorily, and consequently makes but a poor object in the herbarium. The *Myosotis* is quite as pleasant to look at. It has also a larger mass of flowers, and is generally more plentiful. Its home is on the mould that scantily covers the tops of the rocks. The *Veronica* creeps along on the slanting sides or on the *débris* which everywhere abounds. The Alpine Mouse-ear (*Myosotis*) dries very well, and would make no contemptible figure in a lady's album.
The tufts of Silene acaulis, with its green cushions of matted leaves spread over the face of the rock, and its brilliant pink blossoms, form about as charming an object as can well be imagined. Saxifraga oppositifolia hangs in larger festoon-like patches on and over the rocks; but at our visit the flowers were nearly all gone, and the fruit had succeeded. In this state they have lost all their charms. Saxifraga stellaris of various sizes, from an inch to six inches high, still abounded at this altitude, and the rarer S. nivalis was soon collected. This species has white flowers, but the petals are smaller than in S. stellaris, and they are of a slightly different shape. They want the yellow spots at the base, and the plant has larger and more rounded radical leaves. The stem is leafless in S. nivalis; in S. stellaris this organ is leafy. Draba incana also abounded on these rocks, and so did Arabis hirsuta. We believe Draba muralis grows on the same place. We thought we had captured a specimen of Arabis petrea, but on inspection it turned out to be Cardamine hirsuta, without hairs and of very slender habit. C. hirsuta of the common form and C. pratensis were also observed, but the latter not so high up the mountain as the former. One of the showiest species of this Alpine Flora was Cochlearia grænlandica. This plant usually affected damp, sheltered places, where it was almost covered by the upper and impending crags. It was often seen in open exposed parts, but not in such luxuriance and beauty as when nestled in these cozy crannies and corners among the surrounding rocks. Sagina saxatilis, Wimm. (Spergula saginoides, Sm.), a plant which does not differ much from S. procumbens, was not uncommon on the rocky fragments that abound everywhere under and between the impending precipices. Thalictrum alpinum, not more than two or three inches high, was plentiful everywhere on the rocks and on their débris.

By this time the evening was beginning to draw near; the shadows, when the sun favoured us with a gleam, began to lengthen. This and our own feelings admonished us that it was time to seek a place of repose. We had, in the morning, when we arrived at Lawers, engaged our beds at our inn, and now we made up our minds to take our ease at it for the night. We descended to the base of the mountain, or rather to the borders of the lake, and went along its margin and along the course of the stream which issues from it until we reached the village of
Lawers. The descent even from the upper end of the lake was not accomplished in less than an hour. It may have cost us more time than this. But we got down well, and were thankful.

In the dusk of the evening Chaerophyllum temulium and Carum Carui were collected in the churchyard of Lawers. The same evening one of us went to the station of Vicia sylvatica, which abounds in the lower part of the Den of Lawers, not far from the mill. Specimens were brought for the herbarium rather as a memorial of our visit to Lawers than because the species was not already adequately represented in our collection. Hy-

menophyllum Wilsoni has been gathered below the falls near the station of the beautiful Wood Vetch. This we did not see.

The night was drizzly, and the next morning chilly and uncomfortable; but about seven o'clock the fog cleared away from the summit of the mountain, and we determined then to pay it another visit. From what we saw on the afternoon and evening of the 17th we rightly concluded that we had broken the neck of our undertaking, or, in other words, we had seen nearly all the plants that we were likely to see in Scotland this turn; yet the desire of picking up only the gleanings from so exuberant a field induced us to breast the hill and brave the inclemencies of the atmosphere a second time.

On the morning of the 18th of July, about eight o'clock, we started again from Lawers Inn, and, profiting by yesterday's experience, followed the stream, or walked on the peat-road as far as it went; then followed the stream and the shores of the lake, till we reached the upper end of Loch-na-Gat. We gradually worked our way upwards under the lee-side of the rocks which sheltered us from the driving rain and the high wind, which blew keen and cold from the north-west.

Geum rivale, Geranium pratense, and G. sylvaticum reach a high elevation on these rocks, along with several species neither prized for beauty nor rarity. Among these latter ignobles, Leontodon Taraxacum was very conspicuous. The Hieracia noticed by us were neither numerous nor recherchés. H. holosericeum of Backhouse's monograph was secured, and, on an inaccessible cliff, what was probably H. cerinthoides was seen; but neither the specimen which we did secure nor the one seen which we could not
reach was in flower, and hence it would require the aid of one better skilled in the diagnostics of the genus than we are to come to a satisfactory decision about them.

*Rubus saxatilis* was gathered, or rather the root-leaves of the plant; for those we saw had no stems. We were rather surprised at this, for the plant, both in flower and in fruit, abounds about Gordale and Malham, Yorkshire, among the stony débris of the limestone rocks. *Alsine Cherleri*, Fenzl, *Cherleria sedoides*, Lin., and *Sibbaldia procumbens* (Potentilla Sibbaldi) abounded,—the former in rather extensive patches on the hanging rocks, the latter was widely scattered over the bare, stony parts of the mountain. *Epilobium alpinum* was but sparingly collected on the borders of these alpine rills, and none of the specimens were more than a very few inches high.

*Solidago Virgaurea*, with lanceolate leaves, abounded; so did the large-flowered prostrate variety of *Veronica serpyllifolia*. *Polygonum viviparum*, *Oxyria reniformis*, and several species of *Juncaceae*, *Cyperaceae*, and *Gramineae* were noticed. We have not yet had time to identify them all, but *Juncus castaneus*, *Luzula spicata*, *Carex atrata*, and *Sesleria caerulea* were among the number. Very high up the mountain a solitary specimen of *Habenaria bifolia* occurred. We did not observe any other Orchid at this elevation. Beyond the ridge, and down a rather steep descent, there is a bog abounding in Cotton-grasses and Sedges. Here plenty of *Salix herbacea*, which we did not observe before, was collected. This minute Willow is not more herbaeous than *S. repens* or any of the minute forms of the genus that abound on our own heaths. There is scarcely any ligneous plant that could ripen wood on any of the summits of the Ben Lawers ridge. All the Willows would become herbaceous at this height, or, what is the same thing, their stems would perish annually, which is the character of an herbaceous plant.

By this time the day was more than half gone, and the highest head of Ben Lawers was still more than half covered with its misty cap. The wind and the rain were gradually increasing as we ascended, and there was no prospect of any abatement of their violence. The state of the weather and other considerations induced us to relinquish the pleasure of threading the rocky passages on and near the summit of the mountain, which pleasure we
reserved for another time. We can adopt Wordsworth's beautiful language, full as it is of exquisite poetic feeling and truthful expression, merely changing Yarrow into Ben Lawers:

“If care with freezing years shall come,
And wandering seem but folly,
Should we be loath to stir from home,
And yet be melancholy,
Should life be dull and spirits low,
'Twill soothe us in our sorrow,
That earth has something yet to show.—
The bonny holms of Yarrow.”

For the bonny holms of Yarrow let “the views from proud Ben Lawers” be substituted. But we believe naturalists are not often troubled with the megrims or vapours. They need not go to Ben Lawers nor to any other remote locality to dissipate their melancholy. Wimbledon Common, Roehampton and Putney Heaths, even the Isle of Dogs, Woolwich and Plumstead Marshes, have charms for the fraternity. Botanists have excitaments of a simple nature, capable of curing any attack of dullness or “spirits low.”

It was certainly to be regretted that time did not permit us to remain longer, for the next day was clear and fine too, from end to end; but as arrangements had been made for our returning, return we did, every now and then looking back and regretting that the weather was not so propitious during our stay as it was on our departure. We had however the pleasure of learning, on authority which we have no permission to state, but in which we have the fullest confidence, that this very season Alsine rubella, Saxifraga cernua, Gentiana nivalis, and Dryas octopetala had all been collected on Ben Lawers, and in flower. From the same authority a more important item of intelligence was derived, viz. that Veronica fruticulosa had been rediscovered on Ben Lawers.

This fact, which we hope duly to announce, will render the following extract from the first volume of the ‘English Flora,’ p. 18, deeply interesting to British botanists:—“V. fruticulosa, Lin., etc. On the mountains of Scotland and in wet places. Gathered on Ben Cruachan, in Argyleshire, by the Rev. Dr. Walker, from whose original plant, cultivated in his garden, I have specimens. Mr. R. Brown, whose accuracy is also beyond
all doubt or 'supposition,' told me he found this plant on Ben Lawers. I trust no further confirmation is necessary to establish it a native."

Most of us are aware of the generally prevalent presumption that *Hierochloe borealis* had never really been found wild in Scotland; yet this plant was, only about a couple of years ago, rediscovered at a great distance from its first-announced Scottish locality. The particulars of this more recent rediscovery of a Scottish native is expected with some impatience.
CHAPTER VI.

LOCH TAY.—KENMORE.—TAYMOUTH.—FORTINGAL.—FALLS OF ACHARN.—ABERFELDIE.—DUNKELD.—PERTH.

After breakfasting, on the morning of the 19th, we set out on our homeward route. Ben Lawers, a classical spot in the annals of British Botany, had now been traversed; and though our success had been but moderate, we could look back with pleasure on a locality celebrated by many eminent men, who had visited this mountain-range not once in their lives, but several times every summer. This was the culminating point of our journey, and when we had reached it the grand object of our short Scottish tour was accomplished. It was both the furthest extent from our home and the greatest elevation above the coast-line that we had attained. About three weeks had been now spent in the Highlands, and spent very agreeably and not unprofitably. We had passed through a country of great interest and beauty, celebrated by poets, painters, sportsmen, and men of science. We did not enjoy much of what is called Highland hospitality; yet we are able to testify from experience that the ancient reputation of the inhabitants is not a myth. Hospitality is still one of the Highland virtues. Kind treatment, civility and courtesy, may be expected from the genuine Celt. Deference, politeness, readiness to give information to strangers, and quickness in anticipating their wants, are characteristic of a genuine descendant of the ancient Gael.

But our hearths and homes now began to exert their influence over our affections, and the charms of novelty had lost their fascinating power. The sounds of water and waterfalls were not so pleasing now as they were when first heard and seen. Rivers rushing over their rocky channels, lakes either calm or ruffled, mountain defiles, fringed with wood, or terrible with impending rocks, were now comparatively common objects; and they began to be objects of as much indifference as the sounds and sights of London are to the thorough-bred Londoner, who, intent on busi-
ness or absorbed in social or personal cares, exhibits a passive in
difference to what he meets while passing through the busy bustle
of the crowded, noisy, shopy thoroughfares of his native city. We began to be home-sick. Our relatives, our connections, our
occupations, our domestic and social ties began to engross our af-
fections and to exercise a more stringent influence on us than all
the attractions of natural scenery and of natural science united.
In a word, we were not sorry to turn our backs on Ben Lawers
and all its beauties.

The road along the lower end of Loch Tay, from Lawers to Tay-
mouth, is exceedingly pleasant. The character of the country im-
proves with the slightly more favourable temperature. The gay
agrarial annuals which were not even beginning to blossom about
Lochearn Head and at the upper end of Loch Tay, were here
flowering in profusion. The most showy were the Corn-flower or
Blawart (Centaurea Cyanus), or Guille as it is called in Aberdeen
and Morayshires (Chrysanthemum segetum), and the large-flowered
Hemp-Nettle (Galeopsis versicolor). We did not see any ex-
amples of the Corn Cockle (Lychnis Githago), though we passed
by several wheat-fields. We suspect it is not one of Scotland’s
common plants. We remember its first appearance in our native
parish some time about 1812. The Poppies were not remarkably
plentiful: yet we saw two species at least in the fields or by the
waysides. But the genuine wild flowers of Scotland were plentiful
and lovely as flowers can be. Scotland’s Bell-flower, rivalling the
English C. patula in size, and, in the intensity of its colour, the
blue of Scotland’s sky, and of her far distant mountains, when
the evaporation is dancing in the sunbeams.

The Geraniums, the Orchids, the Roses, the Lady’s-finger, the
Craw’s-taes, and many of less note adorned the grassy banks,
burn-sides, and green nooks of many a field and headland. The
Honeysuckle in the hedge, the Hawthorn in the copse, and the
stately Foxglove, gave dignity as well as brilliancy to the scene.
But the wavy Ferns that spread far and wide over the shaded braes
were the most exquisitely lovely rural sights we had ever seen.
The exceeding gracefulness of the plants, especially when in broad
masses, their elegant often pensile foliage, and the various shades
of green which are reflected from the leaves of the different species
can hardly be imagined by those who have not seen them in
similar situations.
About midway between Lawers and Taymouth the road approaches the shores of the lake. Here we looked into the water for aquatic plants, but as usual without success. Either the season was ungenial or the roll or motion of the water hindered their growth. Whatever the cause may have been, few alpine aquatic plants fell in our way. Small quantities of a fine metallic-like sand were observed here and there in little heaps, or spread out in shallow baskets or on coarse cloths. On inquiry at a wayside cottage we learned that this sand had recently been collected and exported to Birmingham, where it was employed in certain manufactory processes, which the simple natives were unable to describe. They were able to tell us that the export of the sand had been forbidden by the noble Marquis, and also that the small parcels which we observed were used for making whetting-boards on which scythes, reaping-hooks, etc. were sharpened.

The road passes over the extremities of Drummond Hill, which is clothed with wood on its eastern and southern sides. Here it has all the appearance of a forest. The gardens of Taymouth lie under this hill, having the road on the upper side and the lake on the lower; they are very extensive. After having passed along the garden wall, which was on our right, we got a view of the Tay issuing from its parent lake and spanned by a noble bridge not more than 40 or 50 yards from the source of the river.

Judging by the eye, not always an accurate measurer of distance or magnitude, we should think that the river here is about as wide as the Thames at Kew or Richmond. But judging by the rapidity of the current in the Scottish river, about twice as much water may pass under the bridge at Taymouth as passes under the bridges of Richmond or Kew, if the tidal water is deducted from the Thames. We were once near giving offence by hinting that the channel of the Seine held as much water as that of the Thames at low water. The former drains a larger area than the latter. But this is not always a sound criterion for estimating the amount of water in a given channel. A hundred square miles in the Highlands will supply more than twice the quantity of water which an equal area in England can: first, because the rain is double as much, and second, because the evaporation is not half so much as it is in the south of England. Before the Tay leaves the domain of the lord of its source it is augmented
by the Lyon, another very considerable river, which rises in a lake of the same name far up among the hills on the north side of Glen Lochay.

Kenmore, which is just over the bridge on the right bank of the Tay, is an assemblage of small white cottages, forming, with its old-fashioned inn, two sides of a square. The upper side of the square is bounded by the church and churchyard, and the lower side by the wall and gateway to Taymouth Castle. About half-a-dozen cottages and the Free Church are built on both sides of the road to Aberfeldie: these, with the aforesaid square, constitute the village of Kenmore. Every place here is an appendage to the Marquis's lordly mansion. It is everything; and every one here is a retainer, a dependant, or a servant of the noble owner. We ought to except the clergy, the schoolmaster, and the innkeeper. The Marquis has the reputation of bearing his honours gently.

From Kenmore we walked along the park, under Drummond Hill to Glen Goldie and Fortingal, the latter celebrated for an immense yew-tree, which, if entire, would have a circumference of 56 feet, but only a portion of the circle remains, the deficient parts being either decayed or existing in a fragmentary state. The yew is still alive, though sadly mutilated, and is now likely to survive many more generations of men, for it is protected by an iron palisading to prevent future depredations. On this road, about halfway between the bridge of Tay and the Glen Goldie gate of the park, stands a cottage very much admired, it is said, by Royalty when Royalty condescended to honour Taymouth with its presence. Those who wish to peruse an account of this and other celebrities of Taymouth should read Sir T. Dick Lauder's account of the royal progresses in Scotland.

About three miles from Kenmore there is a ferry over the Lyon, and at the end of the ferry-house there is an old castle or fortress, all covered with ivy. The road winds round the base of the hill, and leads along the right bank of the Lyon up to Fortingal. In the middle of this Glen, before coming to the entrance of Glen Lyon, stands Garth Castle, the residence of Col. Stewart, a gentleman famed for his knowledge of Celtic history, manners, etc. We found, opposite to this Highland mansion, a charming though rather steep footpath over the hill to Kenmore. From the eminence we had views of Ben Lawers, Schehallion, Glen Lyon,
etc., on the one side, and on the other charming peeps, through the trees which clothe the east side of the hill, of Taymouth Castle and grounds, Kenmore, Aberfeldie, the braes of Dull, etc. etc.

In the evening we walked along the Aberfeldie road, which skirts another side of the park, and visited the battery opposite to the castle. This has the fame of affording one of the finest views in Scotland: it is worth seeing. On this platform there are mounted several guns, not for the protection of the castle, but to announce great events. Happily the guns are now only employed on festive occasions. Here there is a very complete museum, where specimens of all the quadrupeds and birds, or portions of them, that have been killed on the estate are preserved. The wild cats are large and singularly handsome. Of the birds, the eagles, capercailzies, etc. are the most interesting. The floor is very appropriately carpeted with skins of divers kinds of beasts killed on the Marquis's estate.

The next day, the 20th, was the day of rest, and we attended Divine service in the parish church of Kenmore. There is a zigzag road leading up the steep hill to Crieff. From some of the angles of this road exquisite views of the Lake and of Taymouth's noble halls, fine trees and extensive park, are to be had. This road leads over an immense tract of table-land at a considerable elevation above the vale. About four miles from Kenmore the summit is attained, where there is nothing to be seen but barren wilds of immense extent, and dreary waste, abounding in moor game and little flocks of timid sheep, and here and there a few red deer. The distance between Kenmore and Crieff is above twenty miles.

The greater part of the 21st was devoted to the park and gardens of Taymouth: both are very extensive. But we did not go to the Highlands to see parks and gardens; although, to say the truth, few more magnificent parks than Taymouth are to be seen: environed on all sides by lofty hills, clothed to their summits with thriving woods, watered by two grand rivers, the Tay and the Lyon, and possessing as much variety in level lawn, sloping banks, and swelling hills as fall to the general lot even of parks; and the whole is ornamented with the noblest specimens of Beech, Chestnut, Oak, Fir, Birch, and other trees. There is a celebrated avenue of Limes, a mile long. The extent of Tay-
mouth Park is said to be thirteen miles in circumference. But the attractions of home were more powerful than the attractions of Taymouth, and therefore in the evening we packed up all our traps and acquisitions of every sort and kind, in readiness for the Perth carrier, who leaves Acharn for Perth once a week, calling at Kenmore about six o'clock every Tuesday morning. In the morning we saw our baggage safely deposited on his cart, went to breakfast, and were on the road to Dunkeld before eight o'clock.

Before taking our final leave of Kenmore we have to notice another scene, one of the most interesting of its kind, viz. the Falls of Acharn. About two miles from Kenmore, on the right or south-east side of Loch Tay, is a large hamlet or group of cottages recently erected in a rather pretentious style, but sufficiently in character to harmonize well with the fine scenery. No church is here: Kenmore is the parish, where are two churches, although one would hold all the people, if they were all of one mind on certain minor points, neither affecting doctrine, discipline, nor mode of worship; but the less the difference, the greater the animosity of the dissentients. This hamlet contains however a mill, a smithy, a carpenter's shop, and a good school. On the stream above this latter and recent erection there is a hermitage without a hermit, and a waterfall not without water, like the cascades of the Leasowes,—Shenstone's famous folly. The water here has worn for itself a channel of awful depth, and strong are the nerves and cool should be the head of him that ventures to look down through the shading foliage upon the dark limns. About half a mile up the hill is the lower and most imposing of the falls of Acharn, with its hermitage built opposite, where, through a glass door or window, the cascade is viewed very much to the ease and even comfort of the spectator, who is furnished with a chair, a Claude Lorraine glass, a prism, and sundry et-ceteras, artfully contrived to draw the coin from his pockets. Milk and honey flow abundantly from the lips of the genuine Celtic cicerone; and hard-hearted must the Sassenach be who does not feel the effects of the soft sawder in the most sensitive part of his person, his breeches-pocket. This however is a scene well worth seeing; and specimens of Polypodium Dryopteris, growing within reach of the spray from one of the falls, may be had in any ordinary quantity, and of any ordinary or even extraordinary dimensions.
The guide to the natural and artificial notabilities of the locality informed us that Burns visited this hermitage and cascade, and that the following lines, part of those written over the chimney-piece in the parlour of the inn at Kenmore, have an especial reference to this scene:—

"Poetic ardours in my bosom swell,
Lone wandering by the hermit's mossy cell:
The sweeping theatre of hanging woods,
The incessant roar of headlong, tumbling floods.
*    *    *    *    *
Here poesy might wake her heaven-taught lyre,
And look through nature with creative fire."

Both thought and expression are good, but there is little, if any individuality, contained in the poetry: it might serve for any other waterfall just as well as for this, if the said fall had the accessories of wood and a mossy cell. This great poet does not shine in the kind of poetic composition called descriptive; he had a far higher calling than this; he describes but too truly, as well as forcibly, the sorrows, the sufferings, and the wrongs of humanity; the loves, the joys, the pleasures, the toils, the cares, the fears, and the hopes of men and women generally, and in particular of those of his own class. His descriptions of nature are sometimes, as in the above quoted passage, generalities, and therefore touch few sympathetic chords in the human heart. His poetry is not an exponent of nature, but of natural feeling.

The following list of Kenmore plants is from the 'Statistical Account of Scotland,' vol. for Perthshire, 475. It ought to be observed that we did not see any of them, but we enter them on the authority of the reverend gentleman who drew up the account of the parish. Scirpus sylvaticus, Bromus asper and B. giganteus, Anchusa sempervirens, Lysimachia vulgaris, Reseda Luteola, Geranium sanguineum, Astragalus glycyphyllus, Eupatorium cannabinum, Carex pendula.—In woods and hedges: Convallaria majalis, etc., Campanula latifolia, Rosa spinosa, R. involuta, R. casia.—Marshes: Hippuris vulgaris, Lysimachia Nummularia, Radiola Millegrana, Scrophularia aquatica, Hypericum Elodes.—In lakes: Potamogeton heterophyllum, perfoliatum, densum, lucens, crispum, pusillum, Lobelia Dortmanna, Ænanthe fistulosa, Cicuta virosa, Littorella lacustris, Subularia aquatica, Jasione montana, Sanicula europæa, Allium ursinum, A. vineale, Pyrolo
rotundifolia, P. secunda, Saxifraga granulata, tridactylites, Ornithopus perpusillus, Epipactis palustris.

The way to Dunkeld is along the right bank of the Tay, having the river on our left, and the high grounds of Aberfeldie and Moness on our right. The distance of Aberfeldie from Kenmore is five miles. This village (Aberfeldie) is one of the largest and neatest which we had seen in the Highlands. It is rather larger than Callander, and contains several better houses than the latter can boast of; but the surrounding scenery of Callander is finer than that of Aberfeldie. The latter has the Tay, the finest of Scotland’s rivers—of British rivers? We have not seen the Shannon. Callander has the Teith; but it has also Ben Ledi, and the Pass of Leny, and Lubnaig, and the Crags of Callander, which surpass every scene about Aberfeldie, except its Falls; but Aberfeldie is a very enjoyable place, and Killiecrankie is within a moderate distance, and Taymouth only the distance of a walk before breakfast. Dull, celebrated in the ancient ecclesiastical history of Scotland, is near, and accessible by a bridge, which connects Aberfeldie with Weem, on the left bank of the Tay.

We rested an hour at this agreeable place, and then walked onwards by Grandtully Castle, and, passing several other places of less note, reached Dunkeld, nearly twenty-three miles from Kenmore, about five o’clock. Our road was very pleasant, being never far from the river, often on its very brink. At Logierait the united rivers of the Tummel and the Garry combine their floods with the Tay, which is now enlarged to at least double of its original size. The distance from this point to Dunkeld is about eight miles, and the road along the south side of the river is about as beautiful as can well be conceived. We did not increase the botanical department much during this walk, but we increased our knowledge of the Tay and its banks, and were as enthusiastic in its commendations as ever was a gentle knight in the praises of his lady-love.

Near to Dunkeld the scenery became much more imposing; the steep hanging woods and the abrupt cliffy hills presented views such as we had never seen. We had seen higher and more romantic cliffs; but we had never seen any with so many pleasing adjuncts, as trees, green meadows of the richest soil and the liveliest colour, the waters of a noble river, the distant hills, some of them clothed with wood to their very summits, some in all the
wildness of native greatness, without a tree to mitigate the savage aspect of the scene. Dunkeld has been very fortunate in being noticed both by artists and descriptive historians; many eloquent and ready writers have celebrated its attractions. It has been lauded, strangers might fancy, far beyond all the bounds of moderation and truth. Some have entitled it the gem of Scottish landscape; others, the cynosure of Highland beauty, etc. This is unquestionably high praise; yet we do not say that it is too much. We had now seen the celebrities of Perthshire; Bridge of Allan, Callander, the Trosachs, the Pass of Leny, Lochearn, and Killin, and last, but by no means least, Taymouth. After seeing the aforesaid celebrities, we give the preference to Dunkeld. We will not say that one word written in its praise is extravagant.

But this charming spot reminds us of the havoc that time, experience, and observation make in the hoard of long-treasured notions and ideas, or imaginary pictures of celebrated places. We had of course pictured to ourselves a mental representation of Dunkeld, and with pensive feelings we now note how unlike the dreams of bygone times are the existing realities. We knew there was a bridge and a river at Dunkeld, the remains of a cathedral, and fine hills and trees, besides the rumbling bridge, the falls, etc. This is all true. There is a river in Macedonia and there is a river in Wales; there is a river in Monmouth as there is one at Dunkeld; but that the river might be all enclosed, the cathedral and churchyard shut up, even the very hills tabooed, never entered into the composition of our long-cherished imaginary picture. We never felt so keenly the force and truthfulness, as well as the beauty, of a stanza in Wordsworth's 'Yarrow Unvisited,' viz.,

"The treasured dreams of times long past,
We'll keep them winsome marrow;
For when we're there, although 'tis fair,
'Twill prove another Yarrow."

Dunkeld proved indeed different from the city of our imagination. Our treasured dreams of bygone times were dissipated by the stern reality. From the aforesaid fact a useful lesson might be deduced, if this were the place for moralizing.

A moralist would say, "the reality is always exceeded by the anticipation." Perhaps so. Most people can testify from expe-
rience that their real enjoyment of a scene is often much less than their anticipations were. It is not our wish to run a muck against his Grace of Athol, but we think it is a shabby thing to shut up Craigie Barnes, Birnam Wood, etc.; yet it is defensible on the principle pleaded long ago by another duke, "Is it not lawful for me to do what I will with mine own?"

We walked about Dunkeld for an hour or two, and then went to rest; and if we were disappointed on finding every place in and about this ancient city shut against us, except the high-roads, the shops, and hotels, we were not disappointed in the enjoyment of a good night's rest. This we needed after a long walk, and with another walk not very short awaiting us.

The most remarkable buildings about Dunkeld are the hotels; these are not notable for anything striking in their architecture, but merely for their immense size. It may be said the hotel at Paddington, at the terminus of the Great Western Railway, is as large as either of the Dunkeld establishments. Perhaps it may be so; but the inhabitants of London are between two millions and three millions; those of Dunkeld only a few hundreds. The Duke's residence is very small; and possibly his Grace, who has the reputation of an economist, has caused ample provision to be made in the town for those who might expect an entrée into the ducal mansion in the park.

On the 23rd, we were on the bridge of Dunkeld at five by the cathedral clock, intending to walk to Perth to breakfast. This we accomplished without distressing ourselves. The Dunkeld end of the road is interesting enough, especially the celebrated pass between Birnam Hill on the right bank of the Tay, and the elevation near Caputh, on the other or left bank. Birnam Wood is said by Dr. Macculloch to be still suffering from the effects of its march to Dunsinane in the days of Macbeth, but we think it has recovered some of its leafy attractions since the doctor's day.

With the exception of the first three miles from Dunkeld, there is nothing in the scenery of the remaining fifteen miles to repay a pedestrian for the tear and wear of shoes, muscular exertion, and time. As lovers of the picturesque we would have preferred the north side of the river, but we were told there was no road, and we had not time to improvise a new track for ourselves.

The plants noticed on this portion (the last one) of our walk were not numerous, but more so than the acquisitions of the pre-
vious day. On the 22nd we walked in the Highlands, but most of our last morning's walk was in the Lowlands.

On the roadside, not far from Scone, *Pyrola media* was gathered in fruit. We had on the previous Saturday seen two fine examples of this species in full flower, on the summit or near the summit of Drummond Hill, at Taymouth. This specimen, collected near Perth, showed that the temperature of the lowlands of Perthshire was considerably higher than that of the highlands; for though the distance be only thirty miles, yet the difference in elevation is considerable, probably three hundred yards. The highland specimens were in full flower, the lowland examples were in fruit. We observed the following species for the first time in Scotland:—*Linaria vulgaris*, a rare plant in Perthshire; also *Veronica Anagallis*, which is a rarity in other parts of the British Isles, as well as here. The other two rarer *Sinapides*, in addition to *S. arvensis*, were collected, viz. *S. alba* and *S. nigra* both struggling for an establishment in this northern latitude.

In waste places about Perth we also saw *Dipsacus sylvestris*. This is the last botanical rarity we have to register.

Perth is a fine city, situated on a fertile plain on the right bank of the Tay, and partly surrounded by hills of no great elevation, and at some distance from the town. The country in its vicinity is very fertile, and the scenery good. The spurs of the Ochil Hills are the most conspicuous objects in the landscape. The Tay and its bridge, and the beautiful Inch, are the most attractive features of Perth. One of the churches, St. John's, is the finest church we saw in Scotland, a country not remarkable for the grandeur of its ecclesiastical edifices. The bridge of Perth is probably the best in Scotland; but Scotland is more remarkable for its rivers than for its bridges,—for natural rather than for artificial beauties. It is said that the legions of Agricola, on their march northwards, when they came within sight of the Tay, exclaimed, *Ecce Tiberim!* They might easily have paid a shabbier compliment to their native river. People generally exaggerate the qualities of what is their own. To the Cockney no river is like the Thames; to the badaud of Paris the Seine is the fairest river in the world; and a true Roman loved the yellow Tiber. The Tay, though large and beautiful, has very few bridges to boast of. London and Paris have each many more than this river, which is larger than both of the rivers which flow through
the celebrated capitals of England and France. We know only four, which unite the banks of the fairest British stream, viz. the bridges of Taymouth, Aberfeldie, Dunkeld, and Perth. There are also two in the domain at Taymouth Park, but they are private property; so is the bridge of Dunkeld, though the public may use it on payment of a fixed toll. There is a good ferry at Logierait; yet a few more bridges would be convenient. The distance from Taymouth to Perth is thirty-seven miles, and allowing for the bendings of the river, not very considerable, the distance may be forty miles. Four bridges for this extent is rather a short allowance. The distance between London and Windsor is about twenty miles, and the number of bridges is nearly as many. The population on the banks of the Thames above London Bridge is probably one hundred times as many as the inhabitants of an equal length of the Tay.

The Perth, Dunkeld, and Blair of Athol railway will probably increase the population of this beautiful and fertile tract; at all events it will supply the means of transporting the natural productions of the country, viz. timber, cattle, sheep, horses, dairy and agricultural produce, to remote parts of the kingdom, where there is a good market for these necessaries. Instead of a carrier conveying goods once a week, and a post-cart conveying letters every other day, there will be daily intercourse established with all the great marts of the South; provisions will be as plentiful and cheap in the Highlands as in Glasgow and Perth, and the tide of population will flow upwards and onwards till the Highland glens are as populous as the Carse of Gowrie.
CHAPTER VII.

GENERAL SUMMARY, OR RESULTS OF OUR TOUR IN SCOTLAND.

The impressions or recollections of the scenes already noticed and partly described, the general features of the country, and the aspects of its vegetation, only remain to be briefly stated.

We had now travelled nearly 400 miles in Scotland; the half of this distance on foot: we had crossed Scotland's most celebrated rivers, the Tweed, the Forth, the Tay, and the Clyde; had paid our respects to the sites of Scotland's ancient renown, Berwick, Edinburgh, Stirling, and Perth. The general results of the whole are now to be deduced and offered to our readers.

On the eastern Borders, from Berwick to Edinburgh, along the coast—for the railways generally select the flattest parts of every country—the landscape is by no means interesting. It is far more fertile—at least after we crossed the Tweed the crops were better than on the southern side of that river,—and the country was not quite so tame, bleak, and cheerless, as it is in Northumberland along the coast; but this is not high praise. The belt of fertile land between the Lammermuir Hills and the coast is well cultivated, and this year (1856) at least gave promise of an ample return to its cultivators. The hills beyond were "in pastures green," as all the hills of the south-west parts of Scotland are, and grazed by both cattle and sheep.

There were seen abundant proofs of human labour, but of the inhabitants and their dwellings little was visible from the railway. The road passes through a rich and well-tilled country; but few villages and no towns were in sight till we reached Dalkeith, near Edinburgh. Here and there a park was observed, well sheltered and ornamented with trees, and now and then there was a narrow ravine, the sides of which were too steep for cultivation; these were fringed with plantations; otherwise, where the land was convertible into tillage fields, few trees were visible. The country upon the whole has rather a bare, uniform, and unpicturesque
appearance. On approaching the capital, Arthur's Seat, the Berwick Law, and the hills of Fife give relief to the uniformity of the scene; but these elevations are as bare of everything save grass as the sea-shore, or as the summit of Ben-mac-dui. Craigmiller Woods on the left, though at a distance, give an aspect of richness to the scenery.

The general bare and barren-like appearance which prevails about the metropolis has been already noticed. But the barrenness is only in appearance,—the rich succulent green herbage, though closely cropped, evinces the natural fertility of the soil; but there is a striking absence of trees on the south and east of Edinburgh. The trees on the west of Edinburgh, or on the south side of the Frith, between Leith and Hopeton House, "only serve to remind us," as Dr. Macculloch well said, "of the millions that are wanting." The environs of Edinburgh on the south and east are singularly romantic: the Calton Hill is now pretty well occupied with monumental and other erections, all more or less of an ornamental kind; but Arthur's Seat, the noblest and most picturesque of all Edina's natural features, does not possess a single tree to soften the rugged aspect of the scene. The rocky peak of the hill, and the long mural-like frowning rocks of St. Leonard's, contrast rather singularly with the architectural appearances of the new town of Edinburgh. Trees might be judiciously employed even to enhance the pictorial effect of Arthur's Seat. But if the citizens have not ornamented Arthur's Seat, they have abstained from spoiling it; and this is no mean praise in times when a taste for artificial beauty and landscape ornamentation is so prevalent. From Edinburgh to Stirling, the aspect of both shores of the Forth forms a very favourable contrast with that of the country between Berwick and Edinburgh. Here both wood and water are the rule; there they are the exception.

Agriculture and grazing are the prominent occupations of the people on the south of Edinburgh, on the eastern or coast line. From Edinburgh to Stirling the country verging on the shores of the lower part of the Frith appears about equally divided between the noble and opulent classes and the hardy races who toil in quarries and mines. The little towns that skirt the shores are all more or less engaged in the maritime trade of this thriving part of the kingdom, or are supported by the quarrying or
mining branches of industry, or by some other of the useful products derived from the adjacent hills.

The Frith of Forth, about half-a-dozen miles from Stirling, contracts within the dimensions of an ordinary-sized river; but what it loses in breadth it gains in length; for the windings or doublings of the stream are so many and extravagant, that the six miles from Alloa to Stirling by land becomes about twenty by water: this is probably an extravagant estimate, yet the windings of the Forth, both above and below Stirling, are very remarkable, and are now celebrated. The vegetation here is about as rich as a fertile soil can produce, and a mild and moist climate can maintain in a state of verdure unknown in less favourable parts.

The fine chain of hills, called the Ochils, on the right, and the rather less elevated range, called the Fintry Hills, on the left of the *voyageur* from Edinburgh to Stirling, with the imposing masses of Highland mountains in front, contribute to render this extensive prospect one of the most beautiful and imposing of Scotland’s grand scenes. Distance both softens and “lends enchantment to the view.” The tourist has no wish but to push onwards, except it may be the prudent one to enjoy the present, and to try to fix its grand features indelibly on his memory.

Stirling is built on a commanding site. The distant view promises much, and the interior of the town does not baulk the visitor’s expectation. It still contains much of its ancient aspect and character: the streets are not so wide nor so long as they are in Edinburgh, but the churches, and above all the Castle, vie with the metropolitan edifices, if not in extent, certainly in situation and architecture. The views, as have been already stated, are nearly as fine as from Edinburgh Castle,—we preferred them. The metropolis has a fine view of the sea and of the Pentland Hills. Stirling has a proximate view of the Highland Hills, which are about four times the altitude of the Pentlands.

There is far more variety in the environs of Stirling than in the country about Edinburgh; only in the old town of Edinburgh, the noble High Street is a charming picture by itself,—the houses of Edinburgh enhance even the picturesque interest of its fine situation. But Stirling is well worth a visit, both for its own intrinsic merit and perhaps still more from its being in
the vicinity of places justly celebrated in the historical annals of the kingdom. Most visitors will look with greater pleasure on the hills near Dollar, on Abbey Crag, and on the beautiful modern village of Bridge of Allan, than on the fields of the battle of Stirling, the old bridge, Bannockburn, and Sauchie; but *de gustibus nil disputandum*;—the lover of the picturesque, as well as the historical antiquary, will find something to admire in this view, especially if taken from the ramparts, with one of the fine old bombardiers for a *cicerone,*—one who will deliver his historical, pictorial, and traditional lore, with the precision and dignity of a man who fully comprehends his subject, and appreciates its importance.

Stirling is enlarging its bounds,—many houses and handsome villas have been built in it and round about it since the railway system was developed in the south and west of Scotland. This cannot be said of the capital in the summer of 1856; Edinburgh was then stationary. Princes Street, the Railway-stations, the Castle, the Piers of Leith, and the Fish Market were the only places that exhibited any signs of industry or even of vitality. New erections in Edinburgh would appear to be quite superfluous, and in all our walks about it we saw none in progress.

The Bridge of Allan is the most popular watering-place (a strange term) in Scotland. Scotland is celebrated for its Spas (a word used chiefly in Scotland), and the owners of them generally make arrangements for the convenience of the public who come to drink the water. Among the neighbouring nations Scotland is more celebrated for its beautiful natural scenery than for its medicinal springs; and it was with some surprise that we heard of a London patient resorting to the Bridge of Allan as many do now to Montpelier, Naples, and the Islands of Madeira.

Stirling, like Edinburgh, is not rich in its botanical productions; and even if it produced more rarities than it does, these would hardly induce a botanist to tarry here who had the intention of visiting the interesting mountains of Breadalbane. At Callander a day or two might be well spent, not only in observing the rare plants in that neighbourhood, but in contrasting the progress of vegetation with that of England on the one hand, and with the upper parts of Perthshire on the other.

Probably there are but few plants about Callander which are not also growing about Killin, but there is a considerable differ-
ence in their condition; for example, *Tridentalis europaea* and *Trollius europaeus* were in fruit when we were at Callander,—no example of either of them was seen in flower. *Here* the flowering season of these had passed. At Killin, quite a week later in the season, both these plants were collected with unfaded blossoms. The botany of Callander, upon the whole, occupies a more prominent position in the surrounding landscape than it does in the estimation of the botanist. The vales, with few exceptions, are well wooded, and the Sycamores, the Maples, and especially the Ashes, are very fine.

The common Elm in Scotland is *Ulmus montana*; the usual English form of this tree, *U. campestris*, we never saw as a hedge-shrub, which it frequently is in England. The Scottish Pine is often a grand and picturesque object where it has ample room for development; but the loveliest of Scotland's trees is the pendulous or weeping Birch. This tree, as an element in the picturesque, is seen to the greatest advantage both in the Trosachs and about Taymouth.

It is said that the Pine is the monarch of the Scottish woods, as the Oak is of the English; yet the Oak is not absent in Scotland; and the Wallace Oak at Ellerslie, the native place of Sir William Wallace, with many other celebrated trees of this kind, is not unworthy of mention among the more famous Oaks of England. Some of the Pines of Scotland are picturesque; and the dark masses of Pine forests and plantations always harmonize well with the sombre hue of Highland scenery. But the Birch is a lovely object, whether seen individually or collectively, and it harmonizes well with the scrubby Oak abounding in the coppices which clothe the abrupt elevations that enclose the Scottish glens.

As a botanical station, Ben Ledi, close to Callander, is despised or ignored by botanists in general. Its name does not once occur in the annals of British plants, numerous though they be. Yet it is not quite barren. A couple of specimens, which would confer celebrity upon any mountain in England, were in the possession of the post-mistress of Callander: *Polystichum Lorchitis* and *Buxbaumia aphylla* are the plants intended.

The beginning of July is rather too early a period for seeing the beauty of the Scottish Flora or for collecting its gems. This time of the year nearly corresponds with midsummer in the south
of England, and midsummer is too early for seeing the floral treasures of the mountainous parts of the south and south-west parts of the British Isles. The most experienced of Scottish botanists recommend the summer from the middle of July to the middle of August as the best time for seeing the greatest number of Scottish alpines in flower. Every experienced botanist knows that a district or locality must be visited several times in a season, viz. from March to September inclusive, before a tolerably exact estimate of its vegetation can be formed. Ben Lawers would be rather a formidable ascent in the month of March, when in most seasons it is invested in its robe of spotless snow. But doubtless the enterprising muscologist would then find several rarities to repay him for his toil and suffering.

The beginning of August would however be preferable, on many accounts. The weather is milder than in early spring, the days are longer, and the fairest objects of an alpine flora are in their prime. But we would with due deference recommend a botanical route totally different from that which we ourselves adopted. It is not to be expected that strangers would venture to dictate even to the uninitiated. Yet it is to be wished that young, energetic, and enterprising botanists would strike out a new track for themselves, and not be contented to follow the steps of scientific veterans, and continue to hunt in the same ground that has for so many years been the scenes of the explorations of Don, Graham, Greville, Hooker, Balfour, and their pupils and companions. We should like to explore the hills further west, by Ben More, Ben Ean, and some other of the Argyleshire mountains, besides Ben Cruachan, the only one of these popularly known. It has been stated on good authority, that the number of species decreases as the explorer advances towards the west from the east. This, we have little doubt, is the case in the southern part of the island of Great Britain; and it is probably the same in Scotland, from the Tweed to the Moray Frith. The agrarial annuals, or colonists, as they are mostly denominated in the 'Cybele Britannica,' decrease rather rapidly towards the west, because cultivation decreases. We should like to hear if the perennial herbaceous plants, which do not depend on agriculture for their permanence, are affected by longitude; and if so, what are the probable causes of this decrease.

The rivers of the Highlands have a pretty general uniformity
of character. The rocky bed, the eddying pool, and the scrubby or meadowy banks, are common characteristics. Of course they vary in breadth, and in the quantity of water which they contain. But in this even most of the Highland rivers preserve a considerable uniformity. The lakes in which they usually originate have a tendency to preserve this equality of flood. It takes several days' rain to raise perceptibly the surface of Loch Tay, and indeed of all large lochs; and the floods in the Dochart and Lochay, or other feeders of lakes, are some time before they have a perceptible effect on the Tay or on the rivers that issue from Highland lochs. The Tay will gradually increase after heavy rains for several days after the floods which flow into its loch have subsided. A river with a long, wide, shingly beach, is a rarity in the Highlands. The channel, if not always quite full, is never reduced to a slender thread of water in the centre, and where the water-worn pebbles are almost the sole indications that water is there at certain seasons.

But the extent and diversity of the lakes make ample amends for the uniformity of the rivers. Loch Vennachar, the lowest of a chain of lakes of which Loch Katrine is the uppermost, is not very remarkable, either for its extent or the beauty of its environs. Ben Ledi slopes down very gradually to its shores, and the hills on its other or southern side are of no great altitude. Loch Achray is very prettily surrounded by the undulating grounds of the Trosachs, which are ornamented by the Trosachs Inn and a little church and manse, all recent erections, and in a peculiar style, which is not ill adapted to the striking scenery with which it (the lake) is surrounded. Loch Katrine, the queen of Scottish lakes (we saw not a fairer in all fair Scotland), is not to be described here. Poets and painters have exhausted all the resources of their respective arts in vain attempts to transfer some of its beauties into their pages or on to their bits of canvas, but without success. Loch Katrine must be seen, and it will bear looking at. The Scots however have an eye for the useful as well as for the picturesque. The blue waters of this fine lake are now on their way to Glasgow, to subserve the common necessities of humanity. "To what vile uses may we turn, Horatio!" We can recommend it on the crede experto principle. It may be used without filtration, if the pipes, cisterns, and water-butts be kept clean. Scotland however, and even
Perthshire, possess lakes of no mean pretensions, but which have not reached the fame of the scene of 'The Lady of the Lake.' Among these Loch Lubnaig, on the north side of Ben Ledi, deserves honourable mention. It is not a counterpart of Loch Katrine, nor of any Scottish lake whatever. The north shore has a gentle slope, which extends far away to Benvoirlich's head, a pastoral region; the other, or south side, is bounded by the majestic cliffs of Ben Ledi. The lower part of the lake is ornamented by the woods of the celebrated pass of Leny (Lenie), and the upper by the fine forest which separates this district from Strathire. Dr. Macculloch, whose eye for the picturesque was equal to his descriptive pen, says of this lake, "Loch Lubnaig is utterly unlike every Scottish lake, by the dissimilarities of its two boundaries; the one flat and open, the other a solid wall of mountain, formed by the steep and rocky declivities of Ben Ledi."

Some of the little Scottish lakes on the summits of the tablelands have an expanse of only a few acres: their extent is not to be measured by miles, but by perches or acres. But the very smallest of them give rise to good-sized burns or rivulets, which enhance the interest of the bleak, widely-extended moors in which the peaks of the higher mountains have their base. These lochs would be termed tarns in the north of England. Lochearn is a fine lake, and the upper end (Lochearn Head) affords fine scenes. Like Loch Tay, it is a long, narrow lake; but where we saw it, the banks are finer than those of its rival. Of Loch Tay Dr. Macculloch says that "it scarcely affords one landscape, from Kenmore to near Killin. Nor do I know," he adds, "any place in Scotland which with so much promise produces so much disappointment." Loch Tay, viewed from the summit of Shroine-ach-Lochan, is a fine object in the picture. Its two feeders, the Dochart and the Lochay, are seen to unite and enter it on the spit of land below Killin; and both sides of the lake are for two or three miles fringed with the ancient woods of Finlarig on the left, and by the woods of Kinnell and Auchmore on the right hand.

There is another lake which we visited, and which, both in outline and in scenic character, is quite distinct from any of the aforenamed lakes. The Loch of Menteith, or Monteith, has a roundish outline, and is surrounded by quite flat shores on all sides except on the north-west or Aberfoyle side. This lake is a
beautiful sheet of water, plentifully fringed by ancient woods and with two small islands, on the larger of which was a priory, founded by one of the ancient Kings of Scotland. The other islet contains the remains of the castle of the Grahams, Earls of Menteith,—a name detested by Scottish patriots, because borne by the betrayer of one of Scotland’s most heroic and disinterested warriors. This race has been long extinct.

The most celebrated passes visited by us were the two at Dunkeld; the western one between Inver and Craigie Barnes, and the eastern between Birnam and Caputh Hills. The former is the most celebrated, and deservedly. Another noticeable pass is that of Leny (Lenie), near Callander. Concerning the latter Dr. Macculloch writes: "No one who has seen the pass of Leny (Lenie) will ever forget it; but he who has seen it will forget the rest of Strathire, Kilmahog, and all: the river is broad and majestic, while rapid, and rocky, and fringed with wood suited to the breadth and elevation of the noble precipices of Ben Ledi," etc. (vol. i. p. 149). Strathire is not much altered since the Doctor wrote, and Kilmahog (Kilmaig) is probably in the same neglected or forgotten state. But when the railway is extended to Callander from Stirling, the pass of Leny, Loch Lubnaig, Kilmaig, Strathire, and all, may attract some of the attentions and admiration now exclusively lavished on the Tro-sachs and Loch Katrine.

On our homeward journey from Perth to Carlisle, we passed through one of the most fertile districts in Scotland: Stratherne, which is bounded by the Highland Hills on the north-west, and by the Ochils, or by spurs of them, on the south-east, and which is watered by the Erne, yields in productiveness to few straths of Scotland. Long ere we reached the Border, the darkness prevented our viewing the scenery. The only scenes very conspicuous were the furnaces and fires of the smelting-houses, of which there are many between Glasgow and Carlisle.

The absence in Scotland of the common wayside plants of the south and centre of England, is a feature which arrests the attention of the wayfarer in the northern districts of Britain. There are, even in Surrey and Hants, tracts as dreary and barren as the moors of Rannoch and Breadalbane; and the vegetation is very scanty on such places, both in Devon and Perthshire, and there the difference is not very obvious. But about the streams
and near villages the number of plants begins to increase, and then the botanical pedestrian in the North is reminded that he is not in England. In passing through a Scottish village, he fails to see our two common Mallows, *M. sylvestris* and *M. rotundifolia*: *Ballota nigra* and *Lamium album* are also absent. The common climbing hedge-plants of England, both the Bryonies, the white and the black, the large white Convolvulus, the *Solanum Dulcamara* (Woody Nightshade), and the more permanent or durable plants, the Honeysuckles and the Clematis, are absent or very scarce species in Scotland. *Galium Mollugo, Convolvulus arvensis*, and several crucifers, umbellifers, and ranunculaceous plants, are not observable in the corn-fields. Scotland does produce species peculiar to herself and to other similar mountainous or northern regions; but these are not agricultural weeds, nor such annuals as we now term colonists, nor such as are called viatical (wayside species), nor sylvan, nor septal plants. The sylvan and septal species of Scotland are probably the remains of the ancient original forests, through which roads have been formed, and the original vegetation left as a protection to the fields. The Elm, Oak, and Hazel are not so common in the Scottish as in the English hedges; the *Viburnum*, the *Euonymus*, the *Rhamnus*, are not natives of Scotland; and the Ivy is but rarely seen, probably because there are but few or no Elms in the hedgerows. It loves to cling to the Elm; and though not a *parasite*, it helps to kill that from which it derives its support. The Cornel-tree and the White Beam-tree (*Pyrus Aria*) are entirely absent from Scotland. The luxuriance and pictorial beauty of an English unclipt hedge is missed in Scotland. Yet the hedge-trees of England, when planted in Scotland, attain enormous magnitudes for these trees. We observed at Killin a Hawthorn-tree which had reached the dimensions of an ordinary English Elm; and as it was but comparatively a young tree (under 200 years of age), and was quite healthy, it bids fair to rival some of Scotland's largest forest-trees. We have already noticed an enormous specimen of *Acer campestre*, or Field Maple; and many other examples are recorded.

Our impressions of the Scottish atmosphere are not very favourable to its fair fame. We never had more than three fine days in succession, and that only twice. There a *soft* day is the

* He who does not know the meaning of "a soft day," must go to Fort Wil-
rule, and not the exception. The weather in England is proverbially changeable. It is not so in the Highlands; but there unhappily the changes are generally from rain to snow, and from snow to hard frost,—or in other words, it rains all summer and snows or freezes all winter. This we have heard; "but Fame, I ween, says many things in sport." Sed crede experto: we were there in summer, and can recommend top-coats, leggings, if waterproof the better, flannel waistcoats, worsted stockings, thick shoes, and more than two pairs, and the use of a good fire where it is procurable, where it is not, a good allowance of blankets will do quite as well.

"Fare ye well, ye spreading Mosses,
Waving with the Cana's plume;
Fare ye well, ye verdant meadows,
Speckled with the Daisy's bloom.

"Farewell, ye broomy elfin knowes,
Where Thyme and Harebells grow;
Farewell, ye hoary haunted howes,
O'erhung with Birk and Sloe."—Pringle.

liam; or he may go to Inverary, which will do as well. This is the usual friendly salutation when it is raining what the Scots denominate an "even down-pour;" what the Americans call "stoning rain;" what the Cornish very expressively term "lashing;" and what is vulgarly denominated "cats and dogs." On the other hand, a good day is like angels' visits.
ITINERARY TO THE TOUR IN THE HIGHLANDS OF PERTHSHIRE.

From Berwick by rail to Edinburgh: 58 miles.
   The sea is on the right-hand of the passenger to Edinburgh; the Lammermuir and Pentland Hills on the left.

Edinburgh to Roslin: 10 miles.
   Not far from Dalkeith there is a branch line to Melrose, Selkirk, Kelso, and down Tweeddale to Berwick. This line passes through the Arcadia of Scotland.

Edinburgh to Stirling by steam-boat: 50 miles.
   On the left, Hampton House, etc., South Queensferry, Carron, etc.; on the right, North Queensferry, Alloa.

Stirling to Dunblane: 4 miles.

Dunblane to Doune: 4 miles.

Doune to Callander: 8 miles along the Vale of the Teith.

Callander to Loch Katrine: 10 miles.

Lower end of Loch Katrine to Stronachlocher by water: 10 miles.

Stronachlocher to Loch Lomond through Pass of Inversnaid: 5 miles.

Callander to Port Menteith: 7 miles.

Callander to Strathire: 7 miles.

Callander to King's House (Braes of Balquhidder): 10 miles.

Callander to Lochearn Head: 14 miles.

Callander to Lix: 20 miles.
   A road on the left to Tyndrum, up Glen Dochart.

Callander to Killin: 23 miles.

Killin to Lawers: 8 miles.

Killin to Taymouth: 15 miles.
   At Taymouth a road on right to Crief, twenty miles; on left to Blair by Loch Rannoch.

Taymouth to Aberfeldie: 5 miles.

Taymouth to Grand Tully, Castle and Inn: 9 miles.

Taymouth to opposite Logierait: 15 miles.
   At Logierait there is a ferry, and the traveller may go to Dunkeld either on the south or on the north bank of the Tay. The scenery on both roads is good.

Taymouth to Dunkeld: 23 miles.

Dunkeld to Perth: 15 miles.
   The only place of note between Dunkeld and Perth, exclusive of Birnam Pass, is Auchtergaven, a large but not interesting village. The scenery along this road is very flat, tame, and uninteresting after leaving the river, till the road reaches near Scone, where there is a view of Perth, a welcome sight to those who have walked from Dunkeld, especially before breaking their fast.

Perth to Carlisle by rail: 152 miles.
INDEX.

"Life is like a summer flower, 
Blowing but to wither."—Beattie, 'Hermit.'

"Flowers tell of a season when men were not, 
When earth was by angels trod; 
And leaves and flowers in every spot 
Burst forth at the call of God; 
When spirits, singing their hymns at even, 
Wandered by wood and glade; 
And the Lord looked down from the highest heaven, 
And blessed what he had made."

Abbey Craig, 6, 7.
Aberfeldie, 53, 54, 56.
Acer campestre, 70.
Acharn, Falls of, 54.
Adoxa Moschatellina, 43.
Egopodium Podagraria, 8.
Agricola, 59.
Alchemilla alpina, 26.
— vulgaris, 23.
Alisma natans, 28.
Anchusa sempervirens, 4.
Angelica sylvestris, 43.
Arthur's Seat, 2.
Asplenium septentrionale, 2.
Astragalus hypoglottis, 2.
Auchmore, 68.
August, month of, the best time for seeing to advantage the botany of Scotland, 66.

Ballota nigra, 70.
Balsamiferum, 23.
— Braes of, 23.
Baunockburn, 7.
Beal-an-Duine, 17.
Bell-flower of Scotland, 50.
Ben-an, 7.
Ben Cruachan, 7.
Ben Chonzie, 28.
Ben-can, 24.
Ben Lawers, 11, 40.
— modes of botanizing on, 39.
— passing the night on, 38.
Ben Ledi, 7, 21-23, 65.

Ben Lomond, 6, 7.
Ben More, 24.
Benvenue, 7.
Ben Voirlich, 7, 21, 22.
Birch, 53.

“...we sate us down, 
Amid the fragrance of the Yellow Broom, 
While o'er our heads the weeping birch-tree streamed, 
Its branches arching like a fountain-shower.”

Wilson.

Birnam Hill, 58.
Birnam Wood, 58.
“Till Birnam Wood shall come to Dunsinane.”
Blackness Castle, 5.
Boreland Falls, 29.
Bridge of Allan, 64.
Brig o' Turk, 11.

“...and ere the Brig o' Turk was won, 
The headmost horseman rode alone.”

Bruar Water, 2.
— Falls, 2.
Bruntfield Links, 1.
Bunium flexuosum, 8.
Burns, the poet, 55.
Buxbaumia aphylla, 65.

Callander Crags, 10, 17, 64, 65.
— inn, 11.
— Camp, 20.
Cambusmore, 17.
Cambus Kenneth Abbey, 5.
Campanula latifolia, 4.

“...oh that I was where blue-bells grow, 
on Roxburgh's ferny lea, 
where Gowans glent and crow-flowers blow, 
beneath the trysting-tree!”—Pringle.
INDEX.

Campanula rotundifolia, 34.

"The glowing Furze, the bonny Broom,
The Thistle and the Heather,
The Rue-bayz and the Gowen fair,
Which childhood loves to gather."

Campbells, mausoleum of, 35.

Canna or Cana, 13.

Caputh, 58.

Cardamine hirsuta, 44.

"This mayden, in a morn betime,
Went forth, when May was in her prime,
To get sweet Cetywall (Zedonium);
The Honeysuckle and the Harlock,
The Lilly and the Lady Smocke,
To deck her summer hall."

Carduus heterophyllus, 27.

"Old Scotland's 'symbol dear,' which he, the Bard
Of Colla, hath immortalized, and spared
The inspiring emblem waving in the breeze,
I love to mark."

Carex atrata, 46.

"The Forget-me-not on the water's edge
Reveals her lovely hue,
Where the broken bank between the Sedge
Is embroidered with her blue."—Noel.

Carse of Gowrie, 60.

Carum Carui, 45.

Centarea Cyanus, 50.

"The blue CYANTS we 'll not forget
'Tis the gem of the harvest coronet."

Cherastium alpinum, 42.

——— triviale, 42.

Cheiranthus Cheiri, 4.

"Why loves my flower, the sweetest flower
That swells the golden breast of May,
Thrown rudely o'er this ruined tower,
To waste her solitary day?"

Cherleria sedoides, 46.

Chrysanthemum segetum, 10, 50.

"A flower there is that shineth bright
Some call it MARYGOLD-a;
And he that wold not when he might,
He shall not when he wold-a."

Chrysanthemum oppositifolium, 43.

Churches of Perth, 59.

Coilantogle, 14.

Cor-nan-uriskin, 17.

Cornus suecica, 41.

Correi or Correy, 33.

Corydalis claviculata, 11.

Craigie Barnes, 58.

Craigmiller Woods, 62.

Crepis paludosus, 17.

Cystopteris fragilis, 42.

——— montana, 33.

Deanston, 9.

Dianthus deltoides, 2.

——— glaucus, 2.

Dipsacus sylvestris, 59.

Doun, 9.

——— Castle, 9, 10.

Drona incana, 44.

Dunblane, 8.

Dunkeld, 56-7-8.

——— inns at, 58.

Duinsinane, 58.

Echium vulgare, 8.

Edinburgh, 1, 63, 64.

Empetrum nigrum, 19.

Epilobium alpinum, 46.

——— angustifolium, 28.

Equisetum sylvaticum, 3.

——— Telemateia, 4.

Eriophorum vaginatum, 41.

——— angustifolium, 13, 41.

——— gracile, 41.

Erne, 69.

Euonymus, 70.

Fingal's grave, 35.

Finlarig Woods, 34.

——— Castle, 35.

Fintry Hills, 6.

Forth, 5.

——— small towns on, 5.

Fortingal, 52.

Foxglove, 50.

"I've lingered oft by rocky dells,
Where streamlets wind with murmuring din,
And marked the Foxglove's purple bells
Hang nodding o'er the dimpled lin."—Anon.

Galeopsis versicolor, 7, 50.

Galium boreale, 11, 17, 27.

——— Mollugo, 70.

Garth Castle, 52.

Geranium pratense and G. sylvaticum, 3, 23, 27, 28, 29, 45.

Geranium pyrenaeicum, 1.

Glen urbanum, 1.

——— intermedium, 1.

——— rivale, 10.

Glen Dochart, 27.

Glenfinlas, 16.

Glen Goldie, 52.

Glen Lochay, 29.

Glen Lyon, 37, 52.

Glen Ogle, 26.

——— pass of, 26.

Gnaphalium supinum, 41.

Grand Tully Castle, 56.

Gymnadenia conopsea, 13, 14.

——— albida, 14.

Habenaria chlorantha, 11, 13.

——— bifolia, 11, 13, 46.
INDEX.

Lithospermum arvense, 4.
Littorella lacustris, 15.
Lix, 27.
Loch Achray, 67.
Loch Katrine, 7, 11, 12, 67.
Loch Awe, 7.
Lochearn, 24, 68.
Loch Lubnaig, 11-13, 23, 68.
Loch Menteith, 68.
Loch-na-gat, 40, 41.
Loch Tay, 28, 36, 50, 68.
Loch Vennachar, 11, 15, 16.
Logierait, 56.
Luzulae, 3.
Luzula spicata, 46.
Lychnis Githago, 50.
Lyon, 51, 52.

Mallows indigenous in Scotland? 69.
Malva moschata, 19.
—— sylvestris, 19.
M‘Culloch, Dr., 58.
M‘Nabs, burial-place of the, 35.
Meeconopsis cambrica, 20.
Menteith, 8; Port of, 18.
Meum athamanticum, 34.
Mimulus luteus, 13.
Mœhringia trierivens, 35.
Myosotis suaveolens, 43.
—— sylvatica, 4.
—— palustris, 29.

“Where flows the fountain silently
It blooms a lovely flower;
Blue as the beauty of the sky,
It speaks like kind fidelity,
Through fortune’s sun and shower.”

Myrrhis odorata, 4, 8, 17.

Narthecium ossifragum, 13.
New Scottish botanical routes suggested, 66.

Oak, 65.
—— Wallace, 65.
Ochil Hills, 6, 18, 63.
Oenanthe crocata, 10.
Orchis latifolia, 14.
—— maculata, 14.
—— ——— var. uniflora, 14.
Oxyria reniformis, 34, 46.

Papaver Argemone, 4.
Pass of Leny, 11, 21.
Passes in the Highlands, 69.
Pennyghent, 1.
Perth, 59.
Petasites vulgaris, 27.
Fine, Scottish, 65.
Pinguicula vulgaris, 13.
Plantago maritima, 28.
Plants, common, absent in Scotland, 69.
Plants of Killin, 35.
—— seen on Ben Lawers, 47.
Polygonum Bistorta, 4.
—— viviparum, 23, 46.
Polypodium Dryopteris, 42, 54.
Polystichum Lomnichits, 42, 65.
Portobello, 1.
Pyrus Aria, 70.
Pyroba media, 59.

Railway to Blair, 60.
Rhamnus, 70.
Ribes rubrum, 29.
—— Grossularia, 29.
Rivers, Highland character of, 66, 67.
"For we may gather lovely flowers
For miles along the river side,
And far amidst the landscape wild
Wander the scenes of beauty o'er,
Now lingering in the violet glen,
Now roving on the Thymy moor."

Rosa villosa, 11.
—— tomentosa, 11.
Roslin Castle, 3; Chapel, 3.
Rowan-tree, 13.
Rubus Chamaemorus, 41.
—— saxatilis, 46.
—— sp., 14.
—— Ideus, 29.
Rumex pulcher, 8.

Sacrament, holy, administration of, in Scotland, 36.
Sabbath, 31, 32.
Sagina saxatilis, 44.
Salix herbacea, 46.
Sauchie Burn, 7.
Saxifraga aizoides, 23, 41.
—— hypnoides, 43.
—— nivalis, 44.
—— oppositifolia, 34, 44.
—— stellaris, 41, 44.
Schehallion, 52.
Scleranthus annuus, 10.
Scolopendrum vulgare, 4.
Sedum Rhodiola, 42.
—— Telephium, 19.
Services in the churches, 30, 31.
Sesleria aevulca, 46.
Settle, 1.
Shrime-ach-lochan, 29.
Silibaldia procumbens, 46.
Silene acaulis, 43.
Sinapis alba and S. nigra, 59.
Soft day, meaning of, 70, note.
Solanum Dulcamara, 70.
Solidago Virgareua, 46.
Species decrease toward the west? 66.
Spira salicifolia, 11.

INDEX.

St. Leonard's Crags, 2.
St. Swithin's, 34, 35.
Stachys arvensis, 4.
Stage-coach, 38.
Stellaria nemorum, 4.
Stirling, 5, 64.
Strath, 24, note.
—— etymology of, 24.
Stratherne, 69.
Strathire, 69.
Strathgartney, 17.
Stronachlocher, 16, 17.
Sunday in Scotland, 31-2.

Tanacetum vulgare, 8.
Tay, 51.
Taymouth, 51; Castle, 53.
Teith, 9, 12, 13, 21.
Thalictrum alpinum, 44.
Tofelidius palustris, 29.
Trees about Edinburgh, 61.
Tridentalis europaea, 14, 65.
Trifolium medium, 14.
Trollius europaeus, 14, 65.
"When the Blewalt (Eye-bright) bears a pearl,
And the Daisy turns a pea,
And the Bonnie Luccen Gowan (Trollius europaeus)
Has faulde up her ee,
Then the Lavrock frea the blue lift,
Draps down and thinks nase shame
To woo his Bonnie lassie
When the kye comes hame."—Hogg.

Trosachs, 11, 14, 15, 16.
Tummel, 56.
Tussilago Farfara, 43.

Ulmus campestris, 65.
—— montana, 65.

Vaccinium uliginosum, 41.
—— Vitis-Idjea, 14.
Valeriana officinalis, 27.
Veronica Anagallis, 59.
—— montana, 4.
—— fruticulosa, 47.
—— saxatilis, 43.
—— serpyllifolia var., 46.
Viburnum Lantana, 70.
Vicia lathyroides, 8.
—— sylvatica, 45.
Vinca minor, 4.
Viola arvensis, 4.

Water-lily, white, 22; yellow, 22.
Waters of Loch Katrine conveyed to Glasgow, 67.
Wordsworth, 57.

Yew, ancient, at Fortingal, 52.

FINIS.