Orchis latifolia
Ornithogalum umbellatum
Arum maculatum
Potamogeton oblongus
,, crispus
Carex curta

Carex riparia Trisetum flavescens Briza media Botrychium Lunaria Equisetum hyemale

Many lichens collected by Mr. Sadler on Dalmahoy Hills.

North Queensferry, Inverkeithing, St. Davids, Ferry Hill.

Saturday, 12th June 1858.

Party of between 60 and 70 met at Granton at 10 a.m. and proceeded by steamboat to North Queensferry, thence walked to Inverkeithing, St. Davids, and returned by road to Ferry Hill about 6.30 p.m., meeting boat to Granton. Return ticket by boat, 1s.; Granton Pier, 2d.; Ferry Pier, 6d.; total, 1s. 8d.

Among the plants gathered were the following :-

Ranunculus hederaceus " sceleratus Fumaria micrantha

Brassica oleracea
" campestris
Diplotaxis tenuifolia
Thlaspi arvense
Reseda lutea
Cerastium semidecandrum

Sagina maritima " subulata Malva sylvestris

" rotundifolia Geranium pyrenaicum " columbinum (near

Inverkeithing) Melilotus officinalis Astragalus Glyciphyllos Spiræa Filipendula Potentilla verna

[Notes, R.B.G., Edin., No. IX., 1902]

Potentilla reptans Sedum Telephium

" villosum Sambucus Ebulus

Echium vulgare Convolvulus arvensis Stachys arvensis Leonurus Cardiaca

Lamium incisum
Salicornia herbacea
Polygonum Bistorta

Allium Scorodoprasum " vineale Scirpus pauciflorus

Carex vulpina

" fulva Triticum junceum Nardus stricta

Tynehead, Crichton Castle, Borthwick Castle, Fushie Bridge, Arniston, Dalhousie.

Saturday, 19th June 1858.

Party of 60 met at the North British Railway Station and proceeded to Tynehead, walked to Crichton Castle by the glen, thence to Borthwick Castle, Fushie Bridge, Arniston, and Dalhousie, reaching Dalhousie Station about 5 p.m. Returned by train at 5.12 p.m. Return tickets, 1s. 2d.

Among the plants gathered were the following :-

Thlaspi arvense Geranium sylvaticum Genista anglica Saxifraga Geum? (Arniston) " umbrosa (Tynehead; also in woods at Arniston) Sedum reflexum (near Tynehead) Antennaria dioica (Tynehead) Doronicum Pardalianches (Arniston) Pyrola media (glen near Crichton Castle) Ligustrum vulgare (near Fushie Bridge) Myosotis sylvatica (Arniston) Mimulus luteus (Arniston) Lathræa Squamaria Mentha sylvestris (at Tynehead) Rumex sanguineus, var. Salix pentandra Neottia Nidus-avis (woods near Tynehead) Orchis incarnata

" latifolia Gymnadenia conopsea Sparganium ramosum (near Fushie Bridge)

Arum maculatum (Borthwick Castle) Potamogeton pusillus (near Fushie Bridge)

Eriophorum latifolium (near Crichton) Carex remota

" pendula (Arniston)

sylvatica (between Crichton and Borthwick) lævigata

" fulva

" paludosa Phalaris arundinacea, var. variegata

(near Tynehead) Lastrea Oreopteris

(near Tynehead) Equisetum Telmateia (Arniston)

Lycopodium clavatum (near Tynehead)

Cockburnspath, Dunglass Dene, Pease Dene.

Saturday, 26th June 1858.

Party of about 60 or 70 met at the North British Railway Station at 8 a.m. and proceeded to Cockburnspath, thence walked through Dunglass Dene. Visited pond near the house, proceeded by the shore to Pease Dene, and then to Cockburnspath Town Dene, and returned by train at 6.3 p.m. Return tickets, 2s. Mr. Hardie of Penmanshiel accompanied the party. Mr. Smith, factor for Sir John Hall, sent a man to guide us.

Among the plants gathered were the following:-

Aquilegia vulgaris (Dunglass) Nuphar luteum (Dunglass) Papaver Argemone Cakile maritima Dianthus deltoides Sagina maritima Hypericum calycinum Malva rotundifolia Geranium pratense Acer campestre Rubus caesius (foot of Pease Dene) Potentilla reptans Epilobium angustifolium Conjum maculatum Enanthe crocata Senecio saracenicus (woods at Dunglass) Silybum Marianum (near Cockburnspath Station, cultivated)

Centaurea Cyanus

Tragopogon minor

Campanula latifolia Pyrola minor Vinca major "minor Anchusa sempervirens Hyoscyamus niger Mimulus luteus (cultivated) Veronica montana Mentha viridis (Pease Dene)

" piperita Rumex viridis Anacharis Alsinastrum (Dunglass Pond) Neottia Nidus-avis Typha angustifolia Sparganium ramosum Carex arenaria

" vulpina " pendula Melica uniflora Scolopendrium vulgare Polystichum angulare

Bridge of Allan, Keir, Kippenross, Wharrie Glen, Stirling.

Saturday, 3rd July 1858.

Party of between 60 and 70 met at the Scottish Central Railway Station at 6.20 a.m., and proceeded to Bridge of Allan. Breakfasted there, visited the Well, Dr. Paterson's tree-fern, then proceeded to Keir and Kippenross, saw large sycamore here, then to Wharrie Glen and Stirling, examined Castle rocks and visited the Castle, and returned by train at 5.38 p.m. Return tickets, 3s. 3d. Breakfast, 1s. 6d.

At breakfast in Philp's Inn there were present Rev. Dr. Roger, Dr. Paterson, Dr. W. A. F. Brown, Mr. Girdwood, a Polish captain, and others from Bridge of Allan; Mr. Buchan and Mr. Moir joined us.

Among the plants gathered were the following:-

(roadside near Wharrie Glen) Brassica campestris (Stirling Castle) Hypericum perforatum quadrangulum humifusum pulchrum hirsutum Geranium sylvaticum lucidum Trifolium striatum Lotus major Agrimonia Eupatoria Rosa tomentosa rubiginosa canina Sedum Telephium anglicum acre Circæa lutetiana Conium maculatum Smyrnium Olusatrum

(Stirling Castle)

Aquilegia vulgaris

Anchusa sempervirens Echium vulgare (Stirling Castle) Atropa Belladonna (Stirling Castle) Linaria repens (Stirling Castle) Pinguicula vulgaris Neottia Nidus-avis Listera ovata Paris quadrifolia Carex sylvatica .. hirta Melica uniflora Triticum caninum Cystopteris fragilis Polystichum aculeatum Polypodium Dryopteris Equisetum arvense umbrosum

sylvaticum

palustre

Lactuca virosa

(Stirling Castle)

North Berwick, Canty Bay, Bass Rock, Tantallon Castle, Dirleton.

Saturday, 10th July 1858.

Party of about 60 met at the North British Railway Station at 8 a.m. and proceeded to North Berwick. Walked to Canty Bay, visited the Bass Rock, Tantallon Castle, North Berwick Links, Dirleton Common and Castle, and returned by train at 6.22 p.m. Return tickets, 2s.; boat to Bass, 1s.

Among the plants gathered were the following:-

Clematis Vitalba (Dirleton Castle)

Thalictrum minus Lepidium latifolium

(Tantallon Castle) Reseda lutea Lavatera arborea (Bass) Geranium pusillum

Agrimonia Eupatoria Sedum album (Dirleton Castle)

Smyrnium Olusatrum Lonicera Xylosteum (Tantallon) Centranthus ruber Scabiosa Columbaria

Filago germanica ,, minima Silybum Marianum Apargia hispida

Anagallis tenella (North Berwick)

Ligustrum vulgare Hyoscyamus niger

(Dirleton)

(Dirleton)

Ballota fœtida (Dirleton)

Beta maritima (Bass) Salsola Kali

Narcissus biflorus

(Bass; not in flower) Potamogeton densus

Potamogeton densus Phleum arenarium

Triodia decumbens

Parmelia parietina (Bass) Ramalina scopulorum (Bass)

Perth, Birnam, Stenton Crag, Dunkeld.

Saturday, 17th July 1858.

Party of between 40 and 50 met at the Edinburgh and Glasgow Railway Station at 6.20 a.m. and proceeded by Scottish Central to Perth, which was reached at 10. There breakfast was provided in the rooms at the station at 1s, od. each. At 11.15 a.m. the party proceeded to Birnam Station, visited Birnam Hill, height 1500 feet, under the guidance of Dr. Lauder Lindsay, also visited slate quarries. Some of the party went to Stenton Crag, others to Dunkeld.

Sergeant John Sim met the party at Perth, and gave them many rare plants mentioned in the following list. Dr. Stirling also accompanied the party. Returned from Dunkeld at

5.15 p.m. Return tickets, 5s. 2d.

Among the plants gathered were the following:-

Thalictrum minus Ranunculus aquatilis Aquilegia vulgaris Corydalis claviculata Arabis hirsuta Lepidium Smithii Lepigonum rubrum Malva moschata (Stenton) Geranium sanguineum phæum Erodium cicutarium Genista anglica Prunus communis Agrimonia Eupatoria Saxifraga aizoides Circæa alpina Carum Carui Lonicera Periclymenum Solidago Virgaurea Antennaria dioica Gnaphalium uliginosum sylvaticum Chrysanthemum segetum Vaccinium Vitis-Idæa Myrtillus Erica Tetralix cinerea Trientalis europæa Erythræa Centaurium Gentiana campestris Verbascum Thapsus (Stenton)

Polygonum aviculare
Hydropiper
Persicaria
Iapathifolium
Rumex aquaticus
Salix repens
fusca
Emperrum nigrum
Neotta Nidus-avis
(Murthly)
Listera cordata
Gymnadenia conossea

Origanum vulgare

Calamintha Clinopodium

" albida Allium oleraceum Narthecium ossifragum Sparganium ramosum Carex irrigua

" limosa " binervis Melica nutans Serrafalcus commutatus Nardus stricta Allosorus crispus Asplenium germanicum (Stenton Crag) Lastrea Oreopteris Polypodium Dryopteris

" Phegopteris Lycopodium Selago " clavatum Lycopodium alpinum

selaginoides

- Cladonia rangiferina pyxidata

anomæa

Peltidea canina

horizontalis Stereocaulon paschale Cornicularia aculeata

Gyrophora pellita

Mr. Sim's list :-

Hesperis matronalis (Kinnoul Hill)

Hypericum humifusum (Blairgowrie)

Geranium pyrenaicum (roadside near Barn-

Potentilla hirta? (rocks

near Kinnoul Church) argentea(rocks near Kinnoul Church)

Aremonia agrimonioides (wood of Scone)

Sedum album (rocks near

Barnhill) Sedum dasyphyllum (Craigie, near Perth) Gyrophora polyphylla Lecanora ventosa

- Parella tartarea
- Parmelia saxatilis
 - omphalodes
 - conspersa
 - olivacea frigida

Lecidea rivulosa

geographica icmadophila

Evernia prunastri Sphærophoron coralloides

Moneses grandiflora

(wood of Scone) Lysimachia Nummularia

(banks of Tay)

Cynoglossum sylvaticum (Kinfauns Toll-bar)

Linaria repens (limestone wall, left bank of Tay, opposite Perth)

Mimulus luteus (banks of Tay) Allium oleraceum

(banks of Tay)

Scheuchzeria palustris (Methven Bog)

St. Andrews.

Saturday, 24th July 1858.

Party of about 40 met at the Edinburgh, Perth, and Dundee Railway Station at 6.30 a.m. and proceeded to St. Andrews. Breakfasted in the Town Hall. Breakfast provided by Mr. Thomson of Star Hotel for 1s. 6d. Met Mr. Barclay of Cupar, Dr. Day, Mr. Howie, Rev. Mr. Dickson of Cameron, and Mr. Laing.

After Dreakfast saw the old buildings at St. Andrews, visited the harbour, and then went by banks of Eden to Tentsmuir. Reached Leuchars about 6 p.m., and returned to Edinburgh about 9 p.m. Return tickets, 3s. 8d.

Among the plants gathered were the following:-

Aconitum Napellus
Radiola Millegrana
Rubus suberectus
Haloscias scoticum
Senecio sylvaticus
Anagallis tenella
Borago officinalis
Solanum Dulcamara
Linaria vulgaris
Serophularia aquatica
Lycopus curopœus
Marrubium vulgare
Atriplex erecta
pagustifolia
Polygonum lapathifolium

Euphorbia Esula
Salix repens
Juncus Gerardi
Scriptus maritimus
Blysmus rufus
Carex arenaria
, vulpina
, distans
Selerochloa maritima
loliacea
Triticum laxum
Elymus arenarius
Lycopodium inundatum
selaginoides
, selaginoides

Switzerland.

Saturday, 7th August 1858.

Party consisting of J. H. Balfour, Thomas Barclay, Sheriff-Clerk, Cupar; J. M. Bell, Alexander Buchan, Dunblane; E. Dubuc, M.D.; J. Fayrer, Lucknow; P. Neill Fraser, Alexander Graham, Patrick Graham, surgeon; James Hill, W. Johnston, John C. Jones, Texas, U.S.A.; F. Lockwood Logan, David Philip Maclagan, Robert C. Maclagan, S. J. Meintjes, Sam Maverick, Texas, U.S.A.; Henry B. Radford, S. H. Ramsbotham, George Rodger, Gideon Colquhoun Sconce, William Soper, W. Turnbull, and G. Williamson met at the Docks at Leith at 11.30 this morning. The day was remarkably fine, and all were in high spirits. Even those who dreaded a sea voyage in ordinary circumstances felt less anxiety than usual, seeing that the barometer was very high and the sea as smooth as possible. The steamer which was to convey us to Rotterdam was the "Ivanhoe," commanded by Mr. John Cairns, a very civil and obliging captain, although with a rough exterior.

Monday, 9th August 1858.

We reached the bar on the Dutch coast between 12 and 1 and Rotterdam about 4 p.m. The sail up the Meuse brought under our notice the novel Dutch scenery, the flat surface, marshy ground, willows, canals, windmills, &c. On landing at the quay some time was spent in getting the luggage examined. We started in a third-class carriage by the train at 6.40 p.m. and passed through the characteristic scenery of Holland, with "its ubiquitous canals, bowling-green flatness and swampy meadows." We reached the University town of Utrecht about 9 p.m. and took up our quarters at the Hötel des Pays Bas, where we were all accommodated.

Tuesday, 10th August 1858.

Rose at 6 a.m. and went with a commissionaire to the Botanic Garden where we met Professor Bergsma, who is lecturer on Botany and has charge of the garden. He was most attentive and kind, and gave us a full description of the plants cultivated. The garden is small but contains some interesting plants, particularly those sent from the Dutch possessions in Java. The houses are not extensive. There did not seem to be a good arrangement of the plants for study. The number of pupils attending the lectures is about 40. The Professor's house is connected with the garden.

Among the plants which we noticed were the following:-

Amherstia nobilis Angiopteris angustata Antiaris toxicaria Araucaria Cunninghamii Caladium pinnatifidum
Casuarina sumatrana
Cephalotus follicularis
Chamærops conduplicatus
"humilis

Cinchona Condaminea " pubescens Dracena elegans Dracontium pertusum Garcinia Mangostana Hura crepitans Isonandra Gutta Laurus Sassafras Livistona chinensis Magnolia (in fruit) Marsilia ægyptiaca Nepenthes ampullacea

Olea europæa (several varieties) Oreodaphne Pandanus furcatus Paulownia imperialis (in fruit) Philodendron bipinnatifidur Polygonum perfoliatum Punica Granatum Salisburia adiantifolia (fine standard) Ulmus americana

(fine specimen)

It was too early in the day to visit any of the other Professors. Donders, the famous physiologist, was absent; we had the pleasure of meeting him afterwards in Paris.

After breakfasting at the inn we started by rail for Cologne leaving Utrecht at 8.50 and reaching Cologne about 5 p.m. On the way we noted buckwheat abundantly cultivated, also lettuce. Heather was seen in some spots and on higher ground Scots pine. At Cologne we took up our quarters at the Hötel Belle Vue. Met here the Rev. Dr. McCosh, who had reached Cologne on his return from a three and a half months' tour. He had seen a great deal of the Continent and expected to accomplish a four months' excursion for £70.

Wednesday, 11th August 1858.

Went on board the boat at 6 a.m. to sail up the Rhine. We reached Cassel about 8 p.m. Finally the party reached Frankfort by fourth-class carriage about 10 p.m. and were distributed in two hotels—the Hôtel de Russie and the Hôtel de l'Empereur Romain.

Thursday, 12th August 1858.

Started by train at 12.25 for Heidelberg, which was reached about 4 p.m., and took up our quarters at the Hôtel du Prince Charles.

Friday, 13th August 1858.

Some of us rose early and visited the magnificent Castle before

breakfast and gathered a number of interesting plants. Amongst them :—

Diplotaxis tenuifolia Iberis amara Dianthus Carthusianorum Geranium pratense Circæa lutetiana Gnaphalium arenarium Centaurea Jacea Campanula Trachelium " rotundifolia Linaria Cymbalaria Lamium maculatum

After breakfast proceeded by the railway to Basle, which was reached at 2.30 p.m. As our object was to get to the Swiss mountains as soon as possible we only remained in Basle for a short time, and joined the train for Berne at 4.55. We met here Mr. R. Anderson, architect, from Edinburgh, on his way to Berne. Reached Berne about 9.30 p.m. Party divided; the greater part were accommodated at the Hötel des Gentilshommes, while some had to go to the Hötel du Möre.

Saturday, 14th August 1858.

Astir early this morning; visited the platform 108 feet above the Aar, and had a splendid view of the Bernese Alps. Called on Shuttleworth but found that he was in Britain. Saw M. Guthnick, the pharmacien, who gave us important hints as to our route. Met Professor Meissner, who accompanied us to the Botanic Garden—small; some good alpine plants. Promised to send plants and Botanical Society's Transactions to Guthnick and Meissner. Paper and pasteboard purchased, maps, Koch's abbreviated Synopsis, &c. Sent heavy baggage by post to Geneva and got it booked. Started at 5,15 by diligence and carriages of various sorts for Thun. Reached Thun about 8 p.m., took up our quarters at the Hötel du Freienhof (M. Stahli, a friend of Guthnick's).

Monday, 16th August 1858.

We left Thun at 8.30 a.m. and sailed up the beautiful lake to Neuhaus. From Neuhaus the whole party walked, carrying their knapsacks and bundles of paper by relays, to Interlaken, through a beautiful valley shaded by walnut trees. At Interlaken the greater number of the party purchased their alpenstocks, some plain, others with horn, false or real chamois. Passing through the English village of Interlaken and Unterseen we reached the Lake of Brienz, where we joined the steamer. Landed below the Giessbach waterfall. In the wooded banks and rocks in this vicinity there are numerous excellent lowland plants.

At the Giessbach and near Thun the following plants were observed by different members of the party:—

Aconitum Lycoctonum

" pyrenæum

Hepatica triloba

Dentaria pentaphyllos

Moehringia muscosa

Tamaris gallica

Hypericum montanum

Althæa officinalis

Geranium pyrenaicum

Geranium pyrenaicum
, columbinum
, Robertianum
, Robertianum
Henetangere
Melilotus leucantha
Onobrychis sativa
Spiræa Aruncus
Rubus cæsius
Potentilla reptans
Alchemilla vulgaris

alpina

Saxifraga aizoides Ribes petreum Sedum album Lythrum Salicaria Astrantia minor Silaus pratensis Scabiosa Columbaria Erigeron canadensis Caedia apina Carduus pratensis Cichorium Intybus Hieracium presaltum Prenanthes purpurea Campanula pumila?
" Trachelium
Pyrola secunda
Monotropa Hypopitys
Echium vulgare
Solanum Dulcamara

nigrum Digitalis lutea Veronica urticifolia Melampyrum sylvaticum Lycopus europæus Salvia pratensis Prunella grandiflora Galeopsis Ladanum Teucrium Chamædrys Hippophaë rhamnoides Listera ovata Goodyera repens Epipogum Gmelini Epipactis rubra Paris quadrifolia Carex sylvatica Setaria glauca Oplismenus Crus-Galli Molinia cærulea Poa Balfourii Festuca calamaria Brachypodium pinnatum Asplenium viride Lastrea dilatata Polypodium Dryopteris calcareum

Leaving the Giessbach with reluctance we joined our rowingboats and reached the upper part of the lake, meeting some of the party who had gone by steamer to Brienz.

The party, driving and walking, reached Meiringen in the afternoon. Meiringen is a large village of the Oberland at the upper extremity of the Obere Hasli-Thal. We went to the Pension Ruof, kept by M. Fluchs, but found that he had only six beds to spare. M. Guthnick had recommended us to this person. It is a good place for a small party. We then went to the Hötel du Sauvage, where we found ample accommodation. After table d'hôte, arranged our plants on paper.

Tuesday, 17th August 1858.

At 7 a.m., after breakfast, we left for Grimsel—porter to carry baggage and a person who engaged to be guide for three days. Saw the Reichenbach Waterfall near Meiringen. Proceeded up the vailey and gradually ascended to Guttannen. Rested at the Chalet of Handeck, about one and a half hours' walk beyond this. After a fatiguing walk we reached the Hospice of the Grimsel at 4.30 p.m.

Wednesday, 18th August 1858.

At 8.50 a.m., after breakfast at the Hospice, we started on our alpine ramble with Fluk Melgior and his brother as guides. Passing the end of the little lake called Kleinensee, near the Hospice, we proceeded in full botanical equipment to ascend the Sidelhorn.

The boxes and field books were soon replenished with specimens. Roots were taken of some of the rarer and more beautiful plants; and some of them, I hope, will ere long flourish in the Botanic Garden as memorials of our trip. Our movements up the mountain were slow, owing both to the botanising and the heat of the day. On reaching the summit of the Sidelhorn we had a magnificent view of the Alps; the valley of the Grimsel on the one side and the valley of the Rhone on the other. The height of the mountain is about 8650 French feet. We then descended towards the valley with the view of visiting the Aar glaciers.

On the part of the mountain nearest the smaller glacier we

gathered the best plants, and were detained there a long time. Some of the party in place of botanising proceeded at once to the Ober-Aar Glacier. This glacier wants the extensive moraines of the Unter-Aar Glacier. It is distinctly icy throughout. We crossed the river on a rustic bridge near a chalet, the inhabitant of which, a shepherd boy, joined us in our exploration of the hill. Proceeding on the opposite bank of the stream we gathered many good plants, and then reached the side of the Unter-Aar Glacier. Here we had a good opportunity of seeing an extensive glacier with an enormous moraine country of masses of rock of all sizes covering the ice so thoroughly as to make one believe that there was nothing below but a mass of stones. The rocks were very sharp and angular. On walking on the glacier we found remarkable inequalities. In some places there were deep hollows which concealed some of the party from the rest and led to an unexpected separation. In these hollows we could see the icy nature of the glacier, and here and there were deep holes full of water with clear streams flowing. In other parts there were large hummocks covered with debris. In some instances we saw stones of small size which had formed cavities by the melting of the ice around them under the sun's influence. Leaves carried up by birds occasionally produce similar results. Sometimes when the debris is accumulated in these cavities a reverse process takes place and then the debris becomes raised up, forming a mound or hummock supported on ice. We were enabled to see the course of the glacier and to observe some of the phenomena which had led to Professor Forbes' valuable observations regarding the nature of glaciers and their movements. We returned to the Hospice about 7 p.m. tolerably fatigued.

Some of the plants seen near Grimsel were :-

Astrantia minor Erigeron acris " canadensis Carlina acaulis Carduus defloratus Phyteuma orbiculare " spicatum Asclepias Vincetoxicum Erythræa Centaurium Gentiana pannonica " punctata Rumex alpinus (abundant round Grimsel Hospice) Veratrum album Asplenium septentrionale

Some of the Sidelhorn plants were :-

Ranunculus	aconitifolius	
	glacialis	

pyrenaicus

Arabis alpina bellidifolia

cærulea

Cardamine resedifolia Viola biflora

Silene quadridentata

rupestris Cerastium alpinum

Arenaria ciliata Cherleria sedoides

Linum tenuifolium

Trifolium agrarium alpestre

Geum montanum Potentilla aurea

minima

reptans

Alchemilla alpina pentaphyllea

Saxifraga aizoides

androsacea

aspera

cæsia

crustata

cuneifolia

muscoides

oppositifolia rotundifolia

stellaris

Sedum rubens

Sempervivum arachnoideum

montanum Astrantia minor

Gaya simplex Meum Mutellina Galium helveticum

Bellidiastrum

Aster alpinus

Gnaphalium supinum Achillea serrata

Clavennæ Chrysanthemum alpinum

Arnica montana

scorpioides Apargia autumnalis

Campanula barbata cenisia

Azalea procumbens Primula longiflora

villosa Androsace alpina

bryoides

Chamæjasme

helvetica lactea

obtusifolia

villosa

Gentiana acaulis alpina

bayarica

brachyphylla campestris

verna

Veronica alpina bellidifolia

saxatilis

Euphrasia alpina

Pedicularis cenisia rostrata

Teucrium montanum Polygonum viviparum

Salix reticulata ., retusa

Juncus trifidus Luzula nivea

spadicea spicata

Carex atrata capillaris

Carex	

fœtida

montana nigra

Phleum alpinum

Boehmeri

commutatum Michelii

Agrostis alpina

rupestris Allosorus crispus

Euphrasia minima

Thymus alpinus

Plantago alpina

Lapponum

prunifolia

Salix herbacea

Tozzia alpina

Asplenium septentrionale Pseudathyrium alpestre Polystichum Lonchitis

Polypodium rhæticum

Some of the plants of the mountainous part near Ober-Aar Glacier :-

Myagrum saxatile Gypsophila repens Silene acaulis

Rosa alpina Sedum atratum Epilobium alpinum

alsinifolium Galium sylvestre Valeriana montana tripteris

Scabiosa lucida Gnaphalium norvegicum Hyoseris fœtida Tussilago alpina Phyteuma hemisphæricum Vaccinium uliginosum

Vitis-Idaea Primula farinosa Soldanella alpina

Orchis nigra Lloydia serotina Juneus Jacquini trifidus

triglumis Elyna spicata Sesleria carulea

disticha

Poa alpina

.. Balfourii

" laxa nemoralis

On the low ground below the glacier we found Epilobium rosmarinifolium.

Thursday, 19th August 1858.

The morning was wet and misty. After paying our bill at the Hospice, we started at 8.30 and proceeded towards the Valais. After reaching the Col we descended by a very rough and slippery path to the valley of the Rhone. We visited the famous glacier whence comes the arrowy Rhone, which here is very turbid—unlike its blue colour when issuing from the Lake of Geneva. We mounted on the glacier for a short way, saw some small crevasses, examined the beautiful vault of deep blue ice where the Rhone issues—some large pieces of ice had just fallen. Soon after our visit the rain began to cease and ere long the sun broke forth. We walked by the Valais to Obergestelen, where we rested for lunch, and thence to Münster, where we took up our quarters.

Many good plants were gathered on the way :-

Erysimum helveticum Ononis Natrix Bupleurum falcatum ,, graminifolium ,, ranunculoides Athamanta cretensis

Laserpitium Siler

Gaya simplex Artemisia campestris Hieracium blattarioides Hypochœris uniflora Campanula thrysoides Bromus gracilis Melica ciliata

We had some difficulty in getting accommodation at Münster. Our host at the Croix d'Or, Jean Baptiste Guntren, however, was very attentive and polite. Our plants were put into paper and prepared so as to be sent to the care of M. Guthnick at Berne, who had kindly offered to take care of them and transmit to Edinburgh.

Friday, 20th August 1858.

Münster was left, after breakfast, this morning at 8.30. We reached Viesch, famous for its glacier, and remained there till 1.30. Left Viesch in five char-a-banes holding five each besides the driver.

Passed Lax, the Massa, Aletsch (celebrated for its glacier). We reached Brigue in the evening. Our quarters were taken up in the Hötel d'Angleterre. Despatched a parcel of plants to Guthnick at Berne.

Saturday, 21st August 1858.

Left Brigue at 6 a.m. in two large char-a-bancs, and travelled by the valley of the Rhone through a beautiful country to Visp or Vispach. The morning was fine and the view charming. Near Visp noticed a large straight avenue of poplars, a mile or two in length. Stopped at the Hôtel du Soleil to breakfast.

After breakfast the party proceeded up the river Visp to Stalden; this took about one and a half hours or more. Here the valleys of the Saas and St. Niklaus separate. The latter, which goes to the right, led us to Zermatt. We picked many interesting lower country plants on the way:—

Biscutella lævigata Erigeron canadensis Monotropa Hypopitys Digitalis grandiflora Hyssopus officinalis Salvia viscosa Herminium Monorchis Colchicum autumnale Stipa pennata

Leaving Stalden we walked to St. Niklaus, which usually takes two and a half hours more walking. In this part of the journey the Weisshorn is a conspicuous snowy mountain. Fir woods here and there and snowy patches seen. We rested at St. Niklaus for some time to take lunch. We reached Zernatt between 6 and 7 p.m., passing along an interesting valley.

We were thoroughly wet, and as our baggage had not arrived we had no alternative but to go to bed for a time. Nine of the party remained at the Hôtel du Mont Cervin, while the remaining 12 (3 being left at Visp) were accommodated at the Hôtel du Mont Rose, Seiler Frères.

Sunday, 22nd August 1858.

When we awoke in the morning we found the whole ground covered with newly-fallen snow to the depth of 3 or 4 inches. It was a remarkable sight at this time of the year. The sun broke out in the course of the morning and the snow began to melt rapidly, so that the ground became very disagreeable. The cure is a good naturalist and has made a collection of the plants of the mountains. The collection can be purchased. At the hotel there were two volumes of botanical specimens laid out for the inspection of travellers.

Monday, 23rd August 1858.

Day fine, sun shining and snow melting; still much snow covering the ground; notwithstanding, we resolved to start for alpine botanising. We started after breakfast, about 9, with an excellent guide, Joseph Zum Taugwald, who knew something about the plants in the district. On going up the valley, not far from Zermatt, marks of polishing and striation are seen on some of the rocks. We made our way gradually through the wood and up the mountain to the Riffel Hôtel, kept by a brother of M. Seiler, who was also very kind and attentive. On rocks during the ascent to Riffel and near Zermatt gathered Gentiana nivalis and Oxytropis campestris. On reaching the hotel we arranged for beds, table d'hôte, &c., and then started on our way to the alpine heights. We walked through snow sometimes more than a foot deep up to the Gorner Grat, seeing only now and then a plant on some bare rock where the snow had melted; we were most annoyed at our inability to procure specimens, for we had all along looked to the hills in this quarter as our best botanical district.

After lunching on the Gorner Grat we prepared to descend. The greater number returned from the Gorner Grat to the Riffel, while Messrs. Buchan, A. Graham, self, and guide made an excursion to some rocks by the side of the Great Glacier, where the snow had melted more fully on the south and west. Mr Turnbull also accompanied us during part of the time. Here we gathered our best alpine plants:—

Phaca astragalina Senecio uniflorus Oxytropis campestris Campanula cenisia cærulea Gentiana nivalis montana glacialis Valeriana celtica Veronica saxatilis Artemisia glacialis alpina lanata Pinus Cembra (near Zer-Arnica scorpioides matt)

We returned to the hotel about 6 for table d'hôte. The effects of the sun's reflection from the snow was now visible on all our faces; some of us suffered very severely. We had intended to take another day's botanising here, visiting the Furggen glacier, close under the Matterhorn precipices, and the Zmutt glacier; but the effects of our adventure to-day were such as to make the party resolve to return to Zermatt. All were discouraged by the want of success in the way of plant gathering, and the smarting of faces, necks, and eyes was not easily got over. Moreover, the guide said he could not conduct the party on the route we proposed without extra assistance, for the glaciers were not always safe. We accordingly sent our guide to M. Seiler at Zermatt to arrange for our breakfasting next day, while we slept at the Riffel.

Tuesday, 24th August 1858.

At 6.15 a.m. we descended to Zermatt to breakfast, getting a few plants on the way. Some of the party descended from the Riffel to Zermatt in one and a half hours. M. Seiler received us with his usual kindness. We paid a visit to the cure's house for the sake of seeing his plants, but found that he was not at home. About 9 we left Zermatt and walked down the valley. The melting of the snow had caused an increase in the streams, and in several instances the rude bridges required for the passage of horses were carried away. These rapid torrents carry down debris and trees with them and often render the roads impassable. At one point of our journey the repair of a bridge became necessary. This was accomplished by the party with the aid of guides and under the direction of Dr. Fayrer, whose experience in the crossing of rivers in India was most useful. To the astonishment of the guides a most effective bridge was made in a better style than they had ever seen before. We rested at St. Niklaus for lunch. There we met Dr. Sanderson and his wife. The Doctor, an old pupil, zealous physiologist, wrote article, "Vegetable Embryology," in Todd's Cyclopædia. Continued our walk to Visp, which was reached in the evening. Today we were on foot 12 hours. The walk was about 34 or 36 miles. Took up our quarters at the Hôtel du Soleil.

Wednesday, 25th August 1858.

After breakfast, started at 9 in four voitures of different kinds for Martigny. Morning fine, allowing a good view of the valley of the Rhone.

We travelled by the Valais along the banks of the Rhone. Rested at Leuk, Gemmi Pass. We reached Sion in the afternoon for lunch. We remained there two hours. This is the chief town of the Valais. We had a long drive to Martigny. Some time before we reached Martigny rain came on. The night was dark and stormy, with thunder and lightning, and did not promise well for a mountain trip next day. We took up our quarters at the Hôtel Clerc about 6.45, where we were well attended to and very comfortable. Put up our plants and despatched them to Guthnick at Berne.

Thursday, 26th August 1858.

Wind, rain and mist prevented us from attempting to cross the Tête Noire to Chamounix as we had intended. After some delay in the hope that the day might clear, we at last left Martigny about 10.30, some driving in the omnibus and some walking in the direction of Bex, where we meant to join the railway. The day was very wet, heavy showers every now and then. A number of plants were gathered, especially Athyrium fontanum by Mr. Fraser.

We proceeded by rail to Villeneuve, where we joined the steamer on the Lake of Geneva. We left Villeneuve at 12.30 and reached Geneva about 7 p.m. At first we proceeded to the Hôtel Couronne, but did not find sufficient accommodation there. Mr. Bell and Mr. Sconce got beds there. The rest went to the Hôtel de la Métropole—large and fine new hotel; abundance of beds; rather expensive.

Friday, 27th August 1858.

After breakfast, went to Rue du Rhone for a photograph. Found that Messrs. Artaria & Carini, who were recommended as the best photographers, were not at home; and accordingly, as our time was limited, we were compelled to take some other. Accidentally went to the rooms of a person near Artaria & Carini, M. Poncy. He took three photographs of the party, for which 81 francs were charged. These we brought home and they have since been used by Bryson for printing, but none have turned out good. Messrs. Bell & Sconce, who were at another hotel and whose residence we could not ascertain, missed us and got their photographs taken separately by the same artist. That

of Mr. Sconce is excellent. Called on De Candolle, 100 Cour St. Pierre. M. Alphonse de Candolle was not at home. Saw his son, who showed us the Candollean Library and the Herbarium superintended by Dr. Mueller. Interesting to see the mode in which the plants mentioned in the Prodromus were marked. De Candolle and Mueller accompanied us to the Botanic Garden, which is no longer superintended by Alphonse de Candolle, but in which there are many plants of interest. P. Maclagan, P. Graham, Williamson, Bell, and Sconce remained at Geneva. Dined at our hotel and left Geneva at 4.15 p.m. for Paris, 3rd class.

Saturday, 28th August 1858.

After a very uncomfortable night reached Paris about 12 noon, after twenty hours' travel. Took up quarters at Hôtel du Louvre; all accommodated.

Monday, 30th August 1858.

Left Paris at 6.30 for London. Twelve of party returned to London—five had been left in Geneva and seven in Paris. Reached Dover about 5 a.m. and London about 8 a.m. on 31st August 1858. Fayrer and Hill started for Edinburgh by 9 train, and reached it at 8 p.m.—thus going from Paris to Edinburgh in twenty-five and a half hours. Rest of party dispersed, and with two others I left by train at 7.30 p.m., third class, and after an uncomfortable journey reached Edinburgh at 7.30 a.m. on Wednesday, sts September 1858.

LIST OF PLANTS COLLECTED DURING THE EXCURSION.

DICOTYLEDONES.

RANUNCULACEÆ. Aquilegia alpina Aconitum Lycoctonum vulgaris Caltha palustris Napellus Clematis virginiana paniculatum Vitalba Actæa spicata Hepatica triloba Anemone alpina Ranunculus aconitibaldensis folius Halleri acris vernalis

Ranunculus aquatilis

- Flammula
- glacialis
- montanus
- philonotis

pyrenæus

Thalictrum majus minus

Trollius europæus

BERBERIDEÆ.

Berberis vulgaris

Nymphæaceæ.

Nuphar luteum Nymphæa alba

PAPAVERACEÆ.

Chelidonium majus Papaver Decaisnei?

FUMARIACEÆ.

Corvdalis claviculata Fumaria officinalis

CRUCIFER &.

Æthionema saxatile Alyssum calycinum

- campestre
- Arabis alpina
 - arenosa
 - bellidifolia
- cærulea Biscutella coronopifolia
- lævigata
- saxatilis, var.
- Bunias Erucago

Camelina sativa

Cardamine hirsuta

., resedifolia

Dentaria dentata

Diplotaxis tenuifolia Draba frigida

Erysimum cheiran-

thoides

ochroleucum Iberis amara

Malcolmia maritima

Nasturtium officinale palustre

(near St. Niklaus) Raphanus Landra?

Sinapis alba

Sisymbrium officinale pyrenaicum

Sophia

Thlaspi arvense sylvium

RESEDACEÆ.

Reseda lutea

.. Phyteuma

CISTACEÆ.

Helianthemum obscurum

vulgare

VIOLACEÆ.

Viola Allionii

- .. arenaria
- arvensis
- biflora
- calcarata
- mirabilis
 - tricolor

POLYGALACEÆ.

Polygala vulgaris and vars.

CARYOPHYLLACEÆ.

Agrostemma Flos-lovis Alsine fastigiata

- rostrata
 - sedoides setacea
- Arenaria biflora

ciliata

- fasciculata
- laricifolia
- norvegica
- recurva
- serpyllifolia
- verna (A. Gerardi)

Cerastium alpinum

- arvense
- campanu-
- latum
- latifolium
- strictum
- trigynum

triviale

Cherleria sedoides Dianthus actinopetalus

- Carthusian-
- orum
- prolifer
- sylvestris Gypsophila repens

Saxifraga

- Lychnis alpina
- diurna Flos-cuculi
- Moehringia muscosa Sagina apetala
- procumbens
- sp.? (vivip.) Saponaria officinalis
- Vaccaria Silene acaulis

Silene inflata

- muscipula
 - nocturna
 - nutans
 - Otites rupestris
 - vallesia

Stellaria cerastoides

- graminea
- nemorum

PORTULACACEÆ.

Montia fontana

TAMARICACEÆ.

Myricaria germanica

Hypericaceæ. Hypericum montanum

MALVACEÆ.

Althæa officinalis Malva rotundifolia

LINACEÆ.

Linum angustifolium

- tenuifolium
- usitatissimum

GERANIACEÆ.

Erodium cicutarium

Geranium cinereum

columbinum

pratense Robertianum

Oxalis corniculata

BALSAMINACEÆ. Impatiens Noli-me-

tangere

Sapindaceæ.

Acer campestre

Leguminosæ.

Astragalus chionophilus

- " Cicer
- ,, dasyglottis depressus
- " leontinus
- " monspessulanus
- " Onobrychis Coronilla Emerus and

Genista germanica

- " sagittalis
- " tinctoria Hippocrepis comosa

Lotus major Medicago denticulata

- ,, falcata
- ,, sativa Onobrychis sativa
- Ononis arachnoidea ,, Natrix

Oxytropis campestris ,, cyanea

Phaca alpina ,, astragalina

, astragaina letragonolobus siliquosus

- Trifolium agrarium
 - " alpinum
 - ,, arvense
 - " badium
 - " cæspitosum
 - " flexuosum " fragiferum
 - " montanum
 - " montanum " ochroleucum
- " ochrole

Vicia Cracca

Rosaceæ.

Agrimonia Eupatoria Alchemilla alpina

- " pentaphyllea
 - " vulgaris Cotoneaster vulgaris
 - Dryas octopetala Geum montanum

" reptans Potentilla ambigua

- " argentea " aurea
- " cinerea

" grandiflora

Poterium Sanguisorba Prunus Cerasus

Rosa spinulifolia

Rubus cæsius

Sanguisorba officinalis Sibbaldia procumbens Spiræa Aruncus

Saxifragaceæ.

Saxifraga aizoides

- Aizoon
- androsacea
- " aspera " bryoides
- " caesia
- " cuneifolia
- ,, davurica
- " hypnoides
 - " oppositifolia
 - rotundifolia stellaris
- " umbrosa?

GROSSULARIACEÆ.

Ribes petræum

CRASSULACEÆ.

Crassula rubens Sedum album

- " atratum
 - , dasyphyllum , reflexum

Sempervivum arachnoi-

- " montanum
- tectorum

LYTHRACEÆ.

Lythrum Salicaria

ONAGRACEÆ.

Circæa lutetiana Epilobium alpinum

- " alsinifolium
- " angustifolium
- " Dodonæi " Fleischeri
- , Pleischer
- " rosmarinifolium

Cucurbitaceæ.

Bryonia dioica

Umbelliferæ.

Astrantia minor

Athamanta cretensis

- Bupleurum caricifolium ,, falcatum
 - " pyrenaicum

" stellatum Daucus Carota

Gaya simplex Laserpitium hirsutum

" Siler

Ligusticum actæifolium Meum Mutellina Myrrhis odorata Silaus pratensis

CAPRIFOLIACEÆ.

Linnæa borealis (St. Niklaus) Lonicera alpigena

RUBIACEÆ.

Asperula aristata

" cynanchica

- " hirta " taurina
- Galium Bocconi
 - " rubrum
 - , sylvestre verum

Valerianaceæ.

Valeriana celtica

,, montana

" tripteris

DIPSACEÆ.

Asterocephalus Columbaria

Scabiosa pyrenaica

Compositæ.

Achillea atrata

" macrophylla

Millefolium nana

" tomentosa

Achyrophorus maculatus Antennaria alpina

" Leontopo-

Anthe	emis montana
Arnic	a montana
.,	scorpioides

Aronicum glaciale Artemisia Absinthium

,, campestris

" glacialis " Mutellina

Aster alpinus

" Amellus Bellidiastrum Michelii Carduus acaulis

" defloratus Carlina acaulis

,, vulgaris

Centaurea alba ,, Jacea

" paniculata Scabiosa

Chrysanthemum alpinum

" coronopifolium frutescens

Cichorium Intybus
Cirsium oleraceum
Crepis aurea

" bulbosa? Doronicum Pardali-

anches Echinops sphærocephalus

Erigeron acris

" alpinus

" canadensis " uniflorus

" Villarsii Eupatorium cannabinum Filago arvensis

Filago arvensis Gnaphalium dioicum Gnaphalium norvegicum ,, pusillum ,, sylvaticum

Hieracium angustifolium
... Bauhini

" Bauhini " blattarioides

" dentatum

" grandiflorum " Halleri

" montanum

" obscurum " præaltum

" Pilosella " piloselloides

" prenanth-

rigidum

" staticifolium Inula germanica

Lactuca perennis

" Scariola " virosa

Leontodon Taraxacum Prenanthes muralis

" purpurea Senecio carniolicus

" erucifolius " Fuchsii

" incanus " uniflorus

Solidago Virgaurea Tussilago alpina

Campanulaceæ.

Campanula barbata

" cæspitosa " carnica

> (Zermatt) garganica

" incisa " linifolia

Campanula persicifolia

- Raineri
- rapunculoides
- rhomboidalis
- Scheuchzeri
- speciosa
- Trachelium

Iasione montana

- Phyteuma betonicifolium
 - hemisphæri
 - cum
 - humile
 - orbiculare
 - pauciflorum
 - spicatum

VACCINIACEÆ.

Vaccinium uliginosum

ERICACEÆ.

- Arbutus Uva-ursi
- Azalea procumbens
- Calluna vulgaris Erica carnea
- Pvrola secunda
- Rhododendron ferrugineum

MONOTROPEÆ.

Monotropa Hypopitys

PLUMBAGINEÆ.

Statice pubescens

PRIMULACEÆ.

Androsace carnea

- Chamæiasme glacialis
 - obtusifolia pennina

Primula farinosa

- latifolia
- viscosa Soldanella alpina

OLEACEÆ.

Fraxinus excelsior

ASCLEPIADACEÆ.

Cynanchum Vincetoxicum

GENTIANACEÆ.

Erythræa Centaurium

Gentiana acaulis

- alpina
 - asclepiadea bavarica
 - brachyphylla
 - campestris
 - ciliata
 - glacialis
 - nivalis
- obtusifolia
- Pneumonanthe
- punctata
- purpurea tenella
- verna

BORAGINACEÆ.

Cynoglossum officinale

- pictum
- Echinospermum Lappula
- Echium vulgare
- Eritrichium nanum
- Myosotis alpestris Onosma echioides

CONVOLVULACEÆ.

Convolvulus arvensis

sepium

SOLANACEÆ.

Hyoscyamus niger Physalis Alkekengi Solanum nigrum

SCROPHULARIACEÆ.

Anarrhinum bellidifolium

Bartsia alpina

Digitalis grandiflora lutea

Euphrasia lutea

minima Odontites

salisburgensis

Linaria alpina genistifolia

minor

vulgaris

Melampyrum sylvaticum

Pedicularis recutita

rostrata

Rhinanthus Crista-galli

major

Verbascum nigrum Thapsus

Veronica alpina

bellidioides

fruticulosa

repens

saxatilis

spicata urticæfolia

VERBENACEÆ.

Verbena officinalis

LABIATÆ.

Ajuga genevensis Calamintha alpina Galeopsis Ladanum Hyssopus officinalis Lamium maculatum Leonurus cardiaca Lycopus europæus Mentha sylvestris Nepeta Cataria Origanum vulgare Prunella grandiflora

hyssopifolia Salvia glutinosa Sideritis scordioides

spinosa?

Teucrium Chamædrys montanum

Scordium Thymus alpinus

PLANTAGINEÆ.

Plantago alpina

PARONYCHIACEÆ. Herniaria alpina

glabra

Scleranthus annuus perennis

CHENOPODIACEÆ.

Chenopodium album

Botrys

crassi-

folium

Scleranthus annuus

perennis

POLYGONACEÆ.

Oxyria reniformis Polygonum Fagopyrum

viviparum

Rumex Acetosella

alpinus

ELÆAGNACEÆ.

Hippophaë rhamnoides

SANTALACEÆ,

Thesium alpinum

EUPHORBIACEÆ.

Euphorbia Cyparissias platyphylla

segetalis

Mercurialis annua

URTICACEÆ.

Humulus Lupulus

PLATANACEÆ.

Platanus orientalis

CUPILLIFER &

Betula alba Fagus sylvatica Ouercus Robur

AMENTIFER &

Salix arenaria

herbacea

pyrenaica reticulata

MONOCOTYLEDONES.

ORCHIDACEÆ.

Epipactis latifolia

rubra Epipogum Gmelini

Goodvera repens Habenaria albida

viridis

Herminium Monorchis Listera ovata

Orchis nigra odoratissima

LILIACEÆ.

Allium fallax

Scheenoprasum Anthericum ramosum

Convallaria bifolia Lloydia serotina

ASPARAGEÆ.

Majanthemum bifolium Paris quadrifolia

MELANTHACEÆ.

Colchicum alpinum autumnale

Tofieldia glacialis palustris Veratrum album

JUNCACEÆ,

Juncus alpinus

bufonius

filiformis

Jacquini trifidus

Luzula campestris

lutea

nivea pediformis

spadicea

spicata

ALISMACEÆ.

Butomus umbellatus Sagittaria sagittifolia

Ротамеж.

Potamogetones

CYPERACEÆ.

Carex atrata

- brachystachys
- cæspitosa
- capillaris
- chordorrhiza
- ciliata
- curvula
 - decipiens?
 - ferruginea?
- firma
 - fœtida
- frigida
- irrigua
- lagopina
- nigra

remota

tenuis

Elyna spicata Eriophorum angusti-

folium

capitatum

Scirpus alpinus

Bæothryon

GRAMINEÆ.

Achnatherum Calama-

grostis Agrostis alpina

- rupestris
- setacea
- stolonifera
- Avena Scheuchzeri
 - sempervirens
 - tenuis

Brachypodium pinnatum

Bromus arvensis

- grossus?
- tectorum
- Cynodon Dactylon Digitaria ciliaris
- Festuca calamaria heterophylla

 - Lemanii pumila
 - tenella
- Lagurus ovatus

Melica ciliata

Panicum miliaceum

Phleum alpinum

- asperum Boehmeri
 - commutatum

Michelii

Poa alpina

- " Balfourii?
- .. cenisia " nemoralis
- Sesleria cærulea disticha
- Setaria glauca
 - " verticillata
- viridis ,,
- Stipa capillata " pennata

Trisetum distichophyllum

CONIFERÆ.

Iuniperus Sabina

Pinus Cembra

sylvestris

ACOTYLEDONES.

FILICES.

Asplenium septentrionale

" viride Athyrium fontanum

Botrychium Lunaria Ceterach officinarum Cystopteris fragilis

Lastrea dilatata

Polypodium calcareum Polystichum aculeatum

" Lonchitis Pseudathyrium alpestre

Allosorus crispus Asplenium lanceolatum

Lycopodiaceæ.

Lycopodium annotinum ,, helveticum

Musci.

Aulacomnion androgy-

num Bartramia pomiformis

Bryum Wahlenbergii Dicranum scoparium Funaria hygrometrica

Gymnostomum curvirostrum

Hedwigia ciliata

Hypnum Crista-castrense

... cupressiforme

Hypnum tenellum " triquetrum

Leskea subrufa Leucodon sciuroides

Mnium serratum Neckera crispa

Orthotrichum Pogonatum alpinum

" urnigerum

Polytrichum commune " sexangulare Racomitrium aciculare

" canescens Sphagnum cymbifolium

Tortula ruralis ,, tortuosa

Zygodon Mougeotii Lichenes.

> Alectoria jubata Borrera furfuracea

Cetraria islandica

" juniperina " nivalis Cladonia rangiferina

Cornicularia vulpina Parmelia caperata

" conspersa " saxatilis Peltidea polydactyla

Peltidea polydactyla Scyphophorus deformis Stereocaulon paschale

EXCURSIONS IN 1859.

Holyrood, Arthur's Seat, Duddingston Loch.

Saturday, 14th May 1859.

Party of about 120 met at Holyrood Palace at 10.30 a.m., thence walked to Arthur's Seat, Hunters' Bog, Samson's Ribs,

Duddingston Loch. Returned by Dunsappie, top of Arthur's Seat, St. Anthony's Chapel, and reached Holyrood a little after 4 p.m.

Plants collected :-

Ranunculus aquatilis

sceleratus Ficaria

Draba verna Sisymbrium Thalianum

Helianthemum vulgare Lychnis Viscaria

Stellaria Holostea Alsine verna

Geranium sanguineum Oxalis Acetosella Anthyllis Vulneraria

Lathyrus macrorrhizus Potentilla verna

Cratægus Oxyacantha (early in flower) Saxifraga granulata

Hippuris vulgaris Anthriscus vulgaris

" sylvestris Valerianella olitoria Petasites vulgaris Vaccinium Myrtillus Myosotis collina

" versicolor Veronica hederæfolia

> " arvensis " serpyllifolia

" serpyllifolia .. Chamædrys

Lamium purpureum

" album Mercurialis perennis

Salix alba

Carex vulgaris

" riparia

Anthoxanthum odoratum Asplenium Adiantum-

nigrum

Trichomanes Ruta-muraria

" septentrionale

Polypodium vulgare Equisetum limosum

Penicuik, Auchendinny, Roslin.

Saturday, 21st May 1859.

Party of about 100 met at North British Railway Station at 8.45 a.m. and proceeded to Penicuik Station. Visited glen near Station. Saw Paper Mills at Valleyfield, walked by the banks of the Esk to Auchendinny and Roslin, which was reached about 4.30 p.m. Returned by train leaving Roslin Station at 5.30. Return tickets, is. 3d.

Numerous plants gathered, among which may be noticed :-

Cheiranthus Cheiri Cardamine amara sylvatica Sisymbrium Thalianum Stellaria uliginosa Moehringia trinervia Prunus Padus Ribes alpinum Carum Carui Myrrhis odorata Adoxa Moschatellina Vaccinium Myrtillus Fraxinus excelsior Veronica montana Pedicularis sylvatica Ulmus suberosa Salix fragilis
,, cinerea
,, Caprea
Allium ursinum
Luzula pilosa
Carex sylvatica
Polypodium Dryopteris
,, Phegopteris
Equisetum umbrosum

Burntisland, Pettycur, Kinghorn.

Saturday, 28th May 1859.

Party of about 130 met at the Edinburgh, Perth, and Dundee Railway Station, and proceeded to Burntisland. Visited the Island, and walked by hills and shore to Pettycur, thence to Kinghorn and Kinghorn Loch, and returned by boat from Burntisland at 4.50 p.m. Return third class fare, 9d.

Among the plants collected were the following:-

Ranunculus aquatilis hederaceus Cheiranthus Cheiri Cochlearia officinalis Thlaspi arvense Reseda lutea Luteola Viola canina Cerastium glomeratum arvense Malva sylvestris " rotundifolia Geranium sanguineum Astragalus hypoglottis Vicia lathyroides (on Island) Rosa spinosissima Myrrhis odorata

Sambucus nigra
Asperula taurina
Centranthus ruber
(near Aberdour)
Valerianella olitoria
Anthemis arvensis
Tragopogon minor
Cynoglossum officinale
Lithospermum arvense
Linaria Cymbalaria
Veronica polita
" Anagallis
" Anagallis

Æthusa Cynapium

Plantago Coronopus Rumex aquaticus (near Kinghorn Loch) Hippophaë rhamnoides Orchis mascula Allium vineale Pinus sylvestris Botrychium Lunaria Equisetum palustre Hypnum rutabulum Parmelia parietina " aquila Lecanora Parella Ramalina scopulorum Æcidium senecionidis Lycoperdon Bovista

Prestonpans, Tranent, Elphinston, Melville Hall, Cousland, Prestonhall, Crichton, Tynehead.

Saturday, 4th June 1859.

Morning rather unpromising. Party of 40 met at the North British Railway Station at 8 a.m. and proceeded to Prestonpans, thence walked to Tranent, Elphinston, Melville Hall, Cousland, Prestonhall, where Mr. Gorrie joined the party and Mr. Campbell from Glasgow; thence to Crichton and Tynehead. Return tickets, 2s.

Among the plants gathered were the following:-

Ranunculus arvensis (Cousland) Berberis vulgaris Nuphar luteum Nymphæa alba (pond at Prestonhall) Papaver Rhœas dubium Argemone Fumaria micrantha Sinapis alba Stellaria uliginosa Malva moschata (not in flower) Geranium sylvaticum Staphylea pinnata Genista anglica (Tynehead) Fragaria elation (Prestonhall) Agrimonia Eupatoria

Silaus pratensis (Cousland and near Melville Hall: not in flower) Tragopogon minor Vinca minor Villarsia nymphæoides (pond at Prestonhall) Anchusa sempervirens Solanum Dulcamara Veronica montana Ajuga reptans (white, at Prestonhall) Plantago media (Cousland) Hippophaë rhamnoides (at Tynehead) Salix aurita .. Caprea Helix

Neottia Nidus-avis

Orchis latifolia

Ornithogalum umbellatum (Prestonhall) Luzula pilosa " sylvatica Alisma Plantago Eriophorum latifolium

Carex remota Nardus stricta Iuniperus communis Ophioglossum vulgatum (Prestonhall) Botrychium Lunaria

Lanark, Cora Linn, Bonnington Falls, Cartland Crags, Banks of Mouse, Cleghorn.

Saturday, 11th June 1859.

Party of 143 met at the Caledonian Railway Station at 6.30 a.m. and proceeded to Lanark. Breakfasted at the Clydesdale Hotel (Irving). Walked with two guides to Cora Linn and Bonnington Falls, thence to Cartland Crags and the banks of the Mouse. Some of the party went to Stonebyres and walked by banks of Mouse to Cleghorn Junction. The greater part returned by train from Lanark at 4.35 p.m. Return tickets, 2s. 6d.: breakfast, 1s. 9d.: guides, 2d.

Among the plants collected were the following:-

Thalictrum flexuosum (woods, Cora Linn) Trollius europæus Aquilegia vulgaris (in profusion in woods near Cora Linn) Aconitum Napellus Nasturtium palustre (Clyde banks near Lanark) Cardamine amara Hesperis matronalis (banks of Mouse) Vicia Orobus ., sylvatica Spiræa salicifolia (Bonnington) Rubus corvlifolius Pyrus Aucuparia

Saxifraga oppositifolia Geum (woods, Cora Linn)

Viburnum Opulus (Mouse River)

Galium boreale .. pusillum (Cora Linn)

Antennaria dioica Doronicum Pardalianches Carduus heterophyllus Hieracium Pilosella

murorum vulgatum Iasione montana Pyrola minor

Rumex aquaticus (near Lanark)

Neottia Nidus-avis (Mouse)	Carex ampullacea
Listera ovata	Milium effusum
Orchis mascula	Avena pratensis
" incarnata	Melica nutans
" latifolia	., uniflora
,, maculata	Poa nemoralis
Gymnadenia conopsea	Asplenium viride
Convallaria majalis	Scolopendrium vulgar
Scirpus sylvaticus	Cystopteris fragilis
Eriophorum latifolium	Polypodium vulgare
Carex remota	Dryopter
	Discount

ris Phegopteris aquatilis

(banks of Mouse) Equisetum arvense glauca umbrosum vulgaris sylvaticum

palustre panicea fulva limosum flava hyemale hirta Lycopodium selaginoides paludosa (Cora Linn)

Ladybank, Strathmiglo, Balvaird Castle, Glenfarg, Abernethy.

Saturday, 18th June 1859.

Party of between 50 and 60 met at the Edinburgh, Perth, and Dundee Railway Station at 6 a.m. and proceeded to Ladybank and Strathmiglo. Breakfasted there at Mr. Senior's Inn in two rooms. Met Mr. Barclay of Cupar, Dr. Lyall of Newburgh, Dr. Troup of Auchtermuchty, Mr. Henderson (a gardener) and his son. Walked to Balvaird Castle and Glenfarg. Met Mr. Barclay at the Bein Inn. Examined Glenfarg Woods, visited castle, and had a fine view of the Carse, the Earn, the Tay, Moncrieff Hill, Kinnoul Hill, and the Highland mountains. Reached Abernethy in time for the train at 3.15 p.m., and came to Edinburgh about 5.50 p.m. Return tickets, 3s. 3d.; breakfast, 1s. 6d.

Among the plants gathered were the following:-

Ranunculus Flammula Papaver Argemone Arabis hirsuta Viola tricolor ,, lutea

Dianthus deltoides Lychnis Viscaria

(abundant in Glenfarg) Cerastium arvense (near Strathmiglo) Malya moschata (Glenfarg)

Geranium sanguineum

" phæum " svlvaticum

" lucidum Genista anglica

(near Ladybank) Prunus insititia Comarum palustre

Sedum reflexum (Balvaird Castle) Anthemis arvensis Matricaria Parthenium

Pyrola minor Anagallis arvensis Solanum Dulcamara Antirrhinum majus

Antirrhinum majus (Abernethy) Scrophularia vernalis (at Baivaird Castle) Mentha viridis and var.

Origanum vulgare Rumex sanguineus

" viridis (in Glentarg)

Salix repens .. fusca

Listera cordata (hill near Abernethy)

Gymnadenia conopsea Habenaria bifolia

Scirpus setaceus Carex binervis

" hirta

" paludosa (Glenfarg) Poa nemoralis Nardus stricta

Asplenium Adiantumnigrum

" Trichomanes " Ruta-muraria Athyrium Filix-fœmina

Cystopteris fragilis Polystichum lobatum

" aculeatum Lastrea Oreopteris Polypodium Dryopteris Lycopodium Selago

Forteviot, Invermay, Muckersie Falls.

Saturday, 25th June 1859.

Party of between 50 and 60 met at Edinburgh and Glasgow Railway Station at 630 a.m. and proceeded by Scottish Central line to Forteviot. Breakfasted at Rutherford's Inn in two rooms. Met Dr. Stirling from Perth, Dr. Lorimer, and others, the latter accompanied the party. Walked by banks of May to Invermay—met the gardener who showed the party through the grounds. Walked up the side of the river to the Muckersie Falls—then visited Clevage Hill, Clevage Loch, returned to Forteviot at 4-29, and reached Edinburgh at 7.50 p.m. Return tickets, 3s. 11d. Breaklast, 2s.

Among the plants collected were the following:-

Lepidium Smithii Viola canina Stellaria nemorum Hypericum humifusum Geranium sylvaticum pratense Genista anglica Trifolium medium Spiræa salicifolia Rubus saxatilis Potentilla fruticosa Circæa lutetiana Sanicula europæa Sambucus nigra Viburnum Opulus Solidago Virgaurea Filago germanica Antennaria dioica Matricaria Parthenium Erica Tetralix Pyrola minor Anagallis arvensis Solanum Dulcamara

Mimulus luteus Stachys Betonica Littorella lacustris Polygonum viviparum Salix repens Listera ovata Epipactis latifolia Orchis latifolia ., maculata Gymnadenia conopsea albida Habenaria bifolia chlorantha Narthecium ossifragum Scirpus lacustris Carex sylvatica Poa nemoralis Scolopendrium vulgare Cystopteris fragilis Equisetum umbrosum Lycopodium clavatum alpinum

Grant's House, Cockburn Law, &c

Saturday, 2nd July 1859.

Party of 45 met at North British Railway Station at 8 a.m. and proceeded to Grant's House—met Mr. James Hardy of Penmanshiel along with two of the schoolmasters in the neighbourhood, and walked by Butterdean across the Eye by

Quixwood to the Abbey St. Bathan's and the Whitadder. Crossed the river by bridge and proceeded to Cockburn Law, 1049 feet above level of the sea. Visited Edin's Hold, an old Pictish or Saxon building, then crossed the Whitadder to the Retreat (belonging to Lord Wemyss) and walked through the woods to an old copper mine near the Straight Leap, and then by the road and moor to Grant's House, returning by train at 5.51 p.m. Return tickets, 2s. 6d.

Among the plants collected were the following :-

Ranunculus aquatilis

,, hederaceus

Papaver somniferum Cardamine amara Hesperis matronalis Viola palustris

" canina Cerastium arvense Stellaria nemorum Geranium sylvaticum

" pratense

" dissectum " lucidum

Genista anglica Trifolium medium

" hybridum Lotus major Rubus suberectus

" nitidus Potentilla reptans Ribes rubrum Sedum Telephium Myriophyllum spicatum Callitriche platycarpa Sanicula europæa Conium maculatum Pimpinella Saxifraga Galium palustre Solidago Virgaurea Antennaria dioica Senecio sylvaticus

" viscosus Pyrola media Verbascum Thapsus Veronica scutellata Melampyrum pratense

Salix pentandra ,, aquatica

Empetrum nigrum Listera cordata

Gymnadenia conopsea Scirpus setaceus Blysmus compressus

Carex pulicaris remota

" pilulifera

" lævigata " binervis

Phalaris arundinacea Lolium italicum Juniperus communis Allosorus crispus Lastrea Oreopteris

Polypodium Dryopteris ,, Phegopteris Lycopodium clavatum

" alpinum

Beattock, Garpol Linn, Beld Crag, Moffat.

Saturday, 9th July 1859.

Party of 66 met at the Caledonian Railway Station at 6.30 a.m. and proceeded to Beattock—breakfasted at the Beattock Inn (Miss Ramsay). Met the Rev. Mr. Little and proceeded with him to Garpol Linn. Also met the Rev. Dr. MacVicar. After visiting the Linn, went to the manse of Kirkpatrick-Juxta and saw Mr. Little's collection of living ferns. Then walked to the Beld Crag—Mr. Little met us there; afterwards proceeded to Moffat, visited the Well, and reached Beattock in time for the train at 5.22 p.m. Return tickets, 4s. Breakfast, 1s. 6d.

Some of the party visited the hills near Moffat, going to the district on Friday, 8th.

Among the plants collected were the following:-

Ranunculus hederaceus Cardamine Impatiens (Kirkpatrick-Juxta) Viola hirta Stellaria nemorum Lepigonum rubrum Tilia grandifolia Genista tinctoria Saxifraga stellaris Sedum Rhodiola , villosum Jasione montana Pyrola secunda Lysimachia Nummularia (Kirkpatrick-Juxta) Symphytum officinale Linaria vulgaris Habenaria chlorantha Carex remota , lævigata , binervis Milium effusum Melica nutans , uniflora Hymenophyllum Wilsoni Allosorus crispus (Moffat Hills)

Kilconquhar, Balcarres, Elie, Largo.

Saturday, 16th July 1859.

Party of between 40 and 50 met at Edinburgh Perth and Dundee Railway Station at 9.30 a.m. and proceeded to Kilconquhar, where we met the Rev. Mr. Milligan minister of the parish, who acted as our guide; met also Mr. Barclay from Charga, who accompanied us from Thornton Junction, and Mr. A. Wilkie of Leven. Visited Kilconquhar Loch and then walked to Balcarres; visited the Den and the high rock—whence we had a fine view. Passed Balcarres House and proceeded by Elie to Largo Links. Reached Largo in time for train at 6.39 p.m. Detained long at Thornton Junction, and did not reach Edinburgh till near 10 p.m.

Among the plants collected were the following :-

Ranunculus sceleratus Nuphar luteum (near St. Monans) Arabis hirsuta Crambe maritima (near Elie) Viola canina (Largo Links) Lychnis Githago Sagina nodosa Hypericum calycinum

- " hirsutum Euonymus europæus Medicago sativa Melilotus officinalis Comarum palustre Rosa rubiginosa Ribes nigrum
- Hippuris vulgaris
 Epilobium hirsutum
 ,, parviflorum
 montanum
- Petroselinum sativum Sium angustifolium Pimpinella Saxifraga Fœniculum vulgare Œnanthe crocata Bidens cernua Centaurea Scabiosa Campanula rapunculoides

Ligustrum vulgare
Cynoglossum officinale
Solanum Dulcamara
Linaria vulgaris
Veronica Anagallis
Atriplex angustifolia
"Babingtonii
Polygonum amphibium
Daphne Laureola
Habenaria viridis
Sparganium ramosum
Alisma Plantago
Scirpus lacustris
Carex disticha

- " arenaria " teretiuscula
- " teretiuscul " paniculata
- ,, vulpina .. hirta
- " ampullacea Holcus mollis

Phragmites communis Glyceria aquatica Triticum repens

" junceum Asplenium marinum (near Elie)

Cathcart, Busby.

Saturday, 23rd July 1859.

Party of 20 met at the Edinburgh and Glasgow Railway Station at 7 a.m. and proceeded to Glasgow. Thence went by omnibus to Cathcart, met Mr. Keddie, also Mr. Crum's gardener, and the Cathcart schoolmaster, and walked by banks of the Cart through various properties, for which permission had been obtained. Visited Cathcart Castle. Crossed the Cart at different points. Walked along the banks of the Kethock and reached Busby about 2 p.m. Dined at Mr. Crum's. Met the minister of Busby, Free Church Minister of East Kilbride, Dr. Ross of Busby, and others. Visited Mr. Crum's garden and houses. Left about 4 p.m. by omnibus for Glasgow, reaching Edinburgh by train at 5,30 p.m.

Among the plants gathered were the following :-

Trifolium medium Vicia sylvatica Rubus carpinifolius Fragaria elatior Agrimonia Eupatoria Rosa villosa ., canina, var. " arvensis Sedum Telephium ., acre (var., in woods) Æthusa Cynapium Arctium maius Hieracium denticulatum Pyrola secunda (said to be got in woods near Busby) Campanula latifolia (chiefly white) Symphytum officinale

Verbascum Thapsus Veronica montana Plantago maritima (on rock on banks of Cart) Atriplex erecta Polygonum Bistorta Epipactis latifolia Ruscus aculeatus Alisma Plantago Milium effusum Poa nemoralis (a peculiar form like Poa Balfourii) Bromus asper Triticum caninum Polypodium Dryopteris Phegopteris Ophioglossum vulgatum (Cathcart woods)

Clova.

Friday, 12th August 1859.

J. H. Balfour, Thomas Barclay, William Bell, William Brand, J. B. Corbett, Alexander Graham, J. Labonté, Arthur Le Deant, John Linton, James M'Nab, T. Pougnet.

The above party of 11 left Edinburgh on Friday, 12th August, at 6 a.m. They travelled by the Edinburgh, Perth, and Dundee Railway, reached Perth about 9 a.m. and breakfasted there, arrangements having been made for them by Dr. Lauder Lindsay. They left Perth at 10.18 for Kirriemuir where they arrived about 1 p.m., the train being late. The party had return 3rd class tickets available for 14 days, price 7s. 8d.

At Kirriemuir young Findlay met the party with a cart and took charge of the baggage along with provisions for the Milltown of Clova. The party walked by Cortachy to Dykehead, where they rested for lunch. There is a great improvement in the place of late. In the woods on starting gathered Pprola media, Trientalis europea, Listera cordata. From Dykehead walked up the glen to Clova, which was reached about 7 p.m. Collected on the way Saxifraga aixides, Menn athamanticum, Gymnadenia albida, Lycopodium alpinum, and a peculiar white-flowered variety of Carduns heterophyllus.

On arriving at Clova they were accommodated in the hall, where straw-beds were made up for the party, the forms, tables, and boards for the Clova festivities being called into requisition. Mr. M:Nab and Dr. Balfour had beds in the inn in consequence of the non-arrival of Lord Cranston and his keepers, who had secured all the accommodation at the inn for his shooting quarters. Found old Charles Findlay in good health, though older looking than formerly and somewhat deaf. Mary, his daughter, still takes an active charge in the inn. On our way up the glen met the Rev. Mr. Smith, the clergyman of the place. Clova is now to be made a parish extending about three miles below Milltown and about four miles above it.

Saturday, 13th August 1859.

Party started between 8 and 9 a.m. for Glen Dole. Went on the south side of the Esk. Met old John Ogilvy,

who knew George Don and had also met Drummond. He is over 80 years of age. Picked on the way Malaxis paludosa and Gymnadenia albida. Botanised on the north side of Glen Dole. Rain came on and continued all day. The party were thoroughly wet. Several returned early. The party examined Glen Dole ully and gathered:—

Silene acaulis Astragalus alpinus Rubus saxatilis Dryas octopetala Sibbaldia procumbens Saxifraga oppositifolia

- " stellaris " hypnoides, var. Epilobium angustifolium
- " alsinifolium " alpinum Linnæa horealis

Linnæa borealis Erigeron alpinus Gnaphalium supinum Saussurea alpina Hieracium alpinum "Lawsoni Sonchus alpinus Arctostaphylos Uva-ursi Pyrola media Veronica saxatilis Salix reticulata Carex atrata Poa Balfourii Festuca vivipara

Monday, 15th August 1859.

Several of the party this day were unable to take much exercise in the way of walking. The rest of the party started about 8.50 a.m. and crossed the bridge of Clova and then walked along the side of the Esk as far as the cottage where Isabella M'Kenzie lives, a person who has neither hands nor feet. The deformity is congenital. The arms end in rounded extremities without hands. The arm on the right side is shorter than that on the left. The legs are deficient from above the knees. She is intelligent, reads well, and is able to write by holding a pen in her teeth. She was 38 on Sunday, 14th August 1859. In the house where she resided I met the daughter of the former game-keeper (now dead) at Loch Callater, in whose house I once stayed for a night and whom I often visited on botanical excursions.

We then went on to Glen Fee, gathering in Glen Clova Malaxis paludosa and Hieracium denticulatum. Visited the Oxytropis cliff and gathered Oxytropis campestris in fruit and flower, Epilobium angustifolium, Woodsia hyperborea. This fern seems to occur sparsely from the Oxytropis cliff up to the waterfall at the head of the glen. We got also variety of *Tofieldia* palustris and Cystopteris fragilis. Crossed over to the opposite side of the glen and endeavoured to get Carex Grahami, but did not succeed. The station of this plant seems to be lost.

Gathered :-

Juneus trifidus

triglumis

Rubus Chamæmorus Luzula spicata Sibbaldia procumbens Carex pulicaris Cornus suecica Vahlii Gnaphalium supinum atrata Veronica alpina rigida Salix lanata vaginata Lapponum pulicaris Myrsinites.var.arbuti-Asplenium viride Pseudathyrium alpestre herbacea var. flexile

On our way home about 6 visited Robert Welsh at Acharn. His sister kindly gave us milk. The day was fine, very clear views, beautiful sunset.

Polystichum Lonchitis

Tuesday, 16th August 1859.

The morning was bright and seemed to promise well. Six of the party—Dr. Balfour, MrNab, Graham, Bell, Linton, and Rutherford—started about 8,30 a.m., walked to Acharn, thence proceeded directly on the eastern side of Glen Dole to Jock's Road, Visited falls of White Water, and then walked along its banks for about a quarter of a mile, and turned to the west over the hills on the left at the place where there is a depression in the ridge, and reached at once Little Gilrannoch. Picked Cochlearia gravulandica, Lychnius alpinua (mostly in fruit), Cherkeria seduides, and Armeria maritima. On the stream coming from the hill the party gathered Epilobium alsimifolium, Carex aquatilits, Alopecturus alpinus, Phleum alpinum, and Pseudadhyrium alpestre, var. Rain and mist had set in, and we were thoroughly drenched and very cold. Guided ourselves by compass. Returned to White Water, and walked along the banks in a northerly direction,

gathering Sibbaldia procumbens, Epilobium alpinum, Gnaphalium supinum, Juncus castaneus. In returning crossed to the Dole to join Jock's Road. Gathered Rubus Chamemorus (sparingly in fruit), Cornus suecica, Pseudathyrium alpestre (in abundance) and some forms apparently flexile, also varieties of Albyrium Filits-femina and of Lastrea dilatata. On full-grown specimens of Pseudathyrium alpestre saw some fronds rather contracted bearing fructifications. Others were expanded and rounded in the pinum bearing no sporangia. It is probable that P, flexile is merely a barren state of the plant with the pinume more rounded and scattered. Plants of all varieties were taken for the Botanic Garden so as to enable us to determine them. Returned by Glen Dole and reached Clova about 6,50 p.m.

Wednesday, 17th August 1859.

This morning was very fine and warm, sun shone beautifully, and the views all around were splendid.

Ten of the party started at 9,30 for Loch Brandy; Messrs. Le Deant and Labonté remained at home. The party visited Loch Brandy and ascended to the summit of the mountain, whence we had a splendid view of Lochnagar and all the mountains around. The distant views were particularly clear.

Among the plants gathered were :-

Thalictrum alpinum
Subularia aquatica
Cerastium alpinum
Potentilla alpestris
Sibbaldia procumbens
Gnaphalium supinum
Saussurea alpina
Lobelia Dortmanna

Littorella lacustris Salix herbacea Sparganium natans Pseudathyrium alpestre Polystichum Lonchitis Isoëtes lacustris Polytrichum alpinum

Azalea procumbens

On our return went to the Esk and gathered specimens of Cardaus heterophyllus, Hieracium denticulatum, and Carex aquatilis. Dined at 5,30. About 6 p.m. Mr. Barclay appeared, having been detained at Cupar longer than he intended.

Thursday, 18th August 1859.

The party broke up to-day. Mr. M'Nab took charge of the party to Kirriemuir, while Dr. Balfour, Mr. Graham, and Mr.

Linton went to Ballater. Of the Kirriemuir party, Mr. Barclay and Mr. Pougnet went to Aberdeen and Peterhead, Mr. Le Deant and Mr. Labonté went to Perth, the rest to Edinburgh.

The Ballater party left Clova at 6.15 a.m. and ascended by Ben Driesh to the west of Loch Brandy. The hills were covered with mist. The party required the compass to guide them. The direction taken was N.N.E. The road was very rough, and the journey fatiguing. After three hours' travelling there was a partial clearance of the mist and part of Lochnagar was seen, which helped to direct the party. We joined the Glen Muick road between 4 and 5 miles from Ballater and reached the latter place about 12.45.

On the way we gathered :-

Pyrola media Trientalis europæa Linaria repens Melampyrum sylvaticum Betula nana

On 19th August Mr. Graham and Mr. Linton visited Balmoral. On 22nd August Dr. Balfour visited Lochnagar.

EXCURSIONS IN 1860.

Penicuik, Auchendinny, Roslin.

Saturday, 12th May 1860.

Party of 120 met at the North British Railway Station at 9 a.m. and proceeded to Penicuik, thence walked by banks of Esk to Auchendinny and Roslin and returned from Roslin Station at 5-30 p.m. Return tickets, 1s. 3d.

Vegetation very far behind its usual state at this season.

Collected :-

Polypodium Dryopteris ,, Phegopteris (with scarcely a leaf expanded)

Equisetum umbrosum

50 or 60 species of flowering plants were gathered, besides many mosses and lichens, also Morchella esculenta.

Gorebridge, Arniston, Dalhousie.

Saturday, 19th May 1860.

Party of 110 met at the North British Railway Station at 11.25 a.m. and proceeded to Gorebridge, thence walked to Arniston, having permission from Mr. Dundas to visit his grounds. Walked along banks of Esk and reached Dalhousie at 5.16 p.m., returning to Edinburgh at 5.41 p.m. Return tickets, 1s.

Gathered the usual Arniston plants, amongst them :-

Aconitum Napellus Draba muralis (near the garden) Chrysosplenium alternifolium Doronicum plantagineum Pulmonaria officinalis Arum maculatum

North Queensferry, Inverkeithing, St Davids.

Saturday, 26th May 1860.

Party of 100 met at Granton Pier at 8 a.m. and proceeded to Queensferry by steamboat, thence walked to Inverkeithing and St. Davids, and returned to Queensferry, joining the boat about 6 p.m. Return tickets, 1s.; Granton Pier, 2d.; Queensferry Pier, 6d.—in all, 1s. 8d. Much thunder and lightning with heavy showers—rain and hail.

Among the plants gathered were :-

Erysimum orientale (near Queensferry) Camelina sativa (near St. Davids) Diplotaxis tenuifolia Viola canina Sedum villosum Allium Schœnoprasum (on shore near Inverkeithing)

Many sea-weeds. In all about 160 specimens collected.

Mid-Calder, Meadowbank, Dalmahoy, Ravelrig, Water of Leith, Currie.

Saturday, 2nd June 1860.

Party of 80 met at the Caledonian Station at 10.20 a.m. and proceeded to Mid-Calder, thence walked by Meadowbank to Dalmahoy, Ravelrig, Water of Leith, and Currie. Returned from Currie by train at 6.11 p.m. Fare, 18.

Among the plants gathered were:-

Trollius europæus Corydalis formosa Viola canina " lutea Geranium columbinum Linnæa borealis Pyrola minor Trientalis europæa Scrophularia vernalis Listera cordata
Narcissus Pseudo-narcissus
Tulipa sylvestris
Equisetum hyemale
Agaricus campestris
, fascicularis
Polyporus squamosus
Lycoperdon Bovista

Boldside, Abbotsford, Rymer's Glen, Eildon Hills, Melrose.

Saturday, 9th June 1860.

Party of 110 met at North British Railway Station at 7.30 a.m. and proceeded to Abbotsford Ferry, Boldside. Crossed the ferry, walked through the woods to Abbotsford—saw house and garden—(Jeffreys and his wife showing the former and the gardener showing the latter). Walked under direction of Robert Young, the gamekeeper, to Rymer's Glen, thence proceeded to the Eildon Hills, and walked to Melrose. Saw the Abbey, and returned by train at 3.53 p.m., reaching Edinburgh before 6 p.m. Return tickets, 2s. 6d.

At Abbotsford Ferry only ten were taken over each time in the boat, and this made us very late. The visit to Abbotsford House also consumed much time. The excursion was therefore much curtailed Among the plants gathered were the following:-

Sinapis alba Geranium sylvaticum Pyrus Aria

" Aucuparia

" Malus (very large, in beautiful flower, near Eildons) Valeriana dioica (Eildons) Antennaria dioica Anthemis arvensis Vaccinium Vitis-Idæa Symphytum officinale

(Abbotsford)

Myosotis sylvatica
(blue and white, in
Abbotsford woods)
Veronica montana
Pinguicula vulgaris
Polygonum Bistorta
Listera cordata
Poa nemoralis
Juniperus communis
Allosorus crispus (Eildons)
Polypodium Dryopteris
Botrychium Lunaria

Lycopodium alpinum

Bridge of Earn, Moncrieff Hill, Orchardneuk, Kinfauns, Kinnoul Hill, Perth.

Saturday, 16th June 1860.

Party of 160 met at Edinburgh, Perth and Dundee Railway Station at 6 a.m. and proceeded to the Bridge of Earn, where the greater part breakfasted at Mrs. Hill's Inn and on the verandah; then the party walked to Moncrieff Hill conducted by Mr. Bisset, factor to Mr. Thomas Moncrieff, and accompanied by the gamekeeper; then proceeded to banks of the Tay at Orchardneuk, crossed the river in the fishing-boats, and walked to Kinfauns under the direction of the factor, Mr. Bell. thunderstorm came on and the party were sheltered in the barn. Afterwards visited Kinfauns and Kinnoul Hill, walked to Perth, and returned by train at 6.15 p.m. Party met at Bridge of Earn:-Mr. John Sim, Mr. Sergeant, Dr. Laing, Rev. Mr. Kirkwood, also party from Perth Asylum, Mr. Christie, and others. Some of the party visited Scone and Methven. Return tickets, Bridge of Earn, 3s.; breakfast, 1s. 6d.; boat and ferry, id.; Perth to Bridge of Earn, 4d .- total, 4s. 11d.

Among the plants collected were the following:-

Ranunculus aquatilis Berberis vulgaris Nymphæa alba Papaver dubium Argemone Fumaria micrantha (abundant on Moncrieff and Kinnoul Hills) Helianthemum vulgare Viola sylvatica canina (on Moncrieff Hill) Lychnis Flos-cuculi Stellaria graminea uliginosa Mœhringia trinervia Sagina procumbens subulata Spergula arvensis Claytonia alsinoides (introduced at Moncrieff House) Montia fontana Malya moschata (near Perth) " rotundifolia Tilia parvifolia Geranium sanguineum (Moncrieff Hill) phæum pratense pyrenaicum (Quarry near Perth) molle dissectum columbinum (abundant on rocks near Orchardneuk)

lucidum

(Moncrieff Hill)

Robertianum

Erodium cicutarium (Moncrieff and Kinnoul Hills-very small on top of latter) Trifolium arvense striatum (Quarry near Perth) Prunus Avium Padus Fragaria elatior (Kinnoul) Potentilla argentea (Quarry near Perth) Poterium Sanguisorba (Quarry near Perth) Rosa villosa (Quarry near Perth) " systyla? Pyrus Aucuparia Aremonia agrimonioides (Quarry near Perth) Saxifraga umbrosa (at Moncrieff House) granulata Sedum Telephium (Kinnoul) album (near Barnhill Toll) acre Myrrhis odorata Œnanthe crocata Peucedanum Ostruthium (near Ochardneuk) Cornus sanguinea (Moncrieff)

Lonicera Xylosteum

Valerianella olitoria

(Quarry at Perth)

Dipsacus sylvestris (Kinnoul) Antennaria dioica (Moncrieff Hill)

Inula Helenium Anthemis arvensis

Tanacetum vulgare Doronicum Pardalianches

Hieracium Pilosella Vaccinium Oxycoccus

Vaccinium Oxycoccus (Methven)

Erica cinerea Pyrola minor Moneses grandiflora

(woods at Scone) Trientalis europæa

(Methven) Cynoglossum officinale sylvaticum

(near Perth) Anchusa sempervirens Scrophularia vernalis

Scrophularia vernalis (in great quantity on wall on Moncrieff Hill)

Veronica hederæfolia

" arvensis " serpyllifolia

" officinalis

" Chamædrys

" Beccabunga

" peregrina (naturalised near Perth) Mentha sylvestris

Origanum vulgare

Lamium maculatum

(Barnhill Toll) Scleranthus annuus Chenopodium Bonus-

Henricus Rumex sanguineus (Moncrieff Hill)

Carpinus Betulus Salix fragilis, var. Russel-

liana

" Caprea Populus nigra Epipactis latifolia

Orchis latifolia | Narcissus poeticus

(Moncrieff) Narthecium ossifragum

Lemna trisulca Aira præcox

" flexuosa Glyceria aquatica

(Moncrieff Hill) Asplenium Adiantum-

nigrum , Trichomanes

Ceterach officinarum (Kinnoul)

Lastrea spinulosa (Methven)

Polypodium Dryopteris

Equisetum arvense .. palustre

" limosum Lycopodium clayatum

(Moncrieff Hill)

Drem, Gullan, Luffness, Aberlady, Gosford, Longniddry.

Saturday, 23rd June 1860.

Party of 50 or 60 met at the North British Railway Station at 8 a.m. and proceeded to Drem, thence walked to Gullan, Luffness,

Aberlady, Gosford, and returned from Longniddry at 3.6 p.m. Return tickets, 1s. 4d.

Gathered many good plants:-

Cerastium arvense
Geranium sanguineum
" pusillum
Saxifraga tridactylites
(wall near Gosford)
Anagallis cœrulea
Cynoglossum officinale

Hyoscyamus niger Utricularia vulgaris Hippophaë rhamnoides Listera ovata Potamogeton rufescens "obtusifolius Botrychium Lunaria

Kincardine, Culross, Torryburn, Charlestown.

Saturday, 30th June 1860.

Partyof 50 met at Granton at 8 a.m. and proceeded by the Stirling steamboat to Kincardine, thence walked by the shore to Culross, Torryburn, and Charlestown, where they joined the boat at 4.50 p.m. Return tickets—boat, 1s.; pier (Granton), 2d.; pier (Kincardine), 2d.

Among the plants gathered were the following:-

Corydalis claviculata Lepidium Smithii Lepigonum marinum Creae lutetiana Conium maculatum Apium graveolens Dipsacus sylvestris Matricaria Parthenium Solanum Dulcamara Rumex aquaticus Populus alba Gymnadenia conopsea Scirpus maritimus Carex vulpina Hordeum pratense "maritimum Osmunda regalis

Kinross, Loch Leven, Benarty, Navity, Lochore, Lochgelly.

Saturday, 7th July 1860.

Party of about 100 met at the Edinburgh, Perth, and Dundee Railway Station at 6 a.m. and proceeded to Kinross by Thornton and Cowdenbeath. Reached Kinross about 9 and met Mr. Barclay (who had joined us at Thornton), the Rev. Mr. Peters, Mr. Little, Mr. Williamson, factor for Kinross Estate; as well as Messrs. A. Dickson, Ramsbotham, and Bell, who had been at the Rumbling Bridge. Breakfasted in the Town Hall, which had been secured by Mrs. Archer of the Salutation Hotel, and after breakfast visited Kinross grounds and house. Had a fine view from top of house (Sir Graham Montgomery's). Visited the Island and Loch Leven Castle in boats. Landed at Kinross House pier and walked by the north and east shore of loch to Benarty. Went over the hill to Navity and Lochore, and joined the train at Lochgelly Station about 6.57 p.m. Return tickets, 2s. 10d.; breakfast, 1s. 6d.; share of boats, 3d.—in all, 4s. 7d.

Among the plants collected were the following:-

Ranunculus Flammula

- , reptans
- ,, acris
- " repens Cheiranthus Cheiri

Cardamine pratensis Helianthemum vulgare

Viola lutea Silene inflata

Lychnis diurna Arenaria serpyllifolia Radiola Millegrana Geranium sylvaticum

Geranium sylvaticum Anthyllis Vulneraria Lotus corniculatus

Vicia hirsuta ,, sativa

Lathyrus macrorrhizus Comarum palustre Cratægus Oxyacantha

(in full flower) Parnassia palustris Sedum acre Drosera rotundifolia Conium maculatum

Conium maculatum
Bunium flexuosum
Chærophyllum temulum
Anthriscus sylvestris
Torilis Anthriscus

Galium Cruciata

Galium saxatile

" palustre Valeriana officinalis

Antennaria dioica

Pyrola minor Trientalis europæa

Pedicularis palustris

" sylvatica Pinguicula vulgaris

Scleranthus annuus

Polygonum Convolvulus

, Persicaria

" viviparum Salix repens

Listera ovata Gymnadenia conopsea

Habenaria bifolia

Iris Pseudacorus Potamogeton gramineus

- Carex disticha ovalis
- " hirta

Triticum caninum ... repens

Asplenium Adiantumnigrum

nigrum ,, Ruta-muraria

Cystopteris fragilis Lycopodium clavatum

Canal, Slateford, Colinton, Bonaly, Pentlands, Habbie's Howe, Currie.

Saturday, 14th July 1860.

Party of between 25 and 30 met at the Canal Basin, Port Hopetoun, at 9 a.m., and walked by banks of Canal to Slateford, Colinton, Bonaly, Pentlands, Compensation Ponds, and Habbie's Howe, and returned towards Currie and Colinton, reaching Edinburgh about 6.15 p.m.

Among the plants collected were the following:-

Ranunculus aquatilis Arabis hirsuta Geranium phæum

" sylvaticum " pratense Trifolium medium

Rosa rubiginosa " lutetiana Sedum villosum Epilobium angustifolium Galium pusillum Valeriana pyrenaica Solidago Virgaurea

Matricaria Parthenium Hieracium prenanthoides Rumex viridis Empetrum nigrum Habenaria viridis Potamogeton crispus pusillus

Carex stellulata

" pilulifera

" binervis " fulva

Poa nemoralis

Festuca gigantea

" arundinacea Triticum caninum Juniperus communis Cystopteris fragilis Polystichum aculeatum

Polystichum aculeatum Lastrea Oreopteris Lycopodium clavatum

Mr. C. Cowan stated that Allosorus crispus grows on Carnethy Hill, and Rubus Chamæmorus on the hills between Carnethy and the Black Hill.

Callander, Ben Ledi.

Saturday, 21st July 1860.

Party of about 100 met at the Scottish Central Railway Station at 6.30 a.m. and proceeded to Callander. Breakfasted there at M'Gowan's Inn, and then walked to Ben Ledi, and returned by train at 6.25 p.m. Return tickets, 4s. 4d.; breakfast, 1s. 6d. Some of the party (12 or 15) went by a coach to the Trossachs and returned. The day was favourable, and many good plants were collected. Mr. Buchan, from Dunblane, accompanied the party, also several gardeners from the district. Mr. Skinner met us at Callander. He had arranged the breakfast with the innkeeper.

Among the plants gathered were the following:-

Thalictrum alpinum
Caltha minor, var.
Trollius europæus
Nuphar luteum) (loch at
Nymphæa alba J Callander)
Corydalis claviculata
Draba incana
Cochlearia officinalis, var.
Subularia aquatica
(Loch Lubnaig)

(Loch Lubnaig) Viola lutea, var. purpurea Silene acaulis Stellaria uliginosa Hypericum Androsæmum

" humifusum Tilia parvifolia Vicia sylvatica Prunus insititia

Rubus saxatilis " Chamæmorus Alchemilla alpina Sibbaldia procumbens Saxifraga oppositifolia

> " nivalis " stellaris " aizoides " hypnoides

" hypnoides Sedum Telephium

" anglicum Lythrum Salicaria Epilobium alsinifolium Circæa alpina
Pimpinella magna
(Leny avenue)
Œnanthe crocata
Meum athamanticum
Cornus suecica
Galium boreale
"Mollugo
Solidago Virgaurea
Antennaria dioica

Epilobium alpinum

Antennaria dioica
Chrysanthemum segetum
Saussurea alpina
Hieracium alpinum
Apargia autumnalis

Lobelia Dortmanna (Loch Lubnaig) Vaccinium Vitis-Idæa

" uliginosum " Oxycoccus Armeria maritima

(Ben Ledi) Lysimachia vulgaris

(Loch Lubnaig)
" Nummularia
Gentiana campestris
Utricularia intermedia

Scutellaria galericulata (Trossachs) Polygonum viviparum Oxyria reniformis Myrica Gale

Milium effusum Quercus sessiliflora Holcus mollis Salix herbacea Triodia decumbens Populus nigra Poa montana Empetrum nigrum Listera cordata Triticum caninum Gymnadenia albida Nardus stricta Habenaria chlorantha Hymenophyllum Wilsoni Narthecium ossifragum Pteris aquilina Tofieldia palustris Allosorus crispus Juneus trifidus Blechnum boreale Asplenium viride supinus triglumis Trichomanes Athyrium Filix-fæmina Potamogeton obtusifolius Rhynchospora alba Cystopteris fragilis Carex dioica dentata stellulata Polystichum Lonchitis ovalis aculeatum rigida Lastrea Oreopteris vulgaris Filix-mas glauca dilatata irrigua? (Mr. A. Bell; Polypodium vulgare Dryopteris something like C. Phegopteris limosa, but seems to be the irrigua) Botrychium Lunaria Lycopodium Selago præcox pallescens clavatum binervis alpinum fulva selaginoides

Mr. A. Bell was of great assistance in showing us localities for rare plants. He picked Carex irrigua and Vaccinium Oxycoccus.

Isoëtes lacustris

(Loch Lubnaig)

flava

hirta ampullacea

Œderi

Aberfeldy, Moness

August and September 1860.

Plants found near Aberfeldy, at Moness, and on hills near these places:—

Moness:-

Trollius europæus (woods) Berberis vulgaris (woods) Hypericum humifusum Agrimonia Eupatoria Rosa villosa Saxifraga aizoides (hills above) Circæa alpina Galium boreale Solidago Virgaurea Antennaria dioica Carduus heterophyllus Hieracium prenanthoides Campanula latifolia Arctostaphylos Uva-ursi (hills above) Trientalis europæa (Falls) Melampyrum sylvaticum (abundant) Calamintha Clinopodium Listera ovata (above)

Near Aberfeldy:-

Corydalis claviculata (top of cottages) Prunus Padus

Fergan:-

Sagina subulata
Alchemilla alpina
Saxifraga oppositifolia
"izoides
Callitriche autumnalis
Vaccinium Vitis-Idæa
Arctostaphylos Uva-ursi

Near Dull:-

Lamium album

Carex remota

- .. pallescens
- " sylvatica
- ., binervis
- Milium effusum
- Melica uniflora
- Pteris aquilina
- Blechnum boreale
- Athyrium Filix-fæmina
 - " " var. convexum

Polystichum aculeatum Lastrea Oreopteris

- .. Filix-mas
 - .. dilatata
- Polypodium vulgare
 - " Dryopteris
- " Phegopteris Equisetum umbrosum

Lycopodium selaginoides (above)

Rubus suberectus Pyrus Malus

Sparganium natans Carex pauciflora

" pilulifera Asplenium viride

- Lycopodium Selago
 - ,, clavatum alpinum

Weem:-

Calamintha Clinopodium Melica uniflora Poa nemoralis (woods) Pteris aquilina Asplenium Adiantumnigrum
,, Trichomanes
Cystopteris fragilis
Polystichum aculeatum

In grounds at Taymouth:-

Nuphar luteum Nymphæa alba Spiræa salicifolia Antennaria margaritacea Botrychium Lunaria

Ben Lawers.

Tuesday, 4th September 1860.

Party, consisting of J. H. Balfour, W. Keddie, and W. Bell, left Aberfeldy at 7 a.m. for Lawers Inn, where they remained until Wednesday evening. On 4th September, visited Ben Lawers. Examined the rocks in the corrie, and returned to the inn about 7 p.m. The inn kept by W. Anderson and his daughter is very comfortable, there is a public room, a single-bedded and a double-bedded room.

The following are some of the plants collected on Ben Lawers:—

Thalictrum alpinum Anemone nemorosa Ranunculus acris Caltha palustris Trollius europæus Draba incana " verna Cochlearia officinalis

" alpina Viola lutea Silene acaulis Cerastium alpinum Cherleria sedoides Sagina subulata Montia fontana Oxalis Acetosella Anthyllis Vulneraria Rubus saxatilis

" Chamæmorus Potentilla alpestris Sibbaldia procumbens Alchemilla alpina Saxifraga oppositifolia

" nivalis " aizoides

" hypnoides, var. Parnassia palustris Sedum Rhodiola Epilobium alsinifolium
, alpinum
Angelica sylvestris
(peculiar form)
Heracleum Sphondylium
(high up)
Cornus suecica
Galium boreale
Solidago Virgaurea
Erigeron alpinus
Antennaria dioica, var.
Gnaphalium pusillum
Saussurea alpina
Hieracium alpinum

" Lawsoni Apargia autumnalis, var. Taraxaci

Vaccinium Vitis-Idæa " uliginosum

" Myrtillus Arctostaphylos Uva-ursi Armeria maritima, var.

alpina Veronica serpyllifolia

" humifusa " saxatilis Polygonum viviparum Oxyria reniformis Salix fusca, var. repens " reticulata

Empetrum nigrum

Tofieldia palustris Juncus triglumis Luzula spicata Potamogeton oblongus Carex pulicaris

" ovalis

" atrata " rigida

" vulgaris " glauca

" pilulifera " pallescens

" binervis

" flava " pulla

Phleum commutatum? Agrostis vulgaris

Triodia decumbens Poa alpina

" Balfourii Festuca vivipara Juniperus communis

Woodsia hyperborea (in considerable quantity on steep cliffs, very diffi-

cult of access)
Polystichum Lonchitis
Lastrea dilatata, var.
Polypodium alpestre

The station for *Cystopteris montana* was examined. No specimens were seen.

Wednesday, 5th September 1860.

This day again ascended Ben Lawers and went direct to the summit; fine view; clouds and sunshine; strong wind on top. After visiting summit and gathering Saxifraga eermaa, Draba rupestris, and Cochlearia alpina, the party descended to the rocks below, where two large patches of snow were lying, one

of them $3\frac{1}{2}$ feet thick. Saussurea alpina was seen and Woodsia, also Erigeron alpinus and Draba incana.

Returned to the inn about 5 p.m. and reached Aberfeldy by coach about 9.30 p.m.

Schiehallion.

Friday, 7th September 1860.

Party consisting of J. H. Balfour, W. Keddie, and W. Bell, visited Schiehallion. Went by Weem, Dull, Coshieville, and Garth Castle to a farmhouse at the foot of the hill, where we ascended. Hill very precipitous; covered with quartz rocks, porphyry, and trap-dyke through it. Dry, barren hill about 3600 feet high.

Among the plants collected were the following:-

Thalictrum alpinum Genista anglica Rubus Chamæmorus Saxifraga aizoides

" stellaris " hypnoides Hippuris vulgaris (near Loch of Kinnaird) Cornus suecica Pyrola media

Polygonum viviparum Salix arbutifolia Listera cordata

Tofieldia palustris

A specimen of $Polystichum\ Lonchitis$ was gathered with 130 fronds on it.

Plants seen on the summit were :-

Rubus Chamæmorus (very high) Vaccinium Myrtillus Empetrum nigrum Carex rigida

Festuca ovina vivipara Lycopodium Selago

and the usual mosses and lichens, such as species of Andrewa, Polytrichum, Hypnun denticulatum, Cladonia rangiferina, Cetvario islandica, Lecidea, Scyphophorus bellidiflorus, Trichoslomum lanuginosum.

EXCURSIONS IN 1861.

Canal, Slateford, Water of Leith, Colinton, Woodhall.

Saturday, 11th May 1861.

Party of about 120 met at the Canal Basin, Port Hopetoun, at 11 a.m., and proceeded by Canal banks to Slateford, then by banks of Water of Leith to Colinton and by road to Woodhall; returned about 5 p.m. to Edinburgh.

Among the plants collected were the following :-

Anemone nemorosa Ranunculus auricomus Ficaria

Berberis vulgaris Corydalis solida

(walls near Slateford) ,, lutea

Barbarea vulgaris Arabis hirsuta Cardamine amara

> " pratensis " sylvatica

Draba verna Viola sylvatica Lychnis diurna Stellaria Holostea Mæhringia trinervia Geranium phæum

,, molle Prunus communis, var.

spinosa " Avium Geum rivale

Pyrus Aucuparia Saxifraga granulata Myrrhis odorata Galium Cruciata Valerianella olitoria Doronicum Pardalianches Primula vulgaris

Symphytum tuberosum Veronica hederæfolia

Lamium amplexicaule ,, purpureum

" album

Orchis mascula Allium ursinum

Lilium Martagon Arum maculatum

(woods near Slateford)

Scolopendrium vulgare (Colinton)

Cystopteris fragilis (near Woodhall)

Bryum capillare Hypnum commutatum

" striatum " ruscifolium

.. cupressiforme

" rugosum

Burntisland, Aberdour.

Saturday, 18th May 1861.

Party of about 130 met at the Edinburgh, Perth, and Dundee Railway Station at 9.30 a.m. and proceeded to Burntisland, thence walked to Aberdour and returned to Burntisland for train at 4.50, reaching Edinburgh at 5.50 p.m. tickets, 8d.

Among the plants gathered were the following :-

Ranunculus auricomus Cochlearia officinalis danica · Sisymbrium Thalianum Lepidium Smithii

Thlaspi arvense Viola hirta sylvatica

canina Silene maritima Geranium sanguineum

phæum (Aberdour Castle and churchvard)

Medicago maculata (Aberdour Castle, below the churchvard) Poterium Sanguisorba

(not in flower)

Primula veris

Æthusa Cynapium Valerianella olitoria Armeria maritima

Pulmonaria officinalis Solanum Dulcamara Veronica hederæfolia Lamium amplexicaule

incisum

purpureum album

Plantago Coronopus Rumex scutatus

Daphne Laureola Mercurialis perennis

(both diœcious and monœcious)

Allium Scorodoprasum

vineale Arum maculatum Blysmus rufus

Carex præcox Sclerochloa loliacea

Scolopendrium vulgare Botrychium Lunaria

Linlithgow, Carriden, Blackness Castle, Hopetoun, Niddrie Castle, Winchburgh.

Saturday, 25th May 1861.

Party of 80 met at the Edinburgh and Glasgow Railway Station at 7 a.m. and proceeded to Linlithgow. Visited the Palace and Loch. Walked to Carriden, thence to Blackness Castle and Hopetoun Woods. Mr. MrLaren, the forester, accompanied the party through the woods, and Mr. Garvie, the gardener, conducted the party through the gardens and planthouses. Walked to Niddrie Castle and Winchburgh, met train , at 4.2 and reached Edinburgh about 5 p.m. Return tickets, 1s. 6d.

Among the plants collected were the following :-

Ranunculus aquatilis Flammula Berberis vulgaris Chelidonium majus Draba verna (Blackness) Sisymbrium Thalianum Brassica Rapa Lepidium Smithii Viola lutea Cerastium glomeratum Acer campestre (near Hopetoun) Rosa rubiginosa Pyrus Malus Saxifraga tridactylites (Blackness Castle) Myriophyllum spicatum

Fraxinus excelsion Symphytum officinale (Carriden) Linaria Cymbalaria (Hopetoun) Listera ovata (barely in flower) Epipactis latifolia (not in flower) Scirpus uniglumis (Blackness) Asplenium Ruta-muraria Scolopendrium vulgare (Carriden) Ophioglossum vulgatum (Hopetoun)

Lanark, Cora Linn, Bonnington Falls, Stonebyres, Cartland Crass.

Saturday, 1st June 1861.

Party of about 120 met at Caledonian Station at 6.30 a.m. and proceeded to Lanark, thence walked to Cora Linn and Bonnington Falls, as well as to Stonebyres and Cartland Crags, and returned by train leaving Lanark at 4.35 p.m. Return tickets, 2s. 6d.

Among the plants gathered were the following:-

Trollius europæus Aquilegia vulgaris Aconitum Napellus Arabis hirsuta Cardamine amara Draba (Cora Linn) Hesperis matronalis Sisymbrium Thalianum Geranium sylvaticum lucidum

Trifolium filiforme Vicia Orobus Prunus Padus Rubus saxatilis Geum intermedium Fragaria elatior

Pyrus Aucuparia Malus

Saxifraga Geum umbrosa, var.

punctata granulata Ribes alpinum Sedum acre Circæa lutetiana Sanicula europæa Adoxa Moschatellina Galium boreale Antennaria dioica Doronicum plantagineum Campanula rotundifolia Pyrola minor Vinca minor Melampyrum pratense Salix Caprea

Listera ovata Convallaria majalis Luzula pilosa

Neottia Nidus-avis

Eriophorum latifolium

Carex paniculata paludosa Melica nutans

uniflora Briza media Pteris aquilina

Blechnum boreale Asplenium viride Trichomanes

Athyrium Filix-fæmina Cystopteris fragilis Polystichum lobatum

aculeatum Lastrea Filix-mas

dilatata Polypodium vulgare

Dryopteris Phegopteris

Equisetum arvense umbrosum

sylvaticum palustre

limosum

hvemale Lycopodium selaginoides

Tortula tortuosa ruralis

subulata

muralis Orthotrichum crispum

Funaria hygrometrica Leskea sericea Isothecium alpecuroides Hypnum striatum

> commutatum triquetrum

loreum

palustre pseudotriquetrum

undulatum

Hypnum dendroides Bartramia fontana Ceratodon purpurascens Fegatella conica Lepraria flava

Alectoria jubata Ramalina farinacea Usnea barbata Evernia prunastri Peltidea aphthosa

East Linton, Prestonkirk, Tynningham, Belhaven, Dunbar.

Saturday, 8th June 1861.

Party of 82 met at the North British Railway Station at 8 a.m. and proceeded to East Linton, thence walked by Preston-kirk to Tynningham, where they met Mr. Lees, the gardener. Examined woods at Tynningham. Walked to Whitbery Point and mouth of Tyne. Crossed the river and walked by Sandy Bent to Belhaven, and then to Dunbar. Returned by train leaving Dunbar at 6.17 p.m. Return tickets, 2s.

Among the plants gathered were the following:-

Berberis vulgaris (Tynningham) Papaver Rhœas

" dubium

" Argemone Fumaria capreolata

, micrantha

.. officinalis

Arabis hirsuta Sinapis alba (near Tynningham) Cakile maritima

Viola canina

(Whitbery Point)
Cerastium arvense
(Whitbery)
Lepigonum marinum
Astragalus hypoglottis

Onobrychis sativa (near Belhaven) Vicia sativa

Potentilla reptans

Poterium Sanguisorba

(Belhaven Links) Saxifraga tridactylites (Belhaven)

Sempervivum tectorum (Tvnningham)

Petroselinum sativum

Haloscias scoticum Lonicera Caprifolium

(Prestonkirk) Artemisia maritima

> " gallica (mouth of Tyne)

Anagallis arvensis Erythræa Centaurium

Cynoglossum officinale Solanum Dulcamara

(Tynningham) Hyoscyamus niger Hippophaë rhamnoides Neottia Nidus-avis

(woods, Tynningham)

Listera ovata Epipactis latifolia (not in flower) Orchis incarnata ., latifolia, var.

maculata Habenaria chlorantha Scirpus maritimus Carex vulpina Sclerochloa distans Ophioglossum vulgatum (Whitbery) Botrychium Lunaria (Belhaven Links)

Strathmiglo, West Lomond Law, Carlan Crags, Loch Leven, Lochgelly.

Saturday, 15th June 1861.

Party of about 90 met at the Edinburgh, Perth, and Dundee Railway Station at 6 a.m. and proceeded to Strathmiglo, arriving at 8.40. Breakfasted at Senior's Inn. He had secured a large hall for breakfast. Met Mr. Barclay and Mr. Ritchie from Cupar, Dr. Troup, Mr. Rutherford (the gardener at Falkland). and his son. Return tickets-Strathmiglo and Lochgelly, 2s. 6d.; breakfast, 1s. 4d.

After breakfast walked to West Lomond Law, ascended by stony ravine. Saw abundance of Hymenophyllum Wilsoni, Sagina subulata, Saxifraga hypnoides, and Epilobium angustifolium. Ascended to flat ground above and examined a pool there; got Pilularia globulifera and Littorella lacustris, also on the hill Viola lutea, and Trientalis europæa. Proceeded west to side of the West Law for Allosorus crispus. Descended into Glen Vale and ascended to Carlan Crags where Oxytropis Halleri was gathered. On the steep side saw Equisetum umbrosum and Cystopteris fragilis. Walked to shore of Loch Leven and gathered Alyssum calvcinum. then walked to Lochgelly, which was reached at 3.40, in time for train at 3.42 p.m. Day oppressively hot, walk very long (about 18 or 20 miles); too much attempted in a short space of time.

The examination of Lomonds, Benarty, and Loch Leven require four trips.

Among the plants gathered were the following :-

Lamium Galeobdolon Viola palustris (near Lochgelly) lutea Sagina subulata Polygonum Bistorta viviparum (W. Lomond) Lepigonum rubrum Empetrum nigrum Genista anglica Listera cordata (at Ladybank Station) (W. Lomond) Oxytropis Halleri Gymnadenia albida (Carlan Crags) (Lomonds) Potamogeton perfoliatus Comarum palustre Saxifraga granulata crispus Carex pilulifera hypnoides binervis Sedum villosum hirta Myriophyllum spicatum Avena pratensis Epilobium angustifolium Hymenophyllum Wilsoni (W. Lomond) Galium boreale (W. Lomond) (W. Lomond) Allosorus crispus (W. Lomond) Asperula taurina Cystopteris fragilis (Mr. Barclay, near Polypodium Phegopteris Cupar) Filago germanica (W. Lomond)

Perth, Methven, Almond Bank, Bridge End, Scone,
Kinnoul.

Antennaria dioica

(W. Lomond)

Vaccinium Vitis-Idæa

(W. Lomond)

Trientalis europæa Myosotis repens

Myrtillus

Saturday, 29th June 1861.

Botrychium Lunaria

Lycopodium Selago

(W. Lomond)

(W. Lomond)

" clavatum Pilularia globulifera

Equisetum umbrosum (Carlan Hill)

Party of 110 met at the Edinburgh, Perth, and Dundee Railway Station at 6 a.m. Dr. Leycock with about 12 pupils joined the party with the view of visiting the Asylum at Perth. The party was thus partly botanical and partly psychological. They proceeded to Perth, where breakfast was provided by Mr. Pople at the station. Afterwards they went by rail to Almond Bank, where the forester of Mr. J. Smythe of Methven met them. They visited Methven Bog and Methven Woods, Bank of Almond, and returned to Perth in time for the train at 3 p.m Some of the party waited till 6.20 p.m. and examined Bridge End, Kinnoul Hill, and Scone Woods. Return tickets, 3s. 6d.; rail to Almond Bank, 3d.; breakfast, 1s. 6d—total, 5s. 3d. Mr. White, son of Dr. F. J. White, accompanied the party and acted as guide.

Among the plants gathered were the following :-

Papaver somniferum (Almond Bank) Fumaria micrantha Almond Bank) Cerastium arvense (Almond Bank) Lepigonum rubrum Hypericum humifusum (near Almond Bank) Malva moschata (near Perth) Geranium pyrenaicum (Bridge End) Trifolium hybridum (between Almond Bank and Perth) Anthyllis Vulneraria Ornithopus perpusillus (Near Methyen Bog) Rubus saxatilis (Methven Woods) Potentilla argentea (Bridge End) Poterium Sanguisorba (Bridge End) Sedum Telephium Circæa alpina Cicuta virosa (Methven Bog) Viburnum Opulus Gnaphalium sylvaticum Matricaria Parthenium

Moneses grandiflora (Scone) Trientalis europæa (Methven) Vinca minor Myosotis cæspitosa palustris Solanum Dulcamara Linaria vulgaris Mimulus luteus (near Perth) Mentha sylvestris (near Perth) Utricularia minor (Methven Bog) Humulus Lupulus (Almond Bank) Neottia Nidus-avis (Methyen) Paris quadrifolia (Methven) Sparganium ramosum

Scheuchzeria palustris

(Methven Bog)

(Methven Bog)

(Methyen Bog)

(Methven Bog)

Polypodium Dryopteris

Phegopteris

(Methven)

limosa

Lastrea spinulosa

Carex irrigua

Pyrola minor

St. Andrews.

Saturday, 6th July 1861.

Party of 80 or 90 met at the Edinburgh, Perth, and Dundee Railway Station at 6 a.m. and proceeded to St. Andrews, which was reached about 9,30 a.m. The Provost of St. Andrews, Mr. Ireland, Mr. C. Howie, Mr. Barclay, Dr. Watson Wemyss, Mr. Blair, teacher, Cupar, and Mr. Wallace, a student, met us. Breakfasted in the old Town Hall, breakfast being provided by Mr. Davidson of the Star Hotel. Return tickets, 3s. 3d. Breakfast, 1s. 6d. After breakfast, visited the United College, then went to Castle and Kirkhill, Harbour, Kirkhill rocks and Cave, and the Rock and Spindle. Returned to St. Andrews in time for the 3,20 train, reaching Edinburgh about 6,40 p.m.

Among the plants gathered were the following:-

Thalictrum minus
Papawer Argemone
Fumaria micrantha
Silene noctiflora
Lychnis Githago
Sagina maritima
Lepigonum marinum
Trifolium striatum
Haloscias scoticum
Anthemis Cotula
Centaurea Scabiosa
Solanum nigrum
Scrophularia aquatica

Gymnadenia conopsea
Carex vulpina
Sclerochloa maritima
(on wall at Harbour)
Sclerochloa loliacea
(on wall at Harbour)
Hordeum pratense
Elymus arenarius
Equisetum
variegatum
Lycopodium
selaginoides J Tentsmuir

North Berwick, Dirleton, Gullan, Luffness, Drem.

Saturday, 13th July 1861.

Party of about 30 met at the North British Railway Station at 10.15 a.m. and proceeded by train to North Berwick, thence walked by the Links to Dirleton, Gullan, Luffness, and Dren. Returned by train from Drem at 6.50 p.m. Return tickets, 1s. 9.d.

Among the plants gathered were the following :-

Fumaria micrantha Arabis hirsuta Reseda lutea Silene conica noctiflora Geranium pusillum Melilotus officinalis Trifolium arvense Sedum album Hippuris vulgaris Callitriche platycarpa Smyrnium Olusatrum Helosciadium repens Carduus nutans Onopordon Acanthium (Gullan) Thrincia hirta Anagallis tenella Convolvulus arvensis Solanum Dulcamara Hyoscyamus niger

Limosella aquatica

Veronica Anagallis Utricularia vulgaris Calamintha Acinos Marrubium vulgare (Gullan) Ballota fœtida Rumex conglomeratus Hippophaë rhamnoides Listera ovata Habenaria viridis Scirpus lacustris Carex disticha arenaria teretiuscula paniculata Triodia decumbens Equisetum variegatum Lycopodium selaginoides Chara hispida

Uredo segetum

Cladonia rangiferina

Bridge of Allan, Keir, Kippenross, Kippendavie, Wharrie Glen, Stirling.

Saturday, 20th July 1861.

Party of 70 met at the Edinburgh and Stirling Railway Station at 6.25 a.m. and proceeded to the Bridge of Allan to breakfast (Philps' Inn). Visited the Wells and Mr. Macfarlane's Museum. Then walked to Keir with Mr. Niven, the gardener. Then to Kippenross, Kippendavie, Wharrie Glen and Bridge and Stirling Castle. Returned from Stirling by train at 5.48 p.m.

Dr. Browne and the Rev. Mr. Morrell from Henley, with Mr. Wylie, accompanied us. Dr. Paterson and Major Hay met us at Bridge of Allan. Dr. Wilson also went with us. Return tickets, 3s. 3d. Breakfast, 1s. 11d.

The following were some of the plants gathered :-

Aquilegia vulgaris (Stirling Castle) Chelidonium majus (near Dunblane) Brassica Rapa Trifolium hybridum Ornithopus perpusillus (Dunblane) Rubus rhamnifolius Agrimonia Eupatoria Sedum Telephium album (Stirling Castle) Circæa lutetiana alpina Conjum maculatum Petroselinum sativum Æthusa Cynapium

Silybum Marianum (Stirling Castle) Lactuca virosa Trientalis europæa (near Dunblane) Atropa Belladonna Hyoscyamus niger Verbascum Thapsus Lychnitis Linaria repens Calamintha Clinopodium Stachys arvensis Rumex viridis Listera Nidus-avis cordata (near Dunblane) Paris quadrifolia

EXCURSIONS IN 1862.

Merchiston, Colinton, Slateford, Canal.

Saturday, 10th May 1862.

Party of about 120 met at the Middle Walk of the Meadows at 11 a.m. and proceeded to Merchiston and Colinton. Visited the woods and returned by Slateford and the banks of the Canal.

The usual plants were gathered. Among others may be noticed:—

Anemone nemorosa Ranunculus auricomus Cardamine amara Euonymus europæus Saxifraga umbrosa "granulata Adoxa Moschatellina Lonicera Xylosteum Valeriana pyrenaica Valerianella olitoria Chenopodium Bonus-Henricus Orchis mascula Equisetum arvense

Also specimens of Stigmaria ficoides.

Penicuik, Auchendinny, Roslin.

Saturday, 17th May 1862.

Party of about 100 met at the North British Railway Station at 11.45 a.m. and proceeded to Peniculi. Visited Mr. Cowan's Paper Mills. Walked by banks of Esk to Auchendinny and Roslin, and returned by train at 6.42 p.m. Tickets, 1s. 3d.

Among the plants gathered were :-

Ranunculus auricomus Arabis hirsuta Cardamine amara pratensis hirsuta sylvatica Viola palustris ., sylvatica tricolor Stellaria uliginosa Lathyrus macrorrhizus Chrysosplenium alternifolium Pyrola minor Linaria vulgaris Daphne Laureola

Salix alba ,, cinerea

., Caprea

Neottia Nidus-avis Orchis mascula

Carex pendula Melica nutans

" uniflora Polypodium Dryopteris

" Phegopteris

Equisetum arvense

" umbrosum " sylvaticum

" palustre " hyemale

In all about 100 species.

Mid-Calder, Kaimes Hill, Dalmahoy, Ravelrig, Water of Leith, Balerno, Currie.

Saturday, 24th May 1862.

Party of about 80 met at the Caledonian Railway Station at 10.20 and proceeded to Mid-Calder, then walked by Meadowbank to Kaimes Hill and Dalmahoy, Ravelrig, Water of Leith, Balerno, and Currie, whence they returned at 6.11 p.m. Return tickets, 1s. Among the plants collected were :-

Ranunculus hederaceus

" auricomus Trollius europæus Aquilegia vulgaris (banks

of Water of Leith) Aconitum Napellus

Viola palustris

sylvatica

canina

" tricolor

" lutea

Sagina subulata Geranium columbinum

Saxifraga Geum (banks of Water of Leith) Saxifraga hypnoides Linnæa borealis Galium Mollugo

Valeriana pyrenaica Antennaria dioica Trientalis europæa

Anchusa sempervirens Polygonum Bistorta

Salix Russelliana Arum maculatum

Carex curta Equisetum hyemale

Kinghorn, Burntisland.

Saturday, 31st May 1862.

Party of 80 met at the Edinburgh, Perth, and Dundee Railway Station at 9.30 and proceeded to Kinghorn, then walked by the shore to Burntisland, and returned from Burntisland by boat at 4.50 p.m. Return tickets, is.

Among the plants gathered were the following :-

Papaver Argemone Cardamine hirsuta Alyssum calycinum Cochlearia danica Lepidium Smithii Thlaspi arvense Reseda lutea Geranium sanguineum Astragalus hypoglottis

" Glyciphyllos Saxifraga umbrosa Sambucus nigra Centhranthus ruber Valerianella olitoria Senecio viscosus Anagallis arvensis Cynoglossum officinale Scrophularia vernalis Plantago maritima

" Coronopus
Hippophaë rhamnoides
Carex arenaria
Phleum arenarium
Sclerochloa maritima
" rigida

" loliacea Festuca bromoides

Dalkeith, Musselburgh.

Saturday, 7th June 1862.

Party of 60 met at North British Railway Station at 10.35 a.m. and proceeded to Dalkeith. Visited gardens and grounds under direction of Mr. Prentice, and then walked by banks of Esk to Musselburgh. Returned by train at 3.40 p.m. Return tickets, 1s. Id.

Among the plants gathered were the following :-

Aconitum Napellus Cochlearia officinalis Stellaria nemorum Honckenya peploides Geum intermedium Ilex Aquifolium Sanicula europæa Cornus sanguinea Adoxa Moschatellina Petasites albus (Inveresk) Armeria maritima Lysimachia nemorum Fraxinus excelsior Mvosotis svlvatica Lathræa Squamaria Polygonum Bistorta Rumex sanguineus

Rumex viridis Humulus Lupulus (Inveresk) Salix Russelliana alba Smithiana Helix Populus alba Listera Nidus-avis Luzula nivea Carex muricata (Dalkeith grounds) pendula hirta Milium effusum Poa nemoralis

North Queensferry, Ferry Hills, Inverkeithing.

Saturday, 14th June 1862.

Party of about 36 met at Newhaven at 11 a.m. and proceeded to Queensferry, examined Ferry Hills, walked to Inverkeithing, and returned by boat about 5 p.m. Return tickets, 9d.; Granton pier, 2d.; ferry-boat, 6d.

Among the plants gathered were :-

Thalictrum majus Sagina maritima Trifolium striatum Astragalus Glyciphyllos Vicia lutea (abundant) Spiræa Filipendula Sedum villosum Sambucus Ebulus Allium Scorodoprasum

Cockburnspath, Dunglass, Pease Dene.

Saturday, 21st June 1862.

Party of 70 met at North British Railway Station at 8 a.m. and proceeded to Cockburnspath. Visited Dunglass by permission of Sir James Hall, walked by shore to the Cove and Pease Dene, and returned from Cockburnspath at 5.58. Return tickets, 2s.

Among the plants gathered were :-

Glaucium luteum Hypericum calycinum Mertensia maritima Lamium Galeobdolon Neottia Nidus-avis Carex pendula Polystichum angulare

Numerous seaweeds.

Perth. Kinnoul Hill, Kinfauns, Orchardneuk, Moncrieff Hill, Bridge of Earn.

Saturday, 28th June 1862.

Party of about 90 met at the Edinburgh, Perth, and Dundee Railway Station at 6 a.m. and proceeded to Perth. Breakfasted at John Dunbar's Railway Station Refreshment Rooms. Walked to Kinnoul Hill, Kinfauns, crossed the Tay to Orchardneuk, and then walked over Moncrieff Hill to Bridge of Earn. Left the station at Bridge of Earn at 3.10 p.m. Return tickets, 3s. 6d. Breakfast, 1s. 6d.

Among the plants gathered were the following :-

Chelidonium majus Fumaria micrantha Nasturtium officinale (4-5 feet long) Hesperis matronalis (in great quantity on Monerieff Hill) Reseda Luteola (one specimen 7 feet high) Sagina subulata Malva moschata Geranium phæum

" pratense " pyrenaicum " columbinum

Erodium cicutarium Euonymus europæus Vicia lathyroides Potentilla hirta ... argentea Rosa rubiginosa " systyla Pyrus Aria Sedum Telephium " villosum ., album Cornus sanguinea Viburnum Opulus Dipsacus sylvestris Inula Helenium Chrysanthemum Leucanthemum (with white tubular florets of the ray) Doronicum Pardalianches Sonchus asper (6 ft. high)

Campanula rapunculoides

Moneses grandiflora (Scone)
Cynoglossum montanum
Antirrhinum majus
Scrophularia vernalis
Mimulus luteus (shore of
Tay near Kinfauns)
Lamium maculatum
(Kinfauns)
Euphorbia Lathyris
(Orchardneuk)
Humulus Lupulus
(Orchardneuk)
Listera cordata
Habenaria chlorantha
Ceterach officinarum
Lastrea Orcopteris

Beattock, Garpol Linn, Beld Crag, Moffat.

Saturday, 5th July 1862.

Party of about 80 met at the Caledonian Railway Station at 6.20 a.m. and proceeded to Beattock. Breakfasted there, then walked to Garpol Linn, thence to Beld Crag and Moffat. Returned by train at 4.52 p.m. Return tickets, 4s. Breakfast, 1s. 6d.

Among the plants collected were the following:—
On hillside on way to Garpol:—

Drosera rotundifolia
Galium palustre
Valeriana dioica
Antennaria dioica
Myosotis cæspitosa
Myrica Gale
Listera cordata
, ovata
Orchis latifolia, var. incarnata
Gymnadenia conopsea

Geranium sylvaticum

Gymnadenia albida Habenaria bifolia Narthecium ossifragum Scirpus cæspitosus Carex stellulata "remota "pilulifera Lastrea Oreopteris

Lycopodium clavatum
" alpinum
" selaginoides

Splachnum ampullaceum

In Garpol Linn :-

Aquilegia vulgaris Geranium lucidum Rubus saxatilis

Jasione montana (in great profusion by roadsides about Beattock)

Pyrola minor

" secunda Melampyrum pratense Veronica scutellata Habenaria bifolia

,, chlorantha

Carex lævigata Melica nutans

" uniflora Hymenophyllum Wilsoni Allosorus crispus Asplenium viride Cystopteris fragilis Lastrea Oreopteris Polypodium Dryopteris , Phegopteris Lycopodium Selago Blindia acuta Orthotrichum Drummondii Bartramia fontana Zvendon Mousectii

Athyrium Filix-fœmina,

var. convexum

Zygodon Mougeotii Tortula tortuosa Neckera crispa

Sticta fuliginosa " pulmonaria

" sylvatica Nephroma resupinata Alectoria jubata

Dunfermline, Town Wood, Loch Fittie, Black Loch, Carnack Loch.

Saturday, 12th July 1862.

Party of 26 met at the Edinburgh, Perth, and Dundee Railway Station at 6 a.m. and proceeded to Dunfermline. Breakfasted at Milne's Hotel. Visited Mr. Hunt's place at Pittencross; saw ruins, also old abbey, and Robert Bruce's grave. Walked to Town Wood, then to Loch Fittie, Black Loch at Hillhead, and Carnack Loch. Returned by train at 4.32 p.m. Return tickets, 2s. Breakfast, 1s. 6d.

Among the plants collected were the following :-

At Loch Fittie:-

Nuphar luteum Drosera rotundifolia Vaccinium Oxycoccus Trientalis europæa Alisma Plantago Scirpus lacustris

" sylvaticus

Carex aquatilis (in very great quantity. This is the first time it has been observed within twenty miles of Edinburgh)

Lastrea spinulosa

At Black Loch :-

Nuphar luteum Nymphæa alba Cicuta virosa Veronica scutellata Carex teretiuscula

In Loch Carnack:-

Potamogeton pectinatus

Chara flexilis

On roadside, about one mile from Dunfermline:—
Pyrola media

Drem, Gullan, Luffness, Aberlady, Gosford, Longniddry.

Saturday, 19th July 1862.

Party of 20 met at the North British Railway Station at 10.15 a.m. Proceeded to Drem, then walked to Gullan, Luffness, Aberlady, Gosford, and Longniddry—returning by train at 7.2 p.m. Messrs. White and James proceeded to North Berwick and Tantallon. Return tickets, 2s.

Among the plants gathered were the following:-

Ranunculus circinatus Nasturtium palustre Lepidium latifolium Silene noctiflora Cerastium arvense Sagina nodosa Geranium pusillum Trifolium fragiferum Potentilla reptans Saxifraga tridactylites Hippuris vulgaris Helosciadium repens Pulicaria dysenterica Centaurea Scabiosa Specularia hybrida Anagallis tenella

Erythrea Centaurium
, pulchella
Limosella aquatica
Utricularia vulgaris
Atriplex littoralis
Salicornia herbacea
Sueda maritima
Lema trisulca
Potamogeton densus
, pusillus
Scirpus lacustris
, maritimus
Blysmus rufus
Carex extensa
Chara hispida

., vulgaris

Callander, Ben Ledi.

Saturday, 26th July 1862.

Party of about 45 met at Glasgow Railway Station at 6.25 a.m. Proceeded to Callander. Breakfasted at M'Gowan's Hotel, then walked to Ben Ledi. Left Callander at 7.15 p.m.

The following plants were collected :-

Thalictrum alpinum
Ranunculus acris
Caltha palustris, var. minor
Trollius curopaeus
Corydalis claviculata
Draba incana
Silene acaulis
Vicia sylvatica
Rubus saxatilis

" Chamæmorus Alchemilla alpina Saxifraga oppositifolia

> " nivalis stellaris

" aizoides " hypnoides Sedum Rhodiola Circæa alpina Pimpinella magna Angelica sylvestris Cornus suecica Lonicera Periclymenum Galium boreale

Scabiosa succisa

Solidago Virgaurea Gnaphalium sylvaticum " supinum Carduus heterophyllus Vaccinium Vitis-Idæa

" Oxycoccus Melampyrum montanum Polygonum viviparum Oxyria reniformis Myrica Gale

Myrica Gale
Gymnadenia albida
Juncus triglumis
Luzula spicata

Carex rigida " irrigua Triodia decumbens Iuniperus communis

Hymenophyllum Wilsoni Allosorus crispus Asplenium viride Cystopteris dentata Polystichum Lonchitis Botrychium Lunaria Lycopodium alpinum

EXCURSIONS IN 1863.

Tynehead, Borthwick, Gorebridge.

Saturday, 16th May 1863.

Party of 100 met at the North British Railway Station at 11.40 a.m. Proceeded to Tynehead, thence walked to Borthwick, and returned from Gorebridge at 5.27 p.m. Return tickets, 1s. 2d.

Among the plants collected were :-

Anemone nemorosa
Caltha minor
Viola palustris
Genista anglica
Geum rivale (white)
Myrrhis odorata
Vaccinium Myrtillus
Anchusa sempervirens
Empetrum nigrum
Listera cordata
Arum maculatum

Carex paniculata
,, paludosa
Lastrea Oreopteris
Polypodium Dryopteris
,, Phegopteris
Lycopodium clavatum
Equisetum arvense
,, sylvatieum
,, palustre

Cladonia rangiferina

Malva rotundifolia

limosum

Kinghorn and Burntisland.

Saturday, 23rd May 1863.

Party of 83 met at the Princes Street Station of the Edinburgh Perth, and Dundee Railway at 9.40 a.m. Proceeded to Kinghorn, thence walked to Burntisland. Returned from Burntisland by boat at 4.39 p.m. Return tickets, is.

Among the plants collected were :-

Clematis Vitalba (hills above Burntisland) Papaver Argemone Cheiranthus Cheiri Barbarea vulgaris Cochlearia danica Armoracia rusticana Hesperis matronalis (near Kinghorn) Thlaspi arvense Helianthemum vulgare Viola hirta Cerastium tetrandrum semidecandrum arvense Lavatera arborea (Kinghorn)

Geranium sanguineum
Astragalus hypoglottis
, "Glyciphyllos
Vicia lathyroides
Fragaria elatior (Kinghorn)
Carum Carui
Haloscias scoticum
Centranthus ruber
Leontodon lævigatus
Tragopogon pratensis (between Kinghorn and
Pettycur, Mr. Rodger)
Polemonium cæruleum
(Kinghorn and Pettycur, in quantity)

Anchusa sempervirens

Myosotis collina
Echium vulgare
Linaria Cymbalaria
Veronica polita (Kinghorn)
Salvia Verbenaca
Lamium amplexicaule
" intermedium

Euphorbia Helioscopia Parietaria officinalis Endymion nutans Carex ampullacea Sclerochloa maritima ,, loliacea

Penicuik, Auchendinny Woods, The Esk, Roslin.

Saturday, 30th May 1863.

Party of 38 met at the North British Railway Station, Edinburgh, at 11.45 a.m. Proceeded to Penicuik. Walked through Penicuik Glen and Auchendinny Woods by the banks of the Esk to Roslin Station. Returned by train passing Roslin at 6.42 p.m. Return tickets, is. 3d.

Among the plants collected were:-

Anemone nemorosa
Ranunculus auricomus
Trollius europæus
Aquilegia vulgaris
Aconitum Napellus
Cardamine amara
Brassica Rapa
Lychnis dioica
Stellaria Holostea
uliginosa

" uliginosa Geranium sylvaticum " pratense Oxalis Acetosella

Acer campestre
Vicia sepium
Geum intermedium
Fragaria elatior
Saxifraga umbrosa
granulata

Chrysosplenium alternifolium Sanicula europæa Asperula odorata Centaurea montana Pyrola minor Vinca minor Symphytum tuberosum Humulus Lupulus (behind

Greenlaw Barracks)

Neottia Nidus-avis Endymion nutans Scirpus sylvaticus Carex remota

pendula

" sylvatica

" ampullacea Melica uniflora Blechnum boreale Athyrium Filix-fœmina Polystichum aculeatum Lastrea Oreopteris Polypodium vulgare

" Dryopteris " Phegopteris Equisetum umbrosum

Tortula nivalis
.. tortuosa

Currie, Water of Leith, Colinton.

Saturday, 6th June 1863.

A party of 30 met at the Caledonian Railway Station at 10 a.m. We intended to have visited Ravelrig and Dalmahoy, but as the day was wet and unpromising proceeded to Currie and walked back to Edinburgh, following the banks of the Water of Leith to Colinton. Reached Edinburgh about 4 p.m. Railway ticket to Currie, 548

The following were among the plants collected:-

Anemone nemorosa Ranunculus fluitans Aquilegia vulgaris Aconitum Napellus Berberis vulgaris Meconopsis cambrica Corydalis lutea Barbarea vulgaris Cardamine amara Alliaria officinalis Silene inflata Stellaria Holostea Geranium phæum

- " sylvaticum
- " dissectum lucidum

Euonymus europæus Geum intermedium Fragaria elatior Saxifraga umbrosa

- " granulata " hypnoides
- Myriophyllum spicatum Sanicula europæa Valeriana pyrenaica Matricaria Parthenium Petasites fragrans Doronicum Pardalianches Polemonium cæruleum Symphytum tuberosum
- Polygonum Bistorta Rumex viridis
- Populus alba ,, tremula
- Melica uniflora Scolopendrium vulgare

Kilconquhar, Elie, Earl's Ferry.

Saturday, 13th June 1863.

Party of 53 proceeded by the train leaving Edinburgh at 9.40. Met Rev. Mr. Wood, of Elie. Visited Kilconquhar Loch, thence walked towards the shore east of Elie and along the coast to that town, and as far as Earl's Ferry. Returned by train leaving Kilconquhar at 4.45 p.m., reaching Edinburgh about 7.20 p.m. Return tickets, 2s. 6d. Mr. Barclay, Cupan, joined the party.

The chief plants collected were:-

Thalictrum minus
Diplotaxis tenuifolia
Cakile maritima
Cerastium semidecandrum
Lepigonum marinum
Astragalus hypoglottis
Saxifraga tridactylites
(Kilconquhar)
Chanthe crocata
Haloscias scoticum
Viburnum Lantana
(woods, Kilconquhar)
Silvbum Marianum

(railway banks)

Symphytum officinale (Elie)
Lithospermum arvense
Lamium amplexicaule
, intermedium
Beta maritima (Elie)
Listera ovata
Orchis latifolia, var. incarnata
Carex disticha
, vulpina
(shore of Kilconquhar Loch)
... distans

Alopecurus agrestis (Elie)

Newtown, Dryburgh Abbey, Banks of Tweed, Melrose.

Saturday, 20th June 1863.

Party of 83 met at the North British Railway Station at 9.45 a.m. and proceeded to Newtown. Visited Dryburgh Abbey Banks of Tweed, and Melrose Abbey. Returned by train leaving Melrose at 4.19 p.m. Return ticket, 2s. 6d.

The following were some of the principal plants collected:-

Clematis Vitalba
Thalictrum minus
Rexuosum
Ranunculus auricomus
Aquilegia vulgaris
Papaver dubium
Cheiranthus Cheiri
Barbarea vulgaris
Cochlearia officinalis
Hesperis matronalis
Viola odorata
Dianthus barbatus
Stellaria nemorum
Malva moschata

Geranium sanguineum , sylvaticum Vicia sylvatica Geum intermedium Poterium Sanguisorba Sanicula europæa Hedera Helix Lonicera Xylosteum Valeriana dioica Dipsacus sylvestris Solidago Virgaurea Matricaria Parthenium Doronicum Pardalianches Pyrola minor Ligustrum vulgare Vinca minor Anchusa sempervirens Myosotis sylvatica Echium vulgare Verbascum Thapsus Melampyrum pratense Lathræa Squamaria Mentha viridis Plantago media Rumex viridis Populus tremula Convallaria majalis Cryptogramme crispa Polystichum lobatum

Bridge of Earn, Glenfarg, Ochil Hills (Castle Law), Ramsheugh.

Saturday, 27th June 1863.

Party of 100 met at the Princes Street Station of the Edinburgh, Perth, and Dundee Railway at 6 a.m. Proceeded to Bridge of Earn. After breakfast at Hill's Hotel, visited Glenfarg, Ochil Hills (Castle Law), Ramsheugh. Returned from Bridge of Earn by train passing at 4,40 p.m. Mr. Barclay and Mr. Bowmont from Cupar, and Rev. Mr. Kirkwood and Dr. Laing, Bridge of Earn, joined the party. Return tickets, 3s. Breakfast, 1s. 6d.

The following were among the plants collected:-

Viola lutea Lychnis Viscaria Montia fontana Hypericum humifusum Malva mosehata Geranium sylvaticum " lucidum Anthyllis Vulneraria Vicia sativa Saxiiraga granulata Sedum villosum Lonicera Periclymenum Antennaria dioica Matricaria Parthenium

Campanula latifolia Ligustrum vulgare

Papayer dubium

Cardamine amara

Gentiana campestris Myosotis cæspitosa Solanum Dulcamara Pedicularis sylvatica Pinguicula vulgaris Polygonum viviparum Rumex sanguineus, var. viridis Salix repens Gymnadenia conopsea albida Habenaria bifolia chlorantha Iris Pseudacorus Allium ursinum Lemna minor

Carex panicea

Carex Œderi Alopecurus geniculatus Melica uniflora Blechnum boreale Cystopteris fragilis Cystopteris dentata
Polystichum lobatum
,,, aculeatum
,, angulare
Botrychium Lunaria

Mr. White, who proceeded to Perth, collected the following additional species:—

Euonymus europæus Sedum album Cynoglossum sylvaticum Linaria repens Mimulus luteus Carex remota Ceterach officinarum

Kielder Castle, Dead Water Fell.

Saturday, 4th July 1863.

Party of 80 met at North British Railway Station at 6.40 a.m. Proceeded to Kielder (Northumberland). Breakfast at Kielder Castle. Visited the woods in the neighbourhood of the Castle, Dead Water Fell (a hill of between 1600 and 1800 feet altitude), and the mineral well. Returned by train passing Kielder at 7.13, and reached Edinburgh about 10.30 p.m. Return tickets, 3s. 6d. Breakfast, 2s.

The following were among the plants collected:-

Trollius europæus
Aquilegia vulgaris
Corydalis claviculata
Cardamine amara
Cerastium glomeratum
Montia fontana
Geranium sylvaticum
Spiræa salicifolia
Rubus Chamæmorus
Sedum villosum
Drosera rotundifolia
Senecio aquaticus
Carduus heterophyllus
Vaccinium Vitis-Idea

Erica Tetralix
Myosotis cæspitosa
Veronica scutellata
Pedicularis sylvatica
Melampyrum pratense, var.
montanum
Pinguicula vulgaris
Salix herbacea
Empetrum nigrum
Listera cordata
"ovata
Orchis latifolia

Gymnadenia conopsea

Habenaria viridis

Lemna minor
Eriophorum vaginatum
" angustifolium

Carex pulicaris .. stellulata

" pilulifera

, pallescens binervis

Alopecurus geniculatus

Hymenophyllum Wilsoni Cryptogramme crispa Blechnum boreale Scolopendrium vulgare Lastrea Oreopteris "spinulosa Botrychium Lunaria

Equisetum maximum

Lycopodium Selago

North Berwick, Bass Rock, Tantallon Castle, North Berwick Links, Dirleton.

Saturday, 11th July 1863.

Party of 46 met at the North British Railway Station at 8 a.m. Proceeded to North Berwick, visited the Bass Rock, Tantallon Castle, North Berwick Links, and Dirleton, and returned by train reaching Edinburgh at 7.45 p.m. Return tickets, 1s. 9d.; boat to Bass, 1s.

The following were among the plants collected:-

Thalictrum minus Fumaria micrantha parviflora (Dirleton) Lepidium latifolium (Tantallon) Reseda lutea (Dirleton) Silene noctiflora (Dirleton) Lavatera arborea (Bass) Trifolium arvense hybridum Astragalus hypoglottis Vicia sylvatica Potentilla reptans Agrimonia Eupatoria Rosa rubiginosa Sedum album (Dirleton Castle)

Smyrnium Olusatrum Helosciadium repens Haloscias scoticum Scabiosa Columbaria (Canty Bay) Filago germanica Senecio viscosus Centaurea Scabiosa Thrincia hirta Tragopogon minor Campanula glomerata Ligustrum vulgare (Tantallon) Erythræa Centaurium Gentiana Amarella campestris Cynoglossum officinale

Conium maculatum

Echium vulgare Convolvulus sepium Hyoscyamus niger Veronica Anagallis Beta maritima (Bass) Polygonum Convolvulus

aviculare, var. littorale Parietaria erecta Habenaria viridis Sclerochloa rigida Festuca Myuros Elymus arenarius Equisetum variegatum

Rumbling Bridge, Devil's Mills, Cauldron Linn.

Saturday, 18th July 1863.

Party of about 60 met at Edinburgh, Perth, and Dundee Railway Station at 6.15 a.m. and proceeded to Rumbling Bridge. Breakfasted at Rumbling Hotel. Visited Devil's Mills, Rumbling Bridge, then Cauldron Linn. Returned from Rumbling Bridge at 4, and reached Edinburgh about 8 p.m. Return tickets, 2s. 6d.

The following were among the plants collected :-

Trollius europæus Cardamine amara Dianthus barbatus Stellaria nemorum Geranium lucidum Trifolium medium Lotus major Vicia sylvatica Prunus communis

" domestica Spiræa salicifolia Rubus saxatilis Saxifraga umbrosa

" hypnoides Epilobium angustifolium Circeaa alpina Pimpinella Saxifraga Angelica sylvestris Archangelica officinalis Viburnum Opulus Lonicera Periclymenum Galium palustre Petasites fragrans Campanula latifolia Ligustrum vulgare Symphytum officinale Mentha velutina

" sylvestris Calamintha Clinopodium Galeopsis versicolor Rumex sanguineus

" viridis " aquaticus Neottia Nidus-avis Listera ovata Paris quadrifolia

Carex remota

" sylvatica Milium effusum Blechnum boreale Asplenium Trichomanes Cystopteris fragilis Lastrea Oreopteris

Polypodium Dryopteris ,, Phegopteris

Pitlochry, Killiecrankie.

Saturday, 25th July 1863.

Party of 52 met at Princes Street Station of the Edinburgh Perth, and Dundee Railway at 6.15 a.m. Proceeded to Pitlochry. Breakfasted at Perth Railway Station; arrived at Pitlochry about 11.30. Returned from Pitlochry about 5.20, and reached Edinburgh about 10 p.m. Return tickets, 5s. Breakfast, 1s. 6d. Dr. Irvine acted as guide to the party.

Among the plants collected at Killiecrankie, &c., were the following:-

Thalictrum flexuosum Sagina nodosa Geranium pratense Trifolium medium Vicia sylvatica Rubus saxatilis Agrimonia Eupatoria Saxifraga aizoides Parnassia palustris Drosera rotundifolia Circæa alpina Angelica sylvestris Galium boreale Scabiosa succisa Solidago Virgaurea Gnaphalium sylvaticum Senecio sylvaticus Carduus heterophyllus Centaurea Cyanus Hieracium cerinthoides prenanthoides Hieracium boreale Vaccinium Vitis-Idæa Erica Tetralix Gentiana campestris Echium vulgare Myrica Gale Ouercus sessiliflora Salix repens Populus tremula Empetrum nigrum Gymnadenia albida Narthecium ossifragum Juneus supinus Iuniperus communis Cystopteris fragilis Lastrea Oreopteris Polypodium Dryopteris Phegopteris Lycopodium Selago selaginoides

Clova.

Monday, 3rd August 1863.

Party consisting of J. H. Balfour, Thomas L. Brunton, R. Cadell, Frederick Churchill, K. M. Downie, J. A. Dunsmure, L. Dunsmure, P. Neill Fraser, H. M. Harvey, J. Irving, R. Lightfoot, James M'Grigor, Harrison Mitchell, F. Naylor, Charles P.

Nicolson, George A. Panton, John Rankine, James Thomson, and William Thomson, met at the Edinburgh, Perth, and Dundee Railway Station on Monday, 3rd August, at 9-40 a.m. and proceeded to Perth, and then by the North Eastern Railway. They intended to go to Kirriemuir, for which they had return tickets for 7s. 6d. The party were carried on by the train to Forfar. They were astonished to find themselves at Forfar, and on asking an explanation they were told that the train did not stop at Kirriemuir Junction. Ultimately Kirriemuir was reached about 5 p.m.

After taking lunch in the Commercial Inn, the party started in a brake with two horses, a carriage and pair, and two dog-carts. Reached the inn at Clova about 7,15, having taken about two hours in coming from Kirriemuir. The inn at Clova is now kept by Mr. Barnes and his wife, and is a nice building, much improved and with plenty of beds. We were all accommodated in six rooms, most of them with double beds and four of the rooms with two in each. We dined on arrival, and in the evening walked to the bridge and gathered Carex aquatilis and Carduus heterophyllus. On the way we all picked Meum anthamanticum, and near the inn Anchase semberviren.

Tuesday, 4th August 1863.

Started this morning at 8, and walked on the western side of the Esk to Glen Dole gathering Alchemilla alpina, Trientalis europaa, Malaxis paludosa, Gyunnadenia albida. Botanised on the rocks to the west of Glen Dole, and gathered:—Silene acaulis, Rubus saxatilis, Saxifraga aizoides, S. stellaris, S. oppositifolia, S. hypnoides, Sedum Rhodiola, Saussurea alpina, Gnaphalium supinum, Arctostaphylos Uva-ursi, Pyrola secunda, Veronica alpina, Salis rupestris, S. reticulata.

Visited Astragalus cliff. Messrs. Irving, J. Thomson, and Nicolson ascended the cliff and gathered Astragalus alpinus in flower. At the cliff we gathered also Dryas octopetala, Erigeron alpinus, and Vaccinium uliginosum. Near the cliff was abundance of Polypodium alpestre. Ascended to top of hill, gathered Rubus Chamamorus, Cornus succiae, and Carex rarifora. Descended into Glen Fiadh and gathered Oxytropis campestris and Salix Lapponum. Visited Robert Welsh at Acharn. Returned to Clova between 7 and 8 p.m.

Wednesday, 5th August 1863.

This morning at 8 started for Braedownie, then walked up Glen Dole and by Jock's Road to the White Water. Examined the station for Mukgedium alpinum, but failed in getting specimens. Went to the original station near the waterfall and found here Asplenium Filks-famina and Polypodium alpestre. Afterwards went along the White Water. Visited Little Gilrannoch; meant to go to Canlochan but were prevented by rain and mist. Returned to White Water and then by Glen Dole to Acharn, Braedownie, and Clova.

Among the plants gathered were :-

Thalictrum alpinum Cochlearia grænlandica Lychnis alpina Cherleria sedoides Rubus Chamæmorus Sibbaldia procumbens Epilobium alsinifolium alpinum Cornus suecica Gnaphalium supinum pusillum Saussurea alpina Hieracium alpinum Apargia autumnalis, var. Taraxaci Vaccinium uliginosum Armeria alpina Trientalis europæa (in flower) Veronica serpyllifolia

Veronica humifusa alpina Tofieldia palustris Juneus trifidus triglumis Carex rigida and var. between it and C. vulgaris aquatilis rariflora pilulifera capillaris Alopecurus alpinus Phleum alpinum Polypodium alpestre Lycopodium Selago annotinum alpinum

selaginoides

Thursday, 6th August 1863.

Started at 9 this morning for Loch Brandy and the hills around it. Gathered:—Lobelia Dortmanna, Sparganium ramosum, Isoelies lacustris, Chara flexilis. Some of the party sailed in the boat on Loch Brandy. The key of the boat was given by Mr. Barnes, the innkeeper. The rest of the party ascended the rocks and gathered Potentilla alpestris, Hieracia of many kinds

and Carex stictocarpa; on the summit Azalea procumbens and Salix herbacea; also Cerastium alpinum below the summit. Mr. Cadell and Mr. H. Mitchell got into a difficult position on the high crumbling rocks. Mr. Cadell with great difficulty was enabled to extricate himself and descended, but Mr. Mitchell got into such a dangerous position that we had to send to the inn for ropes. Mr. Lightfoot and Mr. Barnes, senr., came up with ropes and we were enabled to extricate Mr. Mitchell. Mr. Irving descended with a rope to give Mr. Mitchell assistance. Mr. Churchill was very kind and daring in his aid. We also were indebted to Mr. J. Thomson and others of the party. Before the ropes arrived we handed down some wine and water to Mr. Mitchell, and we pulled up his botanical box and fieldbook by means of string and our straps. By uniting all our straps we were able through Mr. Churchill's kind services to throw a long strap to Mr. Mitchell and thus give him confidence until the ropes arrived. We were occupied for about three hours with Mr. Mitchell. He remained for at least two hours or two and a half hours in his perilous position. On returning to the inn we went to the marshy spot near John Ogilvy's and picked Tofieldia palustris. Afterwards saw John Ogilvy, who is now nearly 85 years of age. We also called on the Rev. Mr. Smith, and had the pleasure of seeing him and Dr. Steel of Thornton in the evening.

Friday, 7th August 1863.

This morning 16 of the party went by dog-carts and carts to Acharn, and then walked to Glen Fee. Examined the rocks all round the Glen. The day was very misty, and we were thoroughly wet on the hills. We were unable to visit the head of Glen Prosen as I had intended.

Among the plants gathered were the following:—Cochlearia officinalis, Oxytropis campestris, Saussurea alpina, Veronica alpina, Poa Balfourii, and many other alpine species.

Saturday, 8th August 1863.

This morning at 4 a cart was despatched with all the baggage for Kirriemuir. The morning was very wet and misty. The

Messrs. Dunsmure, Brunton, Nicolson, and Lightfoot remained at Clova with the view of walking to Braemar. The rest of the party started at 8.39 (after breakfast) for Kirriemuir in a brake and two dog-carts, and reached the town in time for the train at 11.40. At Forfar the Prince and Princess of Wales passed in a train for the North. The party reached Perth about a quarter of an hour behind time. All proceeded to Edinburgh except Dr. Balfour, who went to Callander. The weather improved much in the evening.

Strathyre, Loch Lubnaig, Ben Ledi.

Wednesday, 12th August 1863.

Mr. Naylor joined me this morning at Strathyre and we proceeded towards Ben Ledi. Sailed on Loch Lubnaig as far as the foot of the loch and saw abundance of Nynphaa alba, Myrio-phyllum spicatum, Scirpus lacustris, also Nuphar pumilum and Subularia aquatica. Collected also Meum athamanticum. Began the ascent of the hill not far from the farmhouse. On the left hand of the stream, ascending about 100 yards beyond the top of the wood, we gathered some specimens of Malaxis paludosa. Got Hymenophyllum Wilsoni on a singular piece of detached rock.

The best way to ascend with the view of collecting alpine plants is to go up the stream from the Hymenophyllum rock to the left. The ascent is steep. You reach a cold wet corrie, and above are fine rocks producing alpine plants, such as:—

Thalictrum alpinum
Cochlearia officinalis
(alpine forms)
Silene acaulis
Sibbaldia procumbens
Alchemilla alpina
Saxifraga oppositifolia

Saxifraga nivalis
,, stellaris
,, aizoides
Sedum Rhodiola
Gnaphalium supinum
Hieracium alpinum and vars.
Salix herbacea

Also some good alpine mosses, as Andrewa.

Examined also rocks on side of Lubnaig at a considerable elevation on Ben Ledi. Left about 12.30 p.m. Reached

the top of Ben Ledi between 4 and 5. Left the top at 5 and got to Strathyre about 8.15 p.m.: beautiful day; fine view, most extensive.

Killin, Bridge of Lochay, Meall Ghaordie.

Thursday, 13th August 1863.

This morning Mr. Naylor and self went in a conveyance about 9 a.m. to Killin. Drove about three miles up the Lochay to Duncrook, where the horse was put up. Ascended Meall Ghaordie and visited the rocks on a shoulder projecting into Glen Lyon. The day was delightful, and there was a splendid view from the summit. The hill itself is not very productive, but the rocks looking into Glen Lyon are very fine and produce many alpine plants as:—

Potentilla alpestris Sibbaldia procumbens Saxifraga oppositifolia "nivalis "stellaris Sedum Rhodiola Gnaphalium supinum Saussurea alpina Hieracium alpinum Bartsia alpina Polygonum viviparum Oxyria reniformis Salix herbacea " reticulata Juncus trifidus " triglumis Carex capillaris " pulla Avena pratensis " alpina Asplenium viride Cystopteris fragilis dentata

Polystichum Lonchitis

We searched for *Cystopteris montana*, but were unsuccessful owing, principally, to want of time. The rocks would require five or six hours for full examination.

These rocks are most easily visited from Glen Lyon. By going to them from the Lochay the party need not go to the top of the mountain, but merely to the knoll on the right of the summit and then down towards Glen Lyon. The rocks are well worthy of a full examination, and I have no doubt that they are the rocks mentioned by Backhouse as producing Cystopteris montana. We returned to Duncrook about 6,30 p.m. After partaking of

refreshments, we left about 7 for Lochay Inn. Here we got a change of horse and proceeded to Strathyre, which we reached about 9.30 p.m.

Killin, Ben Lawers.

Friday, 14th August 1863.

This morning, about 9, started in a conveyance with Mr. Naylor for Killin and Ben Lawers. Morning dull and mist on the top of the hills, which continued all day. Rain came on at night. We took three and a half hours to reach Lawers Inn. Met there Mr. Harvey, the brother-in-law of Mr. Naylor. Ascended Ben Lawers as far as Loch na Ghait. Proceeded to examine the rocks at the head of the loch. We failed in getting Cystopteris montana, although we examined the spot where it was previously found by myself and party. We did not go to the Woodsia rocks as our time was limited.

Among the plants gathered were the following:-

Cochlearia officinalis Silene acaulis Cerastium alpinum herleria sedoides Saxifraga oppositifolia "nivalis "stellaris Sedum Rhodiola Hieracium alpinum Armeria maritima Salix herbacca "reticulata

Draba incana

" triglumis
Luzula spicata
Carex artata
Poa alpina
" Balfourii
" vivipara
Asplenium viride
Cystopteris montana, vars.

Juncus trifidus

Polystichum Lonchitis Polypodium alpestre ,, Dryopteris ,, Phegopteris

Returned to Lawers Inn about 6, and after refreshments returned to Strathyre. The night becoming very rainy, Mr. Naylor and Mr. Harvey remained at Lawers Inn with the intention of going on to Kenmore, and then to Aberdeen and Inverness.

Ben Shean.

Monday, 17th August 1863.

Ascended Ben Shean (sounded Ben Shee-an) on opposite side of valley from Strathyre.

After visiting the summit walked along the ridge towards the glen leading up to Balquhidder. Had a fine view of Loch Lubnaig, Loch Earn, and Loch Voil. The hill is not of sufficient height for good alpine plants. Saxifraga aizoides and Alchemilla alpina were the chief sub-alpine species.

Balquhidder, Loch Voil.

Wednesday, 19th August 1863.

After breakfast proceeded with Mr. Thomas Bayley, Andrew Balfour, and Colin Campbell by King's House and Balguhidder to Loch Voil. In the churchyard at Balquhidder is the tombstone of Rob Roy close to the entrance of the old church, which is in complete ruins. Drove along the side of Loch Voil opposite to Mr. David Carnegie's house, and along the north side of Loch Doyne to the farm of James Stewart, who has 16,000 acres of sheep farm from the Earl of Moray. Had a fine view of the braes of Balquhidder. Reached the farm about 12. Mr. Bayley, Andrew Balfour, and Colin Campbell went to fish in the river and on Loch Doyne, while I ascended Ben An, the highest hill in the district, rising to 3400 or 3700 feet, according to Mr. Stewart. The hill is a promising one and would require very complete examination. I spent from 12 to 6 p.m. on it examining the rocks, especially near the summit. The best rocks are those on the east side-some large massive rocks. There I saw a considerable quantity of Draba rupestris in fine fruit.

Among the plants gathered were :-

Thalictrum alpinum Caltha minor Cerastium alpinum latifolium Sibbaldia procumbens Alchemilla alpina Saxifraga oppositifolia ... stellaris Saxifraga aizoides
, hypnoides
Sedum Rhodiola
Epilobium alpinum
Gnaphalium supinum
Hieracium alpinum and vars.
Apargia Taraxaci
Leontodon Taraxacum
(peculiar var.)
Azalea procumbens
(summit of ridge)
Euphrasia officinalis, var.
gracilis
Oxyria reniformis
Salix herbacea

Juncus trifidus

" triglumis
Luzula spicata
Carex rigida

" depauperata
Aira cæspitosa, var.

alpina and vivipara
Poa Balfourii
Juniperus nana
Cryptogramme crispa
Cystopteris dentata
Polystichum Lonchitis
Lastrea dilatata
(alpine vars.)

Polypodium Phegopteris

There is abundance of Corydalis claviculata on the thatched roofs of houses near Mr. Stewart's farmhouse, also fine specimens of Montia fontana, Callitriche platycarpa, and Ranunculus hederaceus. In the loch are Nymphæa alba, Sparganium natans, Arundo Phragmites.

Saturday, 23rd August 1863.

About 12 to-day I started with my son, Andrew, for a high hill behind Strathyre. It attains a considerable elevation, and is made up of large masses of crumbling rocks which have tumbled down in great quantities. The rocks are by no means safe to climb. Few plants were gathered:—Saxifraga stellaris, Saxifraga aizoides, Cryptogramme crispa, Lastrea dilatata, vars.

Callander.

Tuesday, 8th September 1863.

Drove to Callander from Strathyre, Visited Leny grounds and saw the Falls.

Among the plants seen were the following:-

Clematis Vitalba Aconitum Napellus Berberis vulgaris

Aquifolium Cardamine sylvatica Tilia europæa Ilex Aquifolium Euonymus europæus Acer Pseudo-platanus

campestre

saccharinum (some of the maples with fine autumn tints)

Æsculus Hippocastanum Staphylea trifolia Cytisus Laburnum Prunus Laurocerasus

lusitanica

domestica spinosa Spiræa Ulmaria Rubus Idæus Cratægus Oxyacantha Philadelphus coronarius Ribes alpinum Sedum Telephium Circæa lutetiana Pimpinella magna Hedera Helix Sambucus nigra Aucuba japonica Viburnum Opulus Lonicera Periclymenum Symphoricarpus racemosus Valeriana pyrenaica Solidago Virgaurea Inula Helenium Tussilago Farfara Carduus heterophyllus

Hieracium vulgatum

Campanula Trachelium Primula vulgaris Lysimachia nemorum Syringa vulgaris Fraxinus excelsior Ligustrum vulgare Symphytum officinale Scrophularia nodosa Veronica montana Prunella vulgaris Stachys sylvatica Teucrium Scorodonia Ajuga reptans Polygonum Bistorta Rumex conglomeratus Buxus sempervirens Ulmus montana Humulus Lupulus Betula alba Alnus glutinosa Corvlus Avellana Quercus Robur Castanea vesca Fagus sylvatica Carex sylvatica Bromus asper Brachypodium sylvaticum Pinus austriaca

Cembra sylvestris Abies pectinata Cedrus Libani Pteris aquilina Blechnum boreale Athyrium Filix-fæmina Polystichum aculeatum Lastrea Oreopteris

Filix-mas dilatata Osmunda regalis

Loch Lubnaig, Glen Ample.

Thursday, 10th September 1863.

Went about a mile along the shore of Loch Lubnaig, and then turned to the left and went along by the stream which comes from the top of Glen Ample. Visited the glen, and ascended the hill on the left and went over this to Strathyre.

There are some good moist rocks on which interesting plants were gathered. Among the plants collected on the rocks, near the stream, and high up, were the following:—

Alchemilla alpina
Saxifraga oppositifolia
(in flower)
, aizoides
Antennaria dioica, var.
Hieracium Lawsoni
, prenanthoides
Oxyria reniformis

Melica nutans
Triticum caninum
Asplenium viride
, Trichomanes
Cystopteris fragilis and
vars.
Polystichum Lonchitis
Lastrea Oreopteris

Stuc-a-Chroin.

Friday, 11th September 1863.

Left this morning at 11.30 a.m. Drove to Edinample, and thence about 1½ miles up Glen Ample. Then ascended Stuca-Chroin. This is the hill next in height to Ben Voirlich, which is the highest in the district. The summit of the hill was reached about 2.45 p.m.

On the summit we gathered :-

Alchemilla alpina Vaccinium Myrtillus Carex rigida Festuca vivipara Polystichum alpinum Lycopodium Selago Dicranum scoparium Trichostomum lanuginosum Lecidea geographica On the rocks below:-

Thalictrum alpinum Cerastium alpinum Rubus Chamæmorus Sibbaldia procumbens Saxifraga oppositifolia

- stellaris aizoides
- Sedum Rhodiola

hypnoides Epilobium alpinum

Gnaphalium supinum Tofieldia palustris Cryptogramme crispa Polystichum Lonchitis Lastrea dilatata Lycopodium Selago

alpinum selaginoides Splachnum mnioides

Returned to Strathyre at 6 p.m., having left the lower part of the cliffs at 4.30.

Wednesday, 16th September 1863.

Near Stronvar, on the shores of Loch Voil, gathered Osmunda regalis. On the rocks at the Black Island, where the Calair Burn from Glen Buckie divides, we got Hymenophyllum Wilsoni, At Donald Ferguson's house, Stronvar, saw a peculiar Dahlia, half vellow and half purple, on the same capitulum.

Near King's House observed some peculiar varieties of Athyrium Filix-famina.

Ben Voirlich.

Saturday, 26th September 1863.

This morning, about 9.30 a.m., started from Strathyre for Ardvoirlich House. Ascended Ben Voirlich. The day was fine at starting, but between 12 and 1 the rain and sleet came on with wind and tempest; this continued at intervals, with occasional clear blinks.

The summit was reached about 2, and for half-an-hour the party enjoyed a fine view of the mountains and lochs around, but after that mist came on and continued all afternoon.

The weather interfered much with botanising. Reached Ardvoirlich House about 4.30 p.m.

Among the plants on the hill may be mentioned :-

Rubus Chamaemorus Sibbaldia procumbens Alchemilla alpina Saxifraga aizoides and other alpine Saxifragæ Gnaphalium supinum .

Azalea procumbens (on ridge leading down to Ardvoirlich Cottage) Lastrea dilatata (peculiar alpine form) Lycopodium Selago alpinum selaginoides

All the ordinary alpine species were seen. Near the Ardvoirlich Waterfall Hymenophyllum Wilsoni was gathered.

EXCURSIONS IN 1864.

Gorebridge, Arniston, Dalhousie.

Saturday, 14th May 1864.

A party of 110 met at the Waverley Station at 12.30 p.m. and proceeded to Gorebridge, then walked to Arniston, and proceeded by the banks of the Esk to Dalhousie Station. Returned from Dalhousie Station by train at 7.27 p.m. Return

The following were among the plants collected:-

Anemone nemorosa Ranunculus hederaceus auricomus Aquilegia vulgaris Aconitum Napellus Barbarea vulgaris Cardamine amara Alliaria officinalis Viola palustris Stellaria nemorum Geranium sylvaticum Oxalis Acetosella Lotus corniculatus Vicia sepium

Saxifraga Geum umbrosa granulata Chrysosplenium oppositialternifolium Ribes alpinum rubrum nigrum Sanicula europæa Myrrhis odorata

folium

Prunus Padus

Geum rivale

Adoxa Moschatellina Viburnum Lantana Asperula odorata Tussilago Farfara Doronicum plantagineum Vaccinium Myrtillus Pyrola minor Primula veris Vinca minor Symphytum officinale

" tuberosum Pulmonaria officinalis Myosotis sylvatica " collina

Veronica montana Lathræa Squamaria Buxus sempervirens Salix alba Salix cinerea

" Caprea " Helix Orchis mascula

Galanthus nivalis Allium ursinum Luzula sylvatica

" campestris Potamogeton crispus Carex glauca

Blechnum boreale Polypodium Dryopteris

,, Phegopteris
Equisetum maximum

" limosum Peziza coccinea Morchella esculenta

Burntisland, Aberdour.

Saturday, 21st May 1864.

Party of 110 met at Scotland Street Station at 9.40 a.m. and proceeded to Burntisland. Visited Aberdour, and returned by train at 3.3 p.m. Return tickets, 8d.

The following were among the plants collected:-

Thalictrum minus flexuosum

Ranunculus bulbosus Berberis vulgaris Cheiranthus Cheiri Barbarea vulgaris Cochlearia danica

Barbarea vulgaris Cochlearia danica Sisymbrium Thalianum ... officinale

Alliaria officinalis Lepidium Smithii Thlaspi arvense Reseda Luteola Helianthemum vulgare

Viola hirta

" sylvatica canina

" tricolor

Polygala vulgaris Silene maritima

Cerastium tetrandrum " semidecandrum

Arenaria trinervia
Honckenya peploides
Sagina maritima

Geranium phæum

Erodium cicutarium Trifolium procumbens filiforme Astragalus hypoglottis Vicia sepium Prunus spinosa Geum urbanum rivale Fragaria elatior Cratægus Oxyacantha Saxifraga granulata Myrrhis odorata Sambucus nigra Sherardia arvensis Valerianella olitoria Tussilago Farfara Petasites vulgaris Senecio vulgaris Hieracium Pilosella vulgatum Leontodon palustris Sonchus oleraceus Armeria maritima Primula caulescens Anchusa sempervirens Myosotis arvensis Solanum Dulcamara Linaria Cymbalaria

Antirrhinum majus Veronica hederæfolia Beccabunga Salvia Verbenaca Nepeta Glechoma Lamium incisum Plantago maritima Coronopus Hippophaë rhamnoides Parietaria officinalis Salix Caprea Orchis mascula Endymion nutans Luzula congesta Triglochin maritimum Blysmus rufus Trisetum flavescens Sclerochloa maritima loliacea Asplenium Adiantumnigrum Trichomanes Ruta-muraria Athyrium Filix-fæmina

Lastrea Filix-mas

dilatata

Polypodium vulgare

Mid-Calder, Meadowbank, Dalmahoy Hills, Water of Leith, Currie.

Saturday, 28th May 1864.

Party of 80 met at the Caledonian Railway Station at 10.20 a.m. and proceeded to Mid-Calder; then walked to Meadowbank, Dalmahoy Hills, Water of Leith, and Currie. Returned from Currie at 6.11 p.m. Return tickets, is.

Among the plants collected were the following:-

Ranunculus hederaceus Trollius europæeus Aconitum Napellus Nymphæa alba Meconopsis cambrica Draba verna Sisymbrium Thalianum Helianthemum vulgare Viola canina

" lutea Silene inflata Cerastium glomeratum Tilia grandifolia Geranium sylvaticum

" lucidum Oxalis Acetosella Prunus Padus Geum intermedium

Saxifraga granulata " hypnoides Ribes rubrum

" nigrum Drosera rotundifolia Myriophyllum spicatum Callitriche platycarpa Myrrhis odorata Galium saxatile Asperula odorata Pyrola minor Trientalis europæa Menyanthes trifoliata Polemonium cæruleum Anchusa sempervirens

Myosotis versicolor

Salix Smithiana Corallorrhiza innata Orchis mascula

" latifolia " maculata

Allium ursinum
Luzula sylvatica
Arum maculatum
Lemna minor
Potamogeton oblongus
Eriophorum vaginatum

" angustifolium Carex curta

" pilulifera " panicea

,, ampullacea Nardus stricta

Asplenium Adiantum-

nigrum Equisetum limosum ,, hyemale

Andreæa Rothii Bryum nutans

" cæspititium Lecanora Parella

tartarea

" hæmatomma Sticta scrobiculata Peltidea aphthosa Cetraria glauca Usnea florida Alectoria jubata Cornicularia bicolor

Drem, Gullan, Longniddry.

Saturday, 4th June 1864.

Party of 90 met at the North British Railway Station at 8 a.m. and proceeded to Drem, then walked to Gullan and Long-

niddry, and returned by train at 3.36. Reached Edinburgh at 4.20 p.m. Return ticket, 1s. 4d.

The following were among the plants collected:-

Thalictrum minus Ranunculus circinatus Papaver dubium

" Argemone Cheiranthus Cheiri Cochlearia officinalis Brassica campestris Viola hirta

" canina Lychnis vespertina Cerastium semidecandrum ... arvense

Honckenya peploides Linum catharticum Geranium sanguineum

,, phæum ,, pusillum

dissectum Erodium cicutarium Ilex Aquifolium Astragalus hypoglottis Potentilla reptans Pyrus Aria Hippuris vulgaris Callitriche platycarpa Hydrocotyle vulgaris Symrnium Olusatrum Sium angustifolium Œnanthe crocata Sambucus nigra Galium palustre Valerianella olitoria Carduus tenuiflorus Centaurea Scabiosa

Apargia hispida Armeria maritima Glaux maritima Vinca major Menyanthes trifoliata Cynoglossum officinale Lycopsis arvensis Myosotis collina Solanum Dulcamara Scrophularia vernalis Veronica Beccabunga Utricularia vulgaris Lamium amplexicaule

" intermedium Atriplex Babingtonii Hippophaë rhamnoides Euphorbia Helioscopia Listera ovata Orchis mascula

" latifolia " maculata Iris Pseudacorus Sparganium ramosum Triglochin maritimum Potamogeton natans

" rufescens Eleocharis multiflora Blysmus rufus Carex disticha

" teretiuscula " vulpina Equisetum palustre

Alloa, Lornshill Woods, Menstrie, Blairlogie, Airthrey, Abbey Crag, Stirling.

Saturday, 11th June 1864.

Party of 75 met at the Edinburgh and Glasgow Railway Station at 6.25 a.m. and proceeded to Alloa. Met Mr. John Dawson, Dr. Duncanson, Dr. Wilson, Dr. Brotherston, Rev. Mr. Hallens, Mr. Clark, Sheriff-Substitute, and other members of the Alloa Natural History Society, who joined us at breakfast in the Royal Oak (Mr. Thomas). Return tickets, 3s; breakfast, 1s. 6d. After breakfast, walked by Lornshill Woods (picking Corallorrhiza innata) to Menstrie and the glen near it. Thence to Bialriogie and along the foot of the Ochils to Airthrey. Visited the grounds under guidance of Mr. Fraser, the factor for Lord Abercrombie. Went to the Abbey Crag, and walked to Stirling. Returned thence by train at 5.48 p.m.

Among the plants collected were the following:—

Ranunculus aquatilis hederaceus Berberis vulgaris Corydalis claviculata Cardamine amara Viola palustris Lychnis vespertina Viscaria Sagina subulata Montia fontana Geranium sylvaticum lucidum Trifolium striatum Ornithopus perpusillus (Menstrie) Saxifraga hypnoides Sedum Telephium anglicum reflexum Callitriche verna Sanicula europæa Conium maculatum

Senecio viscosus

Hieracium Pilosella vulgatum Hypochœris radicata Lactuca virosa Erica Tetralix Pyrola minor Villarsia nymphæoides (Airthrey pond) Symphytum tuberosum Myosotis cæspitosa Echium vulgare Atropa Belladonna Melampyrum pratense Pinguicula vulgaris Euphorbia Helioscopia Salix aurita Corallorrhiza innata Habenaria chlorantha Iris Pseudacorus Luzula congesta Triglochin maritimum Carex muricata .. stellulata

Carex ovalis
, pilulifera
Alopecurus geniculatus
Aira præcox
Phragmites communis
Koeleria cristata
Melica uniflora
Glyceria aquatica
Juniperus communis
Hymenophyllum Wilsoni
(Menstrie)
Blechnum boreale

Asplenium Adiantumnigrum Cystopteris fragilis Polystichum aculeatum Lastrea Oreopteris , spinulosa , dilatata Polypodium Dryopteris , Phegopteris Equisetum palustre , limosum Lycopodium davatum

Hawick, Denholm, Hassendean, Minto Crags, Newton.

Saturday, 18th June 1864.

Party of 85 met at the Waverley Station at 6.25 a.m. and proceeded to Hawick. Met Mr. J. A. Murray of the Academy and Mr. Wilson with his son. Breakfasted at the Crown Hotel. Afterwards walked by Cavers to Denholm Dene, Denholm, and Hassendean; then a pilot engine took the party at 5,30 to Newton, reaching there in time for the 6 pm. train. Return tickets, 2s. 6d.; breakfast, 1s. 6d. Mr. A. Craig Christie visited Minto Crags and gathered Lychnis Viscaria, Asplenium germanicum, and A. septentrionale.

Among the plants collected were the following :-

Aquilegia vulgaris
Corydalis claviculata
Fumaria capreolata
Cardamine hirsuta
" sylvatica
Alliaria officinalis
Brassica campestris
Viola palustris
" hirta

Stellaria nemorum Geranium sylvaticum "pyrenaicum

" pyrenaicum " lucidum Trifolium medium
Anthyllis Vulneraria
Vicia sylvatica
Rubus nemorosus
Geum intermedium
Comarum palustre
Pyrus Malus
Saxifraga hypnoides
Sedum villosum
Sempervivum tectorum
Hippuris vulgaris
Callitriche platycarpa

Euonymus europæus

Epilobium hirsutum Circæa lutetiana Conium maculatum Pimpinella Saxifraga Silaus pratensis Peucedanum Ostruthium Adoxa Moschatellina Lonicera Caprifolium Asperula odorata Valeriana dioica Carduus heterophyllus Campanula latifolia Pyrola minor Lysimachia vulgaris Vinca minor Menvanthes trifoliata

Anchusa sempervirens Myosotis cæspitosa palustris Linaria vulgaris Veronica polita agrestis

Polemonium cæruleum

Melampyrum sylvaticum Pinguicula vulgaris Stachys ambigua sylvatica

Atriplex erecta Polygonum Bistorta Rumex viridis

Euphorbia Helioscopia Neottia Nidus-avis Epipactis latifolia Orchis latifolia Habenaria viridis Eriophorum angustifolium Carex dioica

disticha teretiuscula

ovalis

panicea sylvatica

fulva flava

hirta ampullacea

Phalaris arundinacea Trisetum flavescens Avena pubescens Cynosurus cristatus Glyceria aquatica Brachypodium sylvaticum Blechnum boreale Scolopendrium vulgare Lastrea dilatata Equisetum palustre limosum

Hypnum aduncum dendroides

East Linton, Tynningham, Binning Wood.

Saturday, 25th June 1864.

Party of 57 met at the Waverley Station and proceeded to East Linton. Thence walked to Tynningham. Met Mr. Lees. Visited the garden and houses, and walked towards the mouth of the Tyne and the shore. Walked through Binning Wood to East Linton, and returned by train at 3.10 p.m. Return tickets 2s. Many seeds were picked on rocks off St. Baldred's, and near this abundance of Ophioglossum vulgatum.

Among the other plants gathered were the following :-

Papaver dubium
, Argemone
Fumaria micrantha
Sinapis alba
Viola hirta
Lepigonum marinum
Malva rotundifolia
Linum catharticum
Geranium sanguineum
Trifolium hybridum
Rubus cæsius

Potentilla reptans Agrimonia Eupatoria Rosa rubiginosa " arvensis Sempervivum tectorum Conium maculatum Lonicera Caprifolium

Aster Tripolium
Hieracium vulgatum
Apargia autumnalis
Tragopogon minor
Erica Tetralix
Glaux maritima
Erythræa Centaurium
Cynoglossum officinale
Symphytum tuberosum
Myosotis collina
Solanum Dulcamara

Linaria Cymbalaria Antirrhinum majus Veronica agrestis Euphrasia officinalis Lamium intermedium Ballota fœtida

Plantago Coronopus Atriplex Babingtonii Salicornia herbacea Suæda maritima Rumex sanguineus

Hippophaë rhamnoides Buxus sempervirens Humulus Lupulus Parietaria erecta

Populus alba ,, tremula

Neottia Nidus-avis Listera ovata

Orchis latifolia ... maculata

Iris Pseudacorus Ornithogalum umbellatum Juncus Gerardi Triglochin maritimum

Scirpus maritimus Trisetum flavescens Lolium italicum Triticum repens

Taxus baccata Blechnum boreale Asplenium Adiantum-

nigrum Athyrium Filix-fæmina Lastrea dilatata Equisetum palustre

Newburgh, Lindores Loch, Abdie, Denmiln, Mare's Crag, Ochils, Lochmill.

Saturday, 2nd July 1864.

Party of 55 met at the Scotland Street Station at 6.30 a.m. and proceeded to Lindores Loch, walked round it to Abdie,

Macduff's Castle, Denmiln, and the Mare's Crag. Reached Newburgh about 10.18 a.m. for breakfast at Mr. Sutcliffe's George Hotel. Visited Dr. Lyall's collection of ferns, and saw Mr. Lang. Mr. Anderson of the Commercial Bank also accompanied us. Walked by the Ochils to Lochmill, and returned to Newburgh at 4,35 p.m. Return tickets, 2s. 6d.; breakfast, 1s. 3d.

The following were among the plants collected:-

Ranunculus Flammula " hirsutus (Pitcaithly) Papaver dubium

,, Argemone
Fumaria capreolata

" micrantha Sisymbrium Thalianum Reseda Luteola Helianthemum vulgare

Viola tricolor ,, arvensis Silene inflata

Malva moschata " rotundifolia Geranium dissectum Ononis arvensis

Trifolium medium Anthyllis Vulneraria Vicia hirsuta

" Cracca
Agrimonia Eupatoria
Saxifraga granulata
Epilobium angustifolium
Hydrocotyle vulgaris
Scandix Pecten-Veneris
Galium saxatile
Asperula odorata
Valerianella olitoria
Anthemis arvensis
Matricaria inodora

Senecio sylvaticus

Hieracium Pilosella Vaccinium Myrtillus Erica cinerea Menyanthes trifoliata Lycopsis arvensis Linaria vulgaris

Linaria vulgaris Scrophularia nodosa Digitalis purpurea Pedicularis palustris Rhinanthus Crista-galli Galeonesis versicolor

Galeopsis versicolor
" Tetrahit
Lamium amplexicaule
Teucrium Scorodonia
Scleranthus annuus
Chenopodium album

Polygonum amphibium
" viviparum
Euphorbia Helioscopia
Humulus Lupulus

Orchis latifolia Iris Pseudacorus Juncus effusus Luzula sylvatica Alisma Plantago Carex hirta

" ampullacea Phalaris arundinacea Blechnum boreale Lastrea Oreopteris Polypodium Dryopteris In Lindores Loch :-

Ranunculus circinatus ,, aquatilis Nuphar luteum

Comarum palustre Littorella lacustris Typha latifolia Sparganium ramosum " simplex Scirpus lacustris Glyceria aquatica

On Mare's Crag:-

Dianthus deltoides Sagina subulata Geranium sanguineum columbinum Geranium lucidum Ornithopus perpusillus Potentilla argentea

At Denmiln:-

Verbascum Lychnitis

In Lochmill:-

Nuphar luteum Nymphæa alba Potamogeton natans Potamogeton heterophyllus ,, crispus

Dumfries, Caerlaverock Castle.

Saturday, 9th July 1864.

Party of 54—along with 30 of Dr. Leycock's pupils, making in all 84—met at the Caledonian Railway Station at 7.45 a.m. and proceeded to Dumfries. Then proceeded in carriages to the Crichton Institute, where breakfast was provided by Dr. Gilchrist. Walked by banks of Nith to Caerlaverock Castle, and returned by carriage to Dumfries in time for train at 6 p.m. for Edinburgh, which was reached about 9.30 p.m. Return tickets, 5s.

Among the plants collected were the following:-

Ranunculus sceleratus Berberis vulgaris Cheiranthus Cheiri Cochlearia officinalis Iberis amara Crambe maritima Silene maritima Sagina maritima Lepigonum marinum Hypericum dubium