Henry Bacon

CONCISE DESCRIPTION

OF THE

ENGLISH LAKES,

AND ADJACENT

MOUNTAINS:

WITH

GENERAL DIRECTIONS TO TOURISTS;

NOTICES OF THE

BOTANY, MINERALOGY, AND GEOLOGY OF THE DISTRICT;

OBSERVATIONS ON METEOROLOGY;

THE FLOATING ISLAND IN DERWENT LAKE;

AND

THE BLACK-LEAD MINE IN BORROWDALE.

BY JONATHAN OTLEY.

FOURTH EDITION.

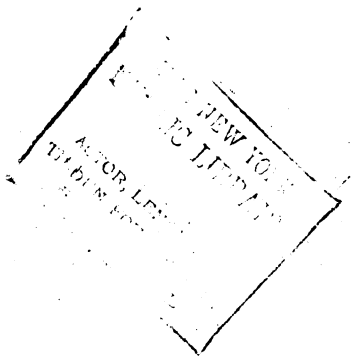
KESWICK:

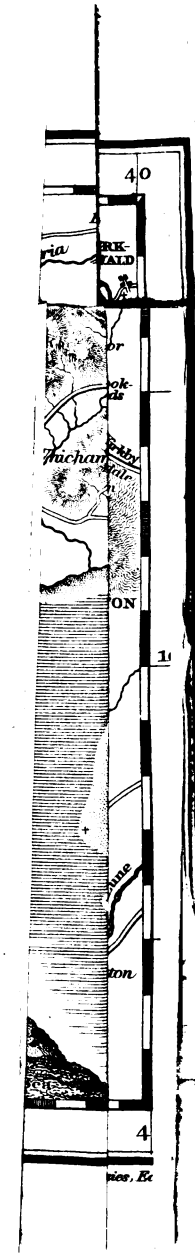
PUBLISHED BY THE AUTHOR;

BY JOHN RICHARDSON, ROYAL EXCHANGE, LONDON;

AND ARTHUR FOSTER, KIRKBY LONSDALE.

1830.





PREFACE.

GUIDES and Tours to the Lakes have been and continue to be offered to the Public in various forms and sizes; but they are chiefly devoted to a single object—the picturesque appearance of of the Country; to the exclusion of other important considerations.

It is admitted, that the gratification of the eye is a leading motive with many of those who make the Tour of the Lakes; but it is not so with all. The reflecting mind will feel more satisfaction in having gained some knowledge of the structure, the natural history, and productions of the region he has visited.

As a resident among the objects he attempts to describe, the Author of this Manual has possessed many opportunities of making observations, which will escape the notice of the transient visiter—the compiler from the works of others—or even of one who undertakes a tour for the professed purpose of making a book.

Availing himself of these advantages, and a little experience in surveying, he constructed a Map of the District, divested of many errors which had been copied into former maps, and containing some particulars not to be found in any other. This Map has been accompanied with such descriptions, directions, and remarks, as were judged likely to be serviceable to the future Tourist; in conducting him through the most eligible paths for viewing the varied scenery, and at the same time conveying some information on the structure and phenomena of these interesting regions.

The Public have so far appreciated his labours as to enable him to dispose of three editions, every one of which has been carefully revised, and interspersed with additional matter; but the original design has never been departed from—to comprise as much information as possible in a moderate compass, and to supply a book of facts—useful without being either cumbrous or expensive.

The Lakes have been so often and so copiously dilated upon, that a concise description of them is all that has been thought necessary; but the observations upon the different Mountains are extended to some length, as they have been hitherto very inadequately and often very inaccurately described.

A new species of illustration has been introduced into this edition—sketches of the outlines of some of the most remarkable ranges of mountains as they appear from different stations in the roads, or places easy of access. This, it is expected, will be found a more intelligible mode of communicating their names than any verbal description, as well as more easily remembered; and may obviate the necessity of many questions, which are often wished to be put when there is none at hand to answer.

CONTENTS.

THE LAKES 9
Windermere 10
Ulswater 14
Brothers Water 16
Hawes Water 17
Coniston Water 17
Esthwaite Water 18
Grasmere 19
Rydal Water 20
Thirlmere 20
Derwent Lake 21
Bassenthwaite Lake 25
Buttermere 26
Crummock 26
Lowes Water 27
Ennerdale 27
Waswater 28
THE TARNS 30
Elterwater—Loughrigg Tarn . . . 31
Little Langdale Tarn—Blea Tarn—Stickle Tarn—Codale Tarn—Easdale Tarn—Hays Water—Angle Tarn 32
Grisedale Tarn—Red Tarn—Keppel Cove Tarn Angle Tarn 33
Small Water—Blea Water—Levers Water—Low Water—Gates Water—Blind Tarn—Beacon Tarn 34

Seathwaite Tarn—Kentmere Tarn—Skeggles Water—Blea Tarn—Watendleth Tarn—Angle Tarn—Sprinkling Tarn 35
Sty Head Tarn—Dock Tarn—Tarn of leaves—Harrop Tarn—Scales Tarn . . . 36
Bowscale Tarn—Over Water—Burtness Tarn—Floutern Tarn—Burnmoor Tarn—Devoke Water—Eel Tarn—Stony Tarn . . . 37
RIVERS.—Derwent—Greta—Cocker—Ellen—Eamont Lowther—Eden—Petterill—Caldew—Lune—Kent Sprint—Mint—Brathay—Rothay—Leven—Crake Duddon—Esk—Irt—Mite—Bleng—Lissa—Enn—Calder 38
WATERFALLS
Lowdore Cascade 40
Barrow Cascade—White Water Dash—Scale Force 41
Airey Force—Stock Gill Force—Rydal Waterfalls 42
Dungeon Gill—Skelwith Force—Colwith Force—Birker Force—Dalegarth Force . . . 43
Taylor Gill—Sour Milk Gill 44
MOUNTAINS 45
Skiddaw 47
Helvellyn 57
Scawfell and Pikes 63
Saddleback 67
Carrock Fell 68
Bowfell 68
Gable 68
Pillar 69
Grasmoor 69
Grisdale Pike 70
Black Combe 70
Coniston Old Man 71
Fairfield 72

Langdale Pikes 72
High Street 73
Wansfell Pike 74
Witeless Pike 74
Loughrigg Fell 75
Mountains of Langdale, &c. from Windermere 97
Mountains of Ulswater 109
Mountains of Derwent Water 115
Mountains of Buttermere 125
Mountains of Waswater 129
Mountains of Ennerdale 131
Mountains of Patterdale 137
BEARINGS AND HEIGHTS OF MOUNTAINS . . 76
CRAGS 78
ANTIQUITIES
Druidical Circles 79
King Arthur's Round Table—Mayburgh—Giant's Graves 80
Barnscar—Beacons—Hardknot Castle—Castles 81
Furness Abbey—Calder Abbey . . . 82
Shap Abbey 83
EXPLANATION OF TERMS 83
SEASON FOR VISITING THE LAKES . . . 87
GENERAL DIRECTIONS AND EXCURSIONS
Stages in the District 89
Lancaster 90
Lancaster to Ulverston and Furness Abbey . 91
Ulverston 92
Coniston 94
Milnthorp to Kendal 96
Kendal 96
Kendal to Windermere 96
Bowness to Esthwaite Water and Coniston . 98
Ambleside 99
Ambleside to Langdale 100
Ambleside to Eskdale and Wasdale . . . 103

Ambleside to Keswick 105
Carlisle to Keswick 107
Penrith 108
Penrith to Ulswater 108
Excursions to Hawes Water 110
Kendal to Hawes Water by Shap . . . 112
Keswick 113
Round Derwent Lake 118
To Borrowdale by Watendleth . . . 120
Ride to Buttermere 121
Drive to Scale Hill and Buttermere . . . 124
Keswick to Waswater and Calder Bridge . . 126
Return from Calder Bridge to Keswick . . 132
Drive round Bassenthwaite Lake . . . 134
Keswick to Ulswater 135
Whitehaven and Cockermouth . . . 136
Cockermouth to Lowes Water, &c. . . . 136
BOTANICAL NOTICES 139
GEOLOGY OF THE DISTRICT 147
METEOROLOGY 163
FLOATING ISLAND IN DERWENT LAKE . . . 169
BLACK-LEAD MINE IN BORROWDALE . . . 173

DESCRIPTION

OF

THE ENGLISH LAKES,

&c.

THE LAKES.

THE Mountainous District in which the English Lakes are situated, extends into three Counties, Cumberland, Westmorland, and Lancashire, which form their junction at a point upon the mountain Wrynose, near the road side. Lancashire is separated from Cumberland by the river Duddon, from Westmorland by the stream falling into Little Langdale; and the latter county is parted from Cumberland by the mountain ridge leading over Bowfell to Dunmail Raise. Windermere Lake is said to belong to Westmorland, at least its islands are claimed by that county, although the whole of its western and part of its eastern shores belong

to Lancashire. Coniston and Esthwaite Lakes, with Blelham and the tarns of Coniston, are wholly in Lancashire. Grasmere, Rydal, and Hawes Water, with several tarns, lie in Westmorland. The head of Ulswater is in Westmorland, but below Glencoin it constitutes the boundary between that and Cumberland. Derwent, Bassenthwaite, Buttermere, Ennerdale, and Waswater, are in Cumberland.

Before this country became so much the resort of strangers, the word LAKE was little known to the native inhabitants; but to the ancient termination *mere*, WATER was usually superadded, as Windermere-Water, Grasmere-Water.

WINDERMERE having given its name to the adjoining parish, it has been thought necessary in speaking of the lake itself, to add the word *water*, or *lake*, by way of distinction. It is the largest of the English Lakes, being upwards of ten miles in length, measured upon the water; by the road on its banks considerably more. Its greatest breadth is about a mile, and depth nearly forty fathoms. A strait near the middle of the lake has a public ferry-boat on the way between Kendal and Hawkshead.

The numerous islands with which it is enriched, are chiefly grouped near the middle of the lake, so

as to admit greater scope for the exercise of sailing. The principal, called Belle-Isle—from the late Mrs. Curwen who purchased it into the family—is a beautiful plot of thirty acres, surmounted by a stately mansion, and encircled by a gravel walk of nearly two miles, which strangers are freely permitted to perambulate. Besides this, are Crow-Holm, two Lilly of the Valley-Holms, Thompsons-Holm, House-Holm, Hen-Holm, Lady-Holm, and Rough-Holm; and to the south of the Ferry, Berkshire-Island, Ling-Holm, Grass-Holm, Silver-Holm, and Blake-Holm.

Windermere is stocked with a variety of fish, of which char are the most esteemed. Char being taken by nets in the winter months, are potted, and sent to different parts of the kingdom. The principal feeders of the lake are the Rothay, having its source in Grasmere; and the Brathay, issuing from Langdale. These two rivers unite their streams about half a mile before entering the lake; and a remarkable circumstance is, that the trout and char, both leaving the lake about the same time to deposite their spawn, separate themselves into the two different rivers; the trout making choice of the Rothay, and the char taking the Brathay.

This lake is situated in a country beautifully diversified by sloping hills, woods, and cultivated grounds, with lofty mountains in the distance. Its banks are adorned with buildings, which combine better with the scenery of this, than they would with

that of the more northern lakes. Storrs-Hall, the mansion of Colonel Bolton, is beautifully situated upon a low promontory, and Rayrigg, the residence of the Rev. John Fleming, upon a bay of the lake. Calgarth-Park, the residence of Mrs. Watson, relict of the late Bishop of Landaff, has a lowly, and Elleray, the occasional abode of Professor Wilson, an elevated situation. The villa of Brathay, and that of Mr. Brancker, at Croft-Lodge, are conspicuous objects near the head of the water. Bowness is an irregularly built, but very neat village, on the margin of the lake; it has two inns, and there are several good houses in the neighbourhood. The church possesses some painted glass, brought from Furness Abbey; and its cemetery contains the remains of the late Bishop Watson. Low Wood Inn, stands sweetly at the edge of the water; and Ambleside is at a convenient distance for making excursions, either on the lake or to the adjacent vallies and mountains.

Some would like to commence their survey of Windermere at Newby Bridge, and have the scenery to unfold itself as they advance. Others will be more gratified by the prospect bursting upon them at once in full expansion, as it does from the elevated ground, on either of the roads leading from Kendal towards Bowness or Ambleside. All the way, from two miles south of Bowness to the head of the lake, the views are excellent; and every rising ground affords something new in the combination. Rayrigg-

Bank has the most complete view of the whole lake; and about Troutbeck Bridge, the range of mountains extending from Coniston Old Man to Langdale Pikes, appears to great advantage: the Pikes on Scawfell, (the highest land in England,) being seen on the left of Bowfell; and, between it and Langdale Pikes, stand Great End and Gable, as if guarding the pass at Sty-Head. It is only from some parts of the lake that the summit of Helvellyn can just be seen, beyond the fells of Grasmere and Rydal; and a peep at Skiddaw is obtained from the Guide-Post, on the Cartmel road, a mile and a half south of Bowness.

The *Station*, belonging to Mr. Curwen, is built upon a rock above the Ferry House. It commands extensive views of the lake and surrounding scenery; and the windows, of stained glass, give a good representation of the manner in which the appearance of the landscape would be affected in different seasons. A walk or a ride along the sequestered road from the the Ferry towards Ambleside, will be found agreeable to the contemplative mind; and during a voyage on the higher part of the lake (which ought not to be omitted) a variety of both near and distant scenes are presented to the view in delightful succession. As the boat proceeds from the landing place at Low Wood, a person previously acquainted with the distant mountains will feel a pleasure in observing how the highest Pike on Scawfell seems to march

forth from behind Bowfell; and the Gable, from behind Langdale Pikes.

At Newby Bridge, on the foot of the lake, is a small inn, where boats, post-horses, and chaise are kept. There is another at the Ferry, on the western side, where boats and post-horses may be had; and the inns at Bowness, Low Wood, and Ambleside, are furnished with every requisite accommodation.

ULSWATER ranks next in point of size, being nine miles long, but rather wanting in breadth: yet on account of its winding form, the disproportion is not so much observed. It has the greatest average depth of any of the lakes, being in many places from 20 to 35 fathoms. The country about its foot is rather tame; but its head is situated among some of the most majestic mountains, which are intersected by several glens or small vallies; and their sides embellished with a variety of native wood, and rock scenery.

Three rocky islets ornament the upper reach of the lake; they are called Cherry-Holm, Wall-Holm, and House-Holm, the last of which, though houseless, is a fine station for viewing the surrounding scenery.—This lake abounds with trout which are sometimes caught of very large size; here are also some char, but they are neither numerous nor of the best quality. Large shoals of a peculiar kind of fish are met with, called here the skelly; and great quantities

of eels are taken in the river Eamont, below Pooley Bridge, as they migrate from the lake in autumn. At the foot of the lake, the water seems to be embanked by a conglomerated mass of pebbles; the same composition forms the finely wooded hill called Dunmallet, which stands like a centinel to guard the pass. The borders of the lake are ornamented with several handsome villas. Ewesmere hill on the Westmorland side commands delightful prospects up the lake. On the Cumberland side, Colonel Salmond's beautiful residence at Waterfoot, retires from the view; at Hallsteads, on a fine promontory with undulating grounds, Mr. Marshall, M. P. has an elegant house. Lyulph's Tower is a hunting box, built by the late Duke of Norfolk, in his deer park; and Airey Force may be seen by application to the keeper who resides here. Glencoin is a farm placed in a sweet recess, where a brook divides the counties of Cumberland and Westmorland. At the foot of Glenridding, the Rev. Mr. Askew has a tasteful cottage; and towards the foot of Grisdale, the seat of W. Marshall, Esq. stands upon the site of the ancient Patterdale Hall.

The only carriage road lies on the north-west side of the water, sometimes on a level with its surface and commanding an unobstructed view; at other times deeply shaded in ancient woods, permitting only occasional glimpses of the lake; but on the opposite side the pedestrian will be well repaid for a ramble along Placefell and Birkfell. From the

slate quarry on Placefell there is a grand view of the mountains, just including the highest point of Helvellyn; and from many parts of the path the views are truly picturesque. If the tourist aspires to more extensive prospects, they may be attained by climbing the mountain to a certain height; where the lower extremity of the lake may be seen over the beautiful grounds of Hallsteads.

This lake, like others, is most advantageously seen by commencing at its foot; so that, whether by the road, or a boat, the grandeur of the scenery is continually increasing as the traveller approaches the mountains; but the views from the lake are more open, and the water itself appears more spacious, from the boat on its surface, than from any elevation above it.

There is a comfortable inn at Pooley Bridge, on the foot of the lake; and another at Patterdale at a little distance from its head. They both furnish boats upon the lake: and the long wanted medium of land conveyance is now in part supplied;—horses and jaunting cars can be had at Pooley Bridge; and a post chaise and horses at Patterdale.

BROTHER WATER—so called from the circumstance of two brothers having been drowned together, by the breaking of the ice—is a small lake, situate in that part of Patterdale called Hartshope, on the road leading to Ambleside.

HAWES WATER is near three miles in length and half a mile in breadth; it is almost divided in two parts by the projection of a plot of cultivated land from the N. W. side. Its head is encompassed by lofty mountains, but they exhibit less variety of outline than those of Derwent and Ulswater. Its eastern side is bounded by Naddle Forest, the lower part completely wooded, and surmounted by the lofty Wallow Crag; beyond which the hill side is scattered with aged thorns. The western side has more cultivation, and a few farm houses sheltered by trees. The houses—with the exception of Mr. Boustead's at Measand-beck, and Mr. Holmes' at Chapel hill—are mostly walled without mortar, and the deciduous trees associate well with the rest of the scenery. Opposite the head of the lake, Castle Crag is a prominent feature in the landscape.

This lake is well stocked with fish of various kinds; but they are chiefly preserved for the table of Lowther Castle.

Lying beyond the usual circuit of the lakes, and at a distance from the great roads and places of entertainment, Hawes Water is often omitted in the tour. But those who can contrive to visit it without hurry or fatigue, will find it a sweet retired spot.

CONISTON WATER, called in some old books THURSTON WATER, is a lake of considerable magnitude, being six miles in length; but wanting in that agreeable flexure of shores so conducive to the

beauty of a lake. Near its foot however, are some fine wooded, rocky promontories; which from certain points add greatly to the prospect. It has two small islands, but they are placed too near the shore to contribute much to its importance.

As the principal mountains lie on the western side and at its head, the best views are in consequence obtained in a progress from its foot, on the eastern side; or from a boat on its surface: but those who have leisure may be gratified by the variety afforded in an excursion quite round the lake.

Its greatest depth is twenty-seven fathoms. It is well supplied with trout and char, the latter are said to be better here than in any other lake; they are taken by nets in winter, and it was formerly supposed they could not be tempted by any kind of bait; however, of late several have been taken by angling, with a hook baited in a peculiar manner with a minnow.

The inn, at Waterhead, is pleasantly situated on the margin of the lake, and furnishes parties with pleasure boats; a chaise, and pair of post horses.

ESTHWAITE WATER is a small placid lake, nearly two miles in length, and distinguished by a fine swelling peninsula, which reaches far into the water from the western side. It is situated near the ancient little town of Hawkshead, in a beautiful open valley, which is crowned with gentle eminences, and

decorated with an agreeable composition of houses, fields, and trees.

On a pond called Priest Pot, near the head of this lake, there is a Floating Island 24 yards in length, and 5 or 6 in breadth; supporting several trees of alder and willow of considerable size. Differing from one in Derwent lake, which rises occasionally from the bottom, this remains always upon the surface, generally resting against the shore; but when the water is high it is frequently moved from side to side by a change of wind; and has undoubtedly been thus torn from the bank at some remote period.

GRASMERE LAKE is not large, but well formed; and placed near the confines of a cultivated valley, which, as well as the parish, takes the name of Grasmere. The island, containing about four acres of verdant pasture, forms a striking contrast to the massive wooded islands on some of the neighbouring lakes. It rises boldly from the water, in a fine swelling form; and its smooth green surface, when spotted with grazing cattle, has a beautiful appearance. Should it, however, be thought wanting in trees, there is scarcely an island in Windermere or Derwent, but what could supply the deficiency. Most of the lakes, in order to be seen to advantage, require the progress to be made from the foot, towards the head of the lake; but Grasmere being completely encircled by mountains, this is not in-

dispensable. The view from Dunmail Raise was much admired by Mr. Gray; others have spoken highly of that from Townend; and Mr. West chose his station on Dearbought hill, on the opposite side. In short, from whatever point the approach of Grasmere is made, the prospect is always pleasing.

There are two good houses for the accommodation of travellers: the Red Lion, supplying post horses and jaunting cars, is near the Church; and the Swan on the Turnpike road.

RYDAL WATER is of smaller dimensions, and formed in a more contracted part of the valley; it receives the river flowing from Grasmere lake after a course of about half a mile. It is ornamented by two picturesque islands, on one of which the herons build their nests in the trees; and bordered by meadows and woody grounds, surmounted by rocky mountains.

The fish in Grasmere and Rydal Waters, are pike, perch, (provincially called bass,) and eels, with a few trout.

THIRLMERE—commonly called LEATHES' WATER, from the family to whose estate it belongs; and sometimes WYTHBURN WATER, from the valley in which it is partly situated—lies at the foot of the "mighty Helvellyn;" upon the highest level of any of the lakes, being near 500 feet above the sea; it is upwards of two miles and a half in length,

and intersected by several rocky promontories; it is divided into an upper and lower lake, and over a strait a picturesque wooden bridge leads to Armboth House. The depth of this lake, which has been reported to be very great, has not been found to exceed eighteen fathoms. A wooded island, of half an acre, lies near the shore, on the lower or northern part of the lake; and the surface of the water being of late somewhat lowered by opening its outlet, a small rock in the upper part has become more conspicuous.

Travellers are commonly satisfied with a sight of this lake from the road; but those who have leisure may obtain better views of the lower and finer part of the lake, from different stations in the grounds near Dalehead House; and finer still from the other side of the water. But the most perfect view of the whole lake is from a rocky hill at a little distance from the northern end of the water.

DERWENT LAKE, near Keswick, is of the most agreeable proportions. In breadth it exceeds any of the neighbouring lakes, being near a mile and a half; although its length is little more than three miles. Lakes of greater length generally extend too far from that mountain scenery, which is so conducive to their importance; but Derwent Lake appears entirely encircled; and visitors are at a loss which to admire most, the broken rocky mountains

of Borrowdale on the one hand, or the smooth flowing lines of Newlands on the other; while the majestic Skiddaw closes up the view to the north.

The islands are of a more proportionate size, and disposed at better distances than those on any other lake. The largest, called Lord's Island, contains about six acres and a half, now entirely covered with wood. It is situated near the shore, on which account probably it was selected for the residence of the family of Derwentwater; but the house has long been in ruins, and nothing now remains but the foundation.

The Vicar's Isle, belonging to General Peachy, contains about six acres, beautifully laid out in pleasure grounds, interspersed with a variety of trees, and crowned with a house in the centre. For some years it was called Pocklington's Island, while it belonged to a gentleman of that name; and is sometimes by way of pre-eminence called Derwent Isle.

One nearer the middle of the lake is called St. Herbert's Isle, from being the residence of that holy man; who, according to the Venerable Bede, was contemporary with St. Cuthbert, and died about A. D. 687. It appears that several centuries afterwards, the anniversary of his death was, by the Bishop of the diocese, enjoined to be celebrated upon this spot in religious offices. Some remains of what is said to have been his cell are still to be seen among the trees with which the island is covered.

Near thirty years ago, a small grotto or fishing cot was built by the late Sir Wilfred Lawson, of Brayton House, to whose successor the island now belongs.

A smaller island, called Rampsholm, is also covered with wood. This and Lord's Isle—being part of the late Lord Derwentwater's sequestrated estate—belong to Greenwich Hospital.

There are other small islets; as Otter Isle, situated in a bay near the head of the lake, the views from which have been much admired. A piece of rock, called Tripetholm, and two others known by the name of Lingholms.

Besides these permanent islands, an occasional one is sometimes observed, called the Floating Island: being a piece of earth, which at uncertain intervals of time rises from the bottom to the surface of the lake; but still adhering by its sides to the adjacent earth, is never removed from its place. Within the last thirty years it has emerged seven times; remaining upon the surface for longer or shorter periods. In a succeeding part of this work the discussion of this subject will be resumed at greater length.

Another peculiarity has been attributed to this lake in what is called the Bottom wind: which has been described as an agitation of the water occurring when no wind can be felt on any part of the lake. It has been supposed to originate at the bottom of the water; and some associating this with the last mentioned phenomenon, have ascribed both

to those subterranean convulsions by which earthquakes are produced. Although it be admitted, that the waves are sometimes greater than could be reasonably expected, from any wind which can be perceived at the time; yet it may be doubted whether they are ever formed when no wind is stirring: and if such a term as "Bottom wind" must still be retained, I think it ought to be referred to the bottom of the atmosphere, rather than the bottom of the lake.

The depth of Derwent Lake does not in any part exceed fourteen fathoms: a great portion of it scarcely one fourth of that measure. It is supplied chiefly from Borrowdale, and forms a reservoir for the water, which in heavy rains pours down the steep mountains on every side; by which means its surface is often raised six or seven feet; and in an extraordinary case has been known to rise a perpendicular height of eight feet, above its lowest water mark. At such times the meadows are overflowed, all the way between this lake and Bassenthwaite. Its surface being large in proportion to its depth, causes it to be sooner cooled down to the freezing point; and it frequently affords a fine field for the skaiter. In January 1814, the ice attained the thickness of ten inches.

The fish of this lake are trout, pike, perch, and eels. The trout, which are very good, are taken by angling, in the months of April and May; the pike and perch during the whole of summer.

It would be superfluous to enter into a description or enumeration of the different views on this lake: many attempts have been made to describe them—but they must be seen to be duly appreciated.

Parties navigating the lake may be landed upon the different islands, and also to view the cascades at Barrow and Lowdore: at the latter place is a public-house where a cannon is kept for the echo, which on a favourable opportunity is very fine; but as Don Manuel says, "English echoes appear to be the most expensive luxuries in which a traveller can indulge."

BASSENTHWAITE LAKE is of somewhat greater length than Derwent, but of less breadth, and without islands. Being further from the mountains, it is not viewed with the same interest as some other lakes. Its western side is rather too uniformly wooded, the eastern has a greater breadth of cultivation, on which side are some fine bays and promontories; but here the road recedes too far from the lake to exhibit it to advantage. However, tourists who have leisure for a ride or a drive of eighteen miles round this lake, may obtain some pleasing views; especially from the foot of the lake, and from some points in Wythop woods. This lake is of less depth than Derwent: pike and perch are the principal fish; salmon pass through it, to deposite their spawn in the rivers Derwent and Greta, but are seldom met with in the lake.

BUTTERMERE LAKE, situated in the valley of that name, is nearly encompassed by superb rocky mountains. It is about a mile and a quarter in length, scarcely half a mile in breadth, and fifteen fathoms deep. Tourists visiting Buttermere, by way of Borrowdale, pass along the side of this lake; those who travel in carriages generally content themselves with the view of it from a hill near the village. The distance between this and Crummock lake, is about three quarters of a mile, comprising some excellent arable land.

CRUMMOCK LAKE is nearly three miles in length, three quarters of a mile in breadth, and twenty-two fathoms deep. It is situated between the two lofty mountains, Grasmire or Grasmoor, on the eastern, and Melbreak on the western side; and in combination with the more distant hills, it affords some excellent views. It has three or four small islands, but they are placed too near the shore to add much to its beauty. The best general views of the lake, are from the rocky point on the eastern side, called the Hause; and from the road between Scale Hill and Loweswater: and the views of the mountains, from the bosom of the lake, are excellent.

Both these lakes are well stocked with trout and char, the latter of which are smaller in size, but perhaps not inferior in quality, to those of Windermere or Coniston. There is a comfortable inn at Buttermere, between the two lakes, and another at Scale

Hill on the foot of Crummock; at one of which places a boat is usually taken, as well for a survey of the scenery, as being the most convenient way of seeing the noted waterfall of Scale Force, on the opposite side of the lake.

LOWES WATER, a small lake of about a mile in length, has given name to the parish or chapelry in which it is situated. It differs from all the other lakes, in that, they generally exhibit the most interesting mountain scenery, in looking towards the head of the lake; this, on the contrary, is more tame towards its head, while at its foot the mountains appear of bolder forms. It is not the difference between one piece of water and another, but the endless variety of scenery with which they are associated, that gives to every lake its peculiar character. Lowes Water, viewed from the end of Melbreak, exhibits a sweet rural landscape, the cultivated slopes being ornamented with neat farm houses and trees: but, taking the view in an opposite direction, the lake makes a middle distance to a combination of mountains scarcely to be equalled.

ENNERDALE LAKE is about two miles and a half in length, and three quarters of a mile in breadth. It is more difficult to obtain a good view of this, than any other lake. The best general view may be had near How Hall; but, as the principal mountain scenery, with part of the lake, is seen to advan-

tage from the road, by which tourists generally pass from Waswater to Lowes Water and Buttermere; few like to extend the journey two or three miles for any improvement that can be made to the view. Pedestrians, anxious to explore the inmost recesses of the mountains, may follow the lake to its head, and after passing the sequestered farm of Gillerthwaite, continue their route four or five miles along the narrow dale, by the transparent stream of the Lisa, which is fed by the crystal springs issuing from the side of the mountain; they may then make their way over one of the mountains, either by the pass called Scarf Gap, to Buttermere, or Black Sail, to Wasdale head: this way a horse might be taken, but it would be found more troublesome than useful.

This lake is well stocked with trout: here is also an inferior kind of char, which enter the river in autumn to deposite their spawn; contrary to the habits of those in the lakes of Buttermere and Crummock. There are two small public houses at Ennerdale Bridge, neither of which affords much accommodation to travellers.

WASWATER is a lake full three miles in length and more than half a mile in breadth. Its depth, being lately sounded by some neighbouring gentlemen, was found to be 45 fathoms, and probably some parts may be still deeper; so that its bottom must be at least 15 fathoms below the level of the sea: and it is probably owing to its great depth in

proportion to the extent of surface, that it has never been known to freeze; the duration of winter not being sufficient to cool the whole mass of water to that temperature which permits ice to be formed upon the surface.

The mountains environing Waswater are lofty and majestic. The Screes* bound the lake on the south-east, and extend from near the summit of the mountain quite into the water; so that it cannot be passed on that side without considerable difficulty and some danger. Looking up the lake, Yewbarrow forms a fine apex; Kirkfell pushes forward its bold front on the left; at the head of the dale the pyramidical Gable appears conspicuous; Lingmel comes finely in view on the right, over which Scawfell and the Pikes reign preeminent; the Hay Cock may be seen through the lateral vale of Bowderdale, and the Pillar crowns the head of the branch called Mosedale: Middlefell, running along the margin of the lake on the spectator's side, and the Screes on the opposite, complete the panorama. In short, Waswater affords many peculiarities well worth visiting once, but not sufficient to yield that increased degree of pleasure in a second and third inspection, that would be experienced on Derwent, Ulswater or Windermere.

* SCREES a provincial term signifying a profusion of loose stones, the debris of the rocks above, resting upon a declivity as steep as is possible for them to remain; so that the least disturbance in any part communicates a motion, somewhat between sliding and rolling, which frequently extends to a considerable distance, and takes some time before quiet is restored.

The fish of Waswater are chiefly trout, with which it is well stored: it also contains a few char. Boats are kept by neighbouring gentlemen for the diversion of angling; and the appearance of the screes from the lake is magnificent. At Nether Wasdale, about a mile and a half from the foot of the lake, there are two public houses where travellers may have refreshment for themselves and horses: there is no other between this and Rosthwaite in Borrowdale, a distance of fourteen miles, one third of which is very difficult mountain road.

THE TARNS.

There are numerous other receptacles of still water, which, being too small to merit the appellation of lakes, are called TARNS. When placed in a principal valley, (which however is not often the case,) they contribute little to its importance; and being in such situations often environed with swampy ground, seem to represent the feeble remains of a once more considerable lake. But in a circular recess on the side of a vale, or on a mountain, as they are generally placed, their margins being well defined, they become more interesting. Reposing frequently at the feet of lofty precipices, and sometimes appearing as if embanked by a collection of materials excavated from the basin which they occupy; they afford ample room for conjecture as to the mode

of their formation. Being sheltered from the winds, their surface often exhibits the finest reflections of the rocks and surrounding scenery, highly pleasing to the eye of such as view them with regard to the picturesque; but it is more agreeable to the wishes of the angler, to see their surface ruffled by the breeze.

Tarns in the tributary streams of Windermere.——Elterwater is one of the largest of the Tarns; and having given its name to a small hamlet in Langdale, it became necessary in speaking of the water itself, to add the word tarn by way of distinction. It is nearly a mile in length, and divided into three parts. By the sudden influx of water from the two Langdales, the low meadows on its margin are frequently overflowed, and rendered wet and swampy. To obviate this, great pains have lately been taken in opening its outlet; by which means the dimensions of the water have been greatly contracted; and the fishery of trout has been nearly annihilated by the introduction of that voracious fish the pike.——Loughrigg Tarn is a circular piece of water of about twenty acres, environed by green meadows, intermixed with rocky woods and cultivated grounds. Seldom ruffled by winds, it displays beautiful reflections of farm-houses, fields, and trees, surmounted by rocky steeps; and when taken in combination with Langdale Pikes in the distance, it makes an excellent picture.——Little

Langdale Tarn, in the valley of that name, is one whose consequence is lessened by the swampiness of its shores.——Blea Tarn, lying on the high ground between the two vales of Great and Little Langdale, has a small sequestered farm adjoining, and called by its name. A view of this piece of water is enriched by the superb appearance of Langdale Pikes.——Stickle Tarn, at the foot of Pavey-ark, a huge rock in connection with Langdale Pikes—is famous for the quality of its trout. The stream falling into Langdale, at Millbeck, in a foaming cataract, may be seen at a distance.——Codale Tarn is a small piece of water, containing a few perch and eels. It sends a small stream down a rocky channel into Easdale Tarn, which is one of the largest mountain tarns, seated in the western branch of Grasmere vale among rocky precipices, of which Blakerigg, or Blea Crag, is the principal. Its stream—from its frothy whiteness called Sour-milk Gill—is a striking object from the road.

Tarns in the environs of Ulswater.——Hays Water is of more extended dimensions than most of those called tarns; and is much frequented by anglers. The stream from it passes Low Hartshope, joining that from Brother Water near the foot of the latter.——Angle Tarn, lying north of the last, upon the mountain separating Patterdale from Martindale, is one of the smaller class; but of a curious shape, having two rocky islets and a small broken

peninsula. Its stream in a quick descent, reaches the vale about half a mile further down.——Grisedale Tarn, one of the larger class, lies in the junction of the three mountains Helvellyn, Seatsandal, and Fairfield. The road over the Hause, from Grasmere to Patterdale, passing the tarn, is accompanied by its stream down the vale of Grisedale, which unites with the parent valley near the Church. ——Red Tarn, also of considerable extent, containing about twenty acres, is upon the highest level of any of the mountain tarns; being upwards of two thousand four hundred feet above the level of the sea, little more than six hundred feet below the summit of Helvellyn; from whence into it you might almost cast a stone.——Keppel Cove Tarn is posited in a singular manner, not in the bottom of the glen, but in a kind of recess formed on one side; it is separated from Red Tarn by a narrow mountain ridge, which branches off from Helvellyn and is terminated by a peak called Catsty Cam, modernized into Catchedecam; below which the two streams unite to form the brook of Glenridding. All these tarns afford good diversion for the angler; Keppel Cove produces a bright well shapen trout: —those of Angle tarn are by some considered of superior flavour; but when quantity as well as quality is taken into account, Hays Water may perhaps be allowed the pre-eminence.

Tarns connected with Hawes Water.——Small Water, rightly named, lies between Harter fell and High Street; and is passed by a mountain track leading from Kentmere to Mardale, over the hause called Nan Bield.——Blea Water, separated from the last by a projection of High Street, lies at the foot of a lofty rock called Blea Water Crag. Before reaching the valley of Mardale their two streams become united.

Tarns in the Feeders of Coniston Water.——Two or three pools, between the hills on the north of Coniston Waterhead, are called simply the Tarns; while those in the western quarter have received the more dignified appellation of Waters.——Levers Water, the largest, is situated in a wide valley, between the mountains Old Man and Wetherlam.——Low Water, placed on the Old Man's side, belies its name, as it occupies the highest level. Their united streams, after a succession of pretty waterfalls, pass Coniston Church in their way to the lake.——Gates Water, [Goats Water,] reposes on the Old Man's western side, and at the foot of the precipitous Dow Crag; [Dove Crag.] Besides being in common with the other tarns stocked with trout, it also contains some char. Its stream forms the rivulet of Torver.——Blind Tarn, a small reservoir of water without a stream, lies near the road to Seathwaite, by Walna Scar.——Beacon Tarn is a small one, near the foot of the lake.

Belonging to the river Duddon, is Seathwaite Tarn, separated from Levers Water, only by a narrow mountain ridge.

Tarns appertaining to the river Kent.——Kentmere Tarn, in the vale of Kentmere, is bordered by morass; and Skeggles Water lies on the heath-clad mountain between that and Long-sleddale; neither of them are possessed of any striking features.

Tarns tributary to Derwent Lake.——A second Blea Tarn is situated on the heathy mountain between Wythburn and Borrowdale. The water, nearly two miles after leaving it, is received by the Tarn of Watendleth, which covers about a dozen acres, in a confined valley of that name, not unworthy of being visited. It is the stream from these tarns, which after running two miles further along a narrow valley forms the famed cataract of Lowdore.——Angle Tarn, stocked only with a few perch, is at the head of the stream belonging to the branch of Borrowdale called Langstreth. At the foot of Eagle Crag, this is joined by another stream from the branch of Greenup; and after passing Stonethwaite and Rosthwaite, joins the Seathwaite branch a little further down the vale.——Sprinkling Tarn, of irregular shape, reposes under Great End Crag; it abounds with excellent trout; but they are too well fed, or too wary to be easily tempted

by the bait of the angler.——Sty-head Tarn, in some maps called Sparkling Tarn, lies about three quarters of a mile below the last, near the road to Wasdale. The water, which it receives from Sprinkling Tarn, seems to have been deprived of its nutritive qualities; as its fish are of a very inferior kind. The stream running from thence towards Seathwaite, has some fine frothy breaks, and one grand waterfall.——Dock Tarn, and Tarn of Leaves; one on the east side of Stonethwaite, the other between Seathwaite and Langstreth; are barely entitled to be mentioned.

Harrop Tarn, though but a small piece of water, is the principal one belonging to *Thirlmere*. It lies on the western side of Wythburn, and its stream, called Dob Gill, passing a few houses, joins the rivulet in the vale a little before it reaches the lake.

Scales Tarn, on the east end of the mountain Saddleback, is an oval piece of water covering an area of three acres and a half, its two diameters being 176 and 124 yards, its depth 18 feet; and uninhabited by the finny tribe. Some very exaggerated descriptions of this tarn have found their way into the history of Cumberland and other publications. From its gloomy appearance, occasioned by being overshadowed by steep rocks, its depth was supposed to be very great, and it has been represented as the crater of an extinct volcano; an

assumption not supported by present appearances. Its stream after nearly encompassing Souterfell is called the Glenderamakin, which passing Threlkeld joins that from Thirlmere to form the Greta.

Bowscale Tarn, which empties itself into the Caldew, is seated in a basin singularly scooped out of the side of a hill.—Over Water lies to the north of Skiddaw, in the rise of the river Ellen.—Burtness Tarn, or Bleaberry tarn, lies on the south-west side of Buttermere, in a recess between High Stile and Red Pike: its stream forms the cataract called Sour-milk gill.—Floutern Tarn serves as a landmark in passing between Buttermere and Ennerdale; as Burnmoor Tarn does between Wasdalehead and Eskdale.—Devoke Water, connected with the Esk near Ravenglass, is famous for the excellence of its trout; and as a place of resort for water fowls.

There are some other small tarns, of little consequence in themselves, and seldom seen by strangers; therefore they scarcely require to be noticed. Such are Eel Tarn, Stony Tarn, and Blea Tarn, in Eskdale, and the two tarns above Bowderdale in the Wasdale mountains.

THE RIVERS.

The Rivers of this district are not of large dimensions; but issuing from rocky mountains and running in pebbly channels, the water they contain is remarkable for its clearness and purity. From the central cluster of mountains about Bowfell, Scawfell, and Gable, many of them derive their origin; others have their source in the neighbourhood of Helvellyn and High Street.

The River Derwent has its rise in Borrowdale; its branches are known by different names till it reaches the lake, from whence it is called the Derwent till it enters the sea.

The river issuing from Thirlmere commonly called St. John's beck, has formerly been called the *Bure;* the one from Mungrisdale by Threlkeld *Glenderamakin;* after their junction it takes the name of *Greta* and receives the *Glenderaterra* from between Skiddaw and Saddleback; passing Keswick it joins the Derwent, shortly after that river leaves the lake. In heavy rains the Greta sometimes rises so suddenly that it inverts the stream of the Derwent, so that the lake is for a short time literally filled from all quarters. The water issuing from Buttermere, Crummock and Lowes Water forms the river *Cocker*, which falls into the Derwent at the town named from this circumstance Cockermouth. The *Ellen* rises in the mountains north of Skiddaw,

and passing Uldale, Ireby and Ellenborough falls into the sea at Maryport.

The several becks of Patterdale unite in Ulswater, the river issuing from thence is called the *Eamont;* it receives the *Lowther* from Hawes Water, Swindale and Wetsleddale near Brougham Castle, and is afterwards absorbed in the *Eden*, which enters the Solway Frith a little below Carlisle; having first received the *Petterill* which rises near Greystoke, and the *Caldew* from the east side of Skiddaw.

Two small streams crossing the road between Kendal and Shap fall into the *Lune*—which at Kirkby Lonsdale is a fine river, and crossed by a lofty antique bridge; it is navigable at Lancaster, a little below which place it falls into the sea.

The *Kent* rising in Kentmere, receives the *Sprint* from Longsleddale and the *Mint* from Bannisdale. It washes the skirts of Kendal, and enters the sea near Milnthorp, where it is joined by the *Belo.*

The becks of Great and Little Langdale combined form the *Brathay*, and those of Grasmere the *Rothay*, which unite in Windermere: after leaving which it is called the *Leven*, and joins the *Crake* from Coniston upon the sands below Penny Bridge.

The *Duddon* rises on the south of Bowfell and separates Cumberland from Lancashire. Unretarded by any lake, it pursues its course in a pretty transparent stream and enters the sea on the north of the Isle of Walney.

The *Esk* rising on the east of Scawfell, retains its name till it enters the sea at Ravenglass; where the *Irt* from Wasdale and the *Mite* from Miterdale join it upon the sands. The *Bleng* passing Gosforth falls into the Irt above Santon Bridge.

The water flowing from the north side of Gable has a long meandering stream down Ennerdale; it is called the *Lisa* till it enters the lake; afterwards it is the *Ehen* till it falls into the sea half way between Ravenglass and St. Bees.——The *Calder* rising in Copeland forest, enters the sea near the same place.

THE WATERFALLS.

Lowdore Cascade constitutes one of the most magnificent scenes of its kind among the lakes. It is not a perpendicular fall, but a foaming cataract; the water rushing impetuously from a height of 360 feet and bounding over and among the large blocks of stone with which the channel is filled; so that when the river is full it is a striking object at three miles distance. To the left, the perpendicular Gowder Crag, near five hundred feet high, towers proudly pre-eminent; while from the fissures of Shepherd's Crag on the right, the oak, ash, birch, holly, and wild-rose, hang in wanton luxuriance. From the foot of the fall, where it is usually seen, more than

half its height lies beyond the limits of the view, and in dry seasons there is a deficiency of water; yet its splendid accompaniments of wood and rock render it at all times an object deserving the notice of tourists.

Winding round Shepherd's Crag towards the top of the fall, and looking between two finely wooded side screens, through the chasm in which the water is precipitated; a part of Derwent lake with its islands, beyond it the vale of Keswick, ornamented with white buildings, and the whole surmounted by the lofty Skiddaw—forms a picture in its kind seldom equalled.

Barrow Cascade, two miles from Keswick, has an upper and lower fall, more perpendicular than that of Lowdore, and exhibits to advantage a smaller quantity of water. From the top of the fall the lake and vale are seen in fine perspective.

White Water Dash, on the north of Skiddaw, is conspicuous from the road between Ireby and Bassenthwaite; and viewed from its foot with the lofty Dead Crag on the right, is a good picture.

Scale Force near Buttermere, is the deepest in all the region of the lakes: it is said to fall at once one hundred and fifty-six feet, besides a smaller fall below. The water is precipitated into a tremendous chasm, between two mural rocks of sienite, beautifully overhung with trees which have fixed

their roots in the crevices; the sides clad with a profusion of plants which glitter with the spray of the fall. Visiters generally enter from below, into this chasm, where the air, filled with moisture and shaded from the sun, feels cool and damp as in a cellar. Passing the lower, they may proceed towards the foot of the principal fall; till the more copious sprinkling of the spray compels them to retrace their steps.

AIREY FORCE, on Ulswater, is concealed by ancient trees, in a deep glen in Gowbarrow Park. The water, compressed between two cheeks of rock, rushes forth with great violence; and dashing from rock to rock, forms a spray, which, with the sun in a favourable direction, exhibits all the colours of the rainbow.

STOCK GILL FORCE, at Ambleside, falls from a height of 70 feet, which is in better proportion to its adjacent scenery than if it fell 150 feet, as has been represented. It is a combination of four falls in one; the water is divided into two streams, and after a moment's rest in the middle of the rock, is finally precipitated into the deep, shaded channel below.

RYDAL WATERFALLS—the upper of which is a considerable cascade; pouring out its water, first in a contracted stream, down a perpendicular rock;

and then, in a broader sheet, dashing into a deep stony channel. The lower fall, being near the house, forms a beautiful garden scene.

DUNGEON GILL is a stream issuing between the two Pikes of Langdale. The water falls into an awful chasm, with overhanging sides of rock, between which, a large block of stone is impended like the key-stone of an arch.

SKELWITH FORCE is not of great height, but it has the most copious supply of water of any cascade among the lakes. From Skelwith Bridge there is a road on the Westmorland side, from whence looking down upon the basin, the turmoil of the water appears very interesting; but, as a picture, the fall is better seen from the Lancashire side, where the Langdale Pikes make an excellent distance.

COLWITH FORCE is a pretty waterfall; and is but little out of the way, for those who make the tour through Little Langdale.

BIRKER FORCE, on the south side of Eskdale, is a stream of water emitted between lofty rocks, and pouring from a great elevation down the hill side in a stripe of foam.

DALEGARTH FORCE, or Stanley Gill, on the same side of the valley, is a sublime piece of scenery.

From the ancient mansion of Dalegarth Hall, now a farm house, a path has been formed, crossing the stream from side to side, three times, by lofty wooden bridges. The water falls in successive cascades, over granite rocks, which rise on each side to a stupendous height; and are finely ornamented with trees, and fringed with a profusion of bilberry, and other plants, rooted in the crevices.

Near the head of the Seathwaite branch of Borrowdale, the water from Sty-head Tarn is met by a dry gill called Taylor Gill; and near their junction there is a lofty waterfall, which is a good object from the road to Wasdale.

Sour-Milk Gill is a name applied to some mountain torrents, on account of their frothy whiteness resembling Butter-milk from the churn. We have Sour-milk Gill near Buttermere, Sour-milk Gill in Grasmere, and Sour-milk Gill near the Black-lead Mine in Borrowdale.

The above enumerated are some of the most noted of the falls: but tracing the mountain streams into their deep recesses, they present an inexhaustible variety: smaller indeed, but frequently of very interesting features.

THE MOUNTAINS.

The mountains of the Lake district are of sufficient elevation to command extensive prospects over the surrounding country; yet not so high as to create any disagreeable sensations in climbing their slopes or traversing their ridges in favourable weather.

Their magnitude imparts a sublimity to the scenery, without overcharging the picture with any disproportionate objects. The rocks and ravines on their sides convey some knowledge of the materials whereof they are composed; and by their variety of soil and elevation of surface, they are adapted to the production of different kinds of vegetables.

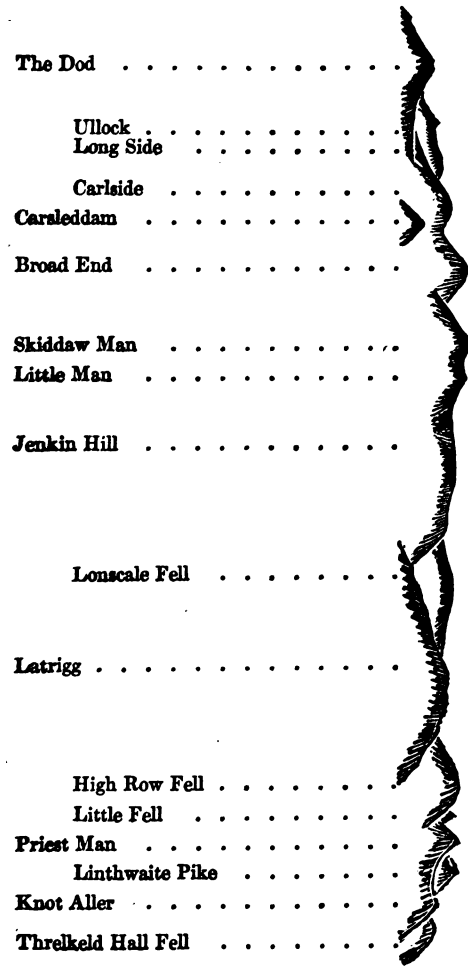
In the summer season the bottoms of the glens are grazed by cattle; the flocks ascend their steeps, and nibble a scanty sustenance from the blades of grass peeping out between the stones on the highest summits. Some of the sheep are annually drawn from the flock, and placed in the inclosures to fatten —and they make excellent mutton; but many remain upon the commons during winter, when, in deep snows, the occupation of the shepherd becomes arduous.

Foxes breed in caverns on the mountains, but being accused of the destruction of young lambs and poultry, the shepherds declare war against them whenever they are found; while gentlemen, fond of

the chase, endeavour to promote their increase in the more open parts of the country. Goats are scarcely to be seen in these parts, and it is only upon the mountains of Martindale that the Red Deer are found in their natural wild state.

Eagles, which half a century ago were frequently seen in their lofty flights over these mountains, are not now to be met with. Though they built their nests in the most inaccessible rocks, the shepherds were so bent upon their destruction, that they contrived, by the help of ropes, annually to take away or destroy either the eggs or the young; till at length the species has been wholly exterminated from the country; and the rocks left to be possessed by the ravens, buzzards and some smaller species of hawks.

A small bird called the Dotterel is found upon Skiddaw, and other high mountains. Grouse breed in parts thickly covered with heath. About the latter end of October, woodcocks begin to arrive, and are frequently met with in the woods and commons bordering on some of the lakes.



Outline of Skiddaw, and Saddleback (formerly Blencathera)

As seen on approaching Keswick from the South:

With names prior to the inclosure of the Commons in 1810.

SKIDDAW.—A view of the country, from at least one of the eminent mountains of the district, is considered as forming a part of the tour, by those who can muster strength and resolution for the undertaking; and for this purpose Skiddaw is, on several accounts, generally selected. It is nearest to the station at Keswick, most easy of access—as ladies may ride on horseback to the very summit—and standing in some measure detached, the view, especially to the north and west, is less intercepted by other mountains.

Skiddaw is the supreme of a group of mountains about thirty miles in circumference; including Saddleback, Carrock and the Caldbeck fells: its height, according to Colonel Mudge, is 3022 feet above the sea. A mean of six different trials with the barometer, between the years 1809 and 1829, makes it 2808 feet above Derwent lake; and the result of a geometrical process by Mr. Greatorex in 1817, agrees with the same very nearly.

The body of the mountain is a rock of dark coloured clay-slate, in some parts of which crystals of *chiastolite* are found imbedded; and among its vegetable productions are the different species of *Lycopodium* and *vaccinium*, the *Erica vulgaris*, and the *Empetrum nigrum;* and upon the summit the *Salix herbacea* peeps forth among the stones.

The desire of an extensive prospect being the principal motive for ascending a mountain, it is a question frequently asked, "which is the best time

of day for going up Skiddaw?" It is not easy to give a precise answer to this question; the morning is commonly recommended, and generally, the sooner you are there after the sun has fully illumined the mountains the better; whether in an early morning, or on a dispersion of the clouds in any other part of the day.

During a clear cold night, the vapour is copiously precipitated from the higher, into the lower parts of the atmosphere; so that very early in a morning, the summits of the mountains, gilded by the sun, appear in great magnificence; and the contrast of light and shade upon their sides is very interesting. But, at such times, a haziness often prevails in the vallies; which, as the air becomes warmed by the sun, again ascends; and at the same time receives an augmentation, by the vapour rising from the ground; the tremulous motion of which may sometimes be perceived, as it exudes from the surface of the earth in places exposed to the most direct action of the solar rays.

After a succession of dry and hot days the air is seldom favourable for a prospect; but between showers, or when clouds prevail—provided they are above the altitude of the mountains—the view is often extended to a great distance. When the atmosphere is loaded with clouds, the middle of the day affords the greatest probability of their rising above the mountains; and a mid-day light gives the

most general illumination to objects on every point of the horizon. A declining sun may throw a beautiful blaze of light upon some parts of the landscape; but its effects will not be so general; and a person remaining upon the mountain till the sun goes down, will find night come on apace as he descends.

Sometimes, when clouds have formed below the summit, the country, as viewed from above, resembles a sea of mist; a few of the highest mountain peaks having the appearance of islands, on which the sun seems to shine with unusual splendour. And when the spectator is so situated that his shadow falls upon the cloud, he may observe some curious meteorological phenomena. To those who have frequently beheld it under other circumstances this may be a new and magnificent spectacle; but a tourist, making his first, and perhaps only visit, will naturally wish to have the features of the country more completely developed. It is a grievous, though not an uncommon circumstance, to be wrapt in a cloud, which seems to be continually passing on, yet never leaves the mountain during the time appropriated for the stay; but those who are fortunate enough to be upon the summit at the very time of the cloud's departure, will experience a gratification of no common kind; when—like the rising of the curtain in a theatre—the country in a moment bursts upon the eye.

It will always be better to seize on a favourable opportunity for a mountain excursion, than to at-

tempt to fix the time beforehand; other journies where the state of the air is of less importance may be deferred. A telescope may assist in the examination or recognition of a particular building or object; but in viewing the great features of the prospect it can render little assistance; it is only when the air is clear that it can be used with advantage; and then, the field of vision is so extensive, and the objects so numerous, that sufficient time is seldom afforded for individual contemplation.

From Keswick to the top of Skiddaw the barometer falls very near three inches; and the temperature, at the top of the mountain may by stated at an average about 12 degrees lower than in the valley; sometimes the difference is much greater. By the intervention of a transient cloud before the sun, the thermometer is more suddenly affected, here, than below; and the air often feels colder than the instrument would seem to indicate; which may be owing, partly to the heat acquired by the exertion in climbing, and a greater current prevailing in the air upon the summit; by which the heat evolved by the body is more rapidly dispelled from the clothing; but the difficulty of breathing, which some have apprehended from the diminished pressure of the atmosphere, is not found by experience.

The distance to be travelled from Keswick to the top of Skiddaw is nearly six miles. Since the inclosure of the common took place in 1810, the way has been varied at the discretion of the gentle-

men through whose grounds it lies. At present it takes the Penrith road, by the side of the river Greta for half a mile; when it crosses over a bridge, turning to the right to Greta-Bank, the late residence of Mr. Calvert. Here making an acute angle to the left, it winds along the skirts of Latrigg, by an occupation road formed at a pleasant elevation; where the lake of Derwentwater, the town of Keswick, the beautiful valley and encircling mountains are seen to great advantage. Part of the lake of Bassenthwaite also comes in view; but it adds little to the value of the prospect.

Beyond the precincts of Latrigg we have little appearance of a road; but a wall—first on the left hand and afterwards on the right—points out the way. The ascent hitherto has been so gentle, that at the distance of three miles we have reached but one third of the required altitude; but now we begin to encounter a more steep part of the mountain. As we advance in height the objects in the valley appear to be diminished in magnitude and importance, but our prospects are enlarged, by mountains at greater distance rising into view; among which are those of Coniston, and the hyperbolic summit of the Pike of Stickle in Langdale.

Having reached one half of the altitude, the wall makes a turn to the right, where we leave it—our path lying more directly up the hill—and having combatted this steep for about a quarter of a mile further, we find ourselves upon a turfy plain of mo-

derate acclivity; and by degrees obtain a view of the sea, with a portion of Scotland beyond it—the Isle of Man gradually advancing from behind the western mountains. In a small hollow, if the weather is not too droughty, we meet with a spring of water; and as it is the last by the way, it may be taken advantage of to dilute the brandy, which—with a few biscuits or sandwiches—a provident guide will not forget to recommend.

We are now upon the verge of the treeless forest of Skiddaw; a tract of three or four thousand acres where the river Caldew takes its rise. It maintains a great number of sheep; and a keeper's lodge has been built by the Earl of Egremont for the protection of the grouse with which it is well stocked. A new view to the northward now opens to us, over the narrow part of the Solway Frith, into Scotland, and we descry the long looked for pile upon the summit of the mountain. Following a beaten track, we leave a double pointed hill on our left, beyond which, succeeds another steep ascent of 500 feet, where we suddenly regain a view of Derwentwater and the mountains beyond it. At the top of this steep we reach the last point seen from the valley; it is the south end of a ridge, covered with fragments of slaty rock, and rising in two or three peaks called the Mounts. Towards its further end lies the object of our journey, which is marked by a large pile of stones, with a central staff 30 feet high, erected in 1826 by a detachment of the ordnance

surveyors. Here the lake of Derwent and vale of Keswick are hid from us; but our attention is now arrested by more distant objects.

The town of Whitehaven is concealed from our sight, but the headlands of St. Bees beyond it are conspicuous; and the Isle of Man in the same direction. Workington, with its shipping, may be seen due west, and further northwards Maryport, and the fashionable bathing place of Allonby. Cockermouth, with its church and castle, is seen over the foot of Bassenthwaite Lake; and between us and the borders of Scotland lies a large extent of cultivated country, in which the city of Carlisle stands as a central object. Beyond Solway Frith, the mountain Criffel in Kirkcudbrightshire appears near the shore; and on its right is the mouth of the river Nith, on which stands the town of Dumfries. To the left lies the small island called Hasten, at the mouth of the water of Orr; and further west, the mouth of the Dee at Kirkcudbright, opening into the large bay of Wigton. Beyond it, the bay of Glenluce, with Burrow Head, and the Mull of Galloway are sometimes visible. The houses and cornfields on the Scottish coast are often distinguishable; with mountains rising behind mountains to an interminable distance. The Cheviot hills appear in the direction of High Pike;—but it would be in vain to look for the German ocean, which has sometimes been represented as visible from hence.

Penrith, with its Beacon, may be seen, and be-

yond it the lofty Crossfell, with some of the eminences bordering upon Northumberland, Durham, and Yorkshire. To the right of Penrith are the walls of Brougham Castle, and the mansion of Henry Brougham, Esq. M.P. The hills surrounding Ulswater are in view, and the top of Ingleborough appears beyond the end of High Street. Through the gap of Dunmail Raise, the estuary of the Kent, below Milnthorp, appears in two small portions, separated by the intervention of Yewbarrow, a hill in Witherslack; and the Castle of Lancaster may sometimes be discerned with a telescope, beyond the southern edge of Gummershow in Cartmel Fells.

The superior eminences of Scawfell, and Gable, have been in full view during our ascent, and we may now discover Black Combe through the opening between them; and part of the Screes mountain beyond Waswater, between Kirkfell and the Pillar. In the same direction, may Snowdon in Wales possibly be sometimes discerned; but ninety-nine times out of a hundred it would be vain to look for it; the same may be said of the Irish mountains; and the lake of Windermere, which has so often been included both in oral and written descriptions, cannot be seen at all from Skiddaw.

It would be superfluous to enumerate more of the objects which on a very fine day may be seen from this mountain; it is the province of the guide to point them out as they rise into view, or as a favourable light renders them most clearly discerni-

ble. It is not those objects that are seldom and dimly seen, that ought to receive the greatest attention; but rather such as may be distinctly known and properly appreciated. It must not be expected that objects at fifty miles distance, should appear as distinct as these near at hand; indeed it often happens, that they cannot be seen at all, though the air to a moderate distance seems remarkably clear; yet still, a person who undertakes the excursion with a disposition to be pleased, will any tolerably fine day be sufficiently compensated for his trouble; and the more the distant objects are veiled from view, the higher will the nearer ones rise in estimation.

One of the most vexatious circumstances, and which not unfrequently happens, is to meet with a small cap of cloud upon the summit, that entirely excludes all prospect from thence; in such a case the party—if on foot and not over timid—ought to be conducted from the south end of the ridge downwards about 600 feet to a part of the mountain called Carlside, or to the point of Ullock, where most of the objects may be seen that should have been visible from the summit, with an unrivalled view of Bassenthwaite Lake: and the homeward journey by the hamlet of Millbeck not at all lengthened—only in parts steeper. A party on horseback might go a little to the northward from the summit, make their descent into the valley of Bassenthwaite, and after refreshing at the Castle Inn, return to Keswick on the western side of the Lake.

Some of the Western Mountains: as seen from Helvellyn.

HELVELLYN affords a more complete geographical display of the lake district than any other point within its limits: several of the lakes may be viewed from thence, and the mountains in every direction appear in a most splendid arrangement; while from the south to the western part of the horizon, the distant ocean may be discerned through several of the spaces between them.

According to Colonel Mudge, the height of Helvellyn above the level of the sea is 3055 feet; comparing it with Skiddaw, I estimate it at something more. It is about 2540 feet above the Nag's Head at Wythburn, from which place it is most frequently ascended; the distance here being the shortest, and a guide can be had. It is too steep to make use of horses, but by an active person on foot it is easily surmountable. The ascent on this side is no where difficult or dangerous; it may be commenced at the six mile stone, at the King's Head, or other places nearer Keswick, where the views by the way are less circumscribed that at Wythburn. Leaving the turnpike road at Fisher Place, the waterfalls in Brotto Gill on the left hand deserve notice; in one place the water is projected further from the rock than any other cascade in the neighbourhood. As we advance in altitude, the lakes of Thirlmere and Bassenthwaite are gradually developed to the sight; Skiddaw and Saddleback being in view to the north; and the mountains lying to the south-west progressively appearing to rise up beyond the long and

uninteresting fell, which lies between the lake of Thirlmere and the valley of Borrowdale.

This mountain is also frequently ascended from Patterdale; where for three-fourths of the way the ascent is gentle, and gradually opens out pleasing views of the lake of Ulswater, with the scenery around and beyond it. More immediately below, is the narrow vale of Grisedale, surmounted by the lofty St. Sunday Crag, which casts its solemn shade into the valley. On reaching the first ridge of the mountain, the long looked for summit pile is discovered on the top of a rocky precipice, six hundred feet in height above Red Tarn, which lies inclosed in the bosom of the mountain before us. From hence the shortest way is one that many would hesitate to venture upon; while others might think it a stigma upon their courage to decline it. It lies along the top of Striding Edge, which in some parts affords little more footing than the ridge of a house, while its sides are far steeper than an ordinary roof. A less difficult way is to leave the tarn on the left hand, ascending Swirrel Edge, which is comparatively smooth; yet here is a little rocky scrambling to gain the top of the precipice; in the midst of which it will be well to halt, and take a view of Bassenthwaite Lake with its environs; which cannot be seen from the highest part of the mountain.

The ground towards the summit forms a kind of moss-clad plain, sloping gently to the west, and terminated on the east by a series of rocky precipices;

and here the prospect on every side is grand beyond conception. Considerable portions of the lakes of Ulswater, Windermere, Coniston, and Esthwaite, with several of the mountain tarns are to be seen. Red Tarn is seated so deeply below the eye, that compared with its gigantic accompaniments it would scarcely be estimated at more than half its actual dimensions. To the right and left of Red Tarn, the two narrow ridges called Striding Edge, and Swirrel Edge, are stretched out in the direction of the lamina of the slaty rock, of which this part of the mountain is composed; other parts being of chert or hornstone, resting upon porphyritic greenstone. Beyond Swirrel Edge lies Keppel-cove Tarn; and at the termination of the ridge rises the peak of Catsty-cam, modernized into Catchedecam, or Catchety-cam. Angle-tarn, and the frothy stream from Hays Water, may be seen among the hills beyond Patterdale: and more remote, the estuaries of the Kent and Leven, uniting in the wide bay of Morecambe, and extending to the distant ocean. Chapel Isle is an object in the Ulverston channel, and a small triangular piece near the middle of Windermere serves as a direction to the town and Castle of Lancaster which are sometimes visible from hence. The sea, circumscribing the western half of the Lake district, from Lancaster sands to the Solway Frith, is here and there visible between the peaks of the mountains; each portion in succession reflecting the sun's rays to the eye of the spectator, as the luminary

descends from the meridian to the western horizon.

On the banks of Ulswater, Hallsteads, the beautiful summer retreat of John Marshall, Esq. M. P. occupies a prominent station. From the foot of the lake the vale of Eamont leads towards Brougham-Hall and the ruins of the ancient Castle near it. The cultivated country about Penrith is bounded by a chain of mountains, topped by the lofty Cross-fell; to the right of which, are high grounds separating Westmorland from Durham and Yorkshire, and further still to the right the crowned head of Ingleborough stands conspicuous. Black Combe—in the distance beyond Wrynose—fills up the space between the fells of Coniston and Langdale; Crinkle Crags and Bowfell are exceeded in altitude by the Pikes on Scawfell; and on the opposite side of Sty-head, the Gable rears his head to a conspicuous elevation. The Isle of Man appears to be raised up to the top of Kirkfell, the distance of more than forty miles between them being overlooked.

The Pillar of Ennerdale holds a respectable station; and the mountain of Buttermere, with its three protuberances, High Crag, High Stile and Red Pike, rises beyond Honister Crag and the Dalehead of Newlands. Grasmoor and Grisdale Pike look well up among their neighbours, while Skiddaw and Saddleback abate nothing of their importance on being viewed from this elevation. The mountains of Scotland, seen beyond the Solway Frith, fill up the distance; and nearer to our station, High Street,

Ill-bell, Fairfield, and many other neighbouring eminences ought not to be overlooked; but the mountains towards Hawes Water present less variety of outline, and those of Martindale are too distant to discern the herds of red deer which depasture thereon.

On the sloping side of the mountain about the distance of 300 yards, and 300 perpendicular feet below the summit, is a spring called Brownrigg Well, where the water issues in all seasons in a copious stream; its temperature in the summer months being from 40° to 42°: and, when mixed with a little brandy, it makes a grateful beverage.

By traversing the ridge to a little distance, a variety of prospects may be enjoyed; which those who return directly leave unseen. Travelling a little northward, one of the islands on Windermere comes in view; and at the lower or northern man, the lakes of Thirlmere and Bassenthwaite: by deviating a little to the westward we see a small portion of Grasmere; and by following the edge of the precipice southward, better views of Patterdale present themselves; and the descent may be made to Wythburn, to Dunmail Raise, or by Grisdale Tarn to Grasmere.

Some have extended their excursion from Helvellyn to Fairfield, holding on the mountain ridge to Ambleside; but after making the unavoidable descent of 1350 feet to Grisdale Tarn, a second ascent of 1230 feet will mostly be thought too

fatiguing. By too long continued exertion, the mind as well as the body becomes enervated and incapable of enjoyment; as it has been known in some, who travelling through Borrowdale in a morning would not overlook the most trifling object, yet in the latter part of the same day have passed the most interesting scenes on Waswater without making any other inquiry than "how far is it to the inn?"

SCAWFELL AND THE PIKES.—Scawfell is the name that has generally been given in maps, to the mountain connecting the heads of Borrowdale, Eskdale, and Wasdale. It is the highest ground in all this mountainous district, and indeed in that part of the united kingdom called England. The several lofty peaks by which it is distinguished are known in the neighbourhood by different names. The two most eminent are stated by Colonel Mudge, to be 3166 and 3092 feet in height: I have estimated their difference at 60 feet; which, from various observations made between the two points, I am convinced is rather an excess than otherwise. Rising from one of the lowest vallies, the highest point is 3000 feet above Waswater.

The lower of these points, lying to the south-west, is a bulky mountain—the proper Scawfell; the higher rising from a narrower base, has been called the Pikes. For want of a designation sufficiently explicit, strangers have sometimes been mistakenly directed to the secondary point; and to

cross the deep chasm of Mickle Door, by which they are separated, is a work of considerable difficulty; although the direct distance does not exceed three quarters of a mile. Latterly however it seems by common consent, the highest point is called Scawfell-Pikes; and since the erection of the large pile and staff upon it in 1826, there is no danger of mistaking the place.

Excepting some tufts of moss, very little vegetation is to be seen upon these summits. They are chiefly composed of rocks, and large blocks of stone piled one upon another; and their weather-worn surfaces prove that they have long remained in their present state. The prevailing rock is a kind of indurated slate, in layers of finer and coarser materials, which gives to the surface a ribbed or furrowed appearance; the finer parts are compact and hard as flint, and here the *lichen geographicus* appears in peculiar beauty.

Scawfell-Pikes may be ascended from any of the adjacent vales, but most conveniently from Borrowdale; yet the distance from a place of entertainment, the ruggedness of the ground, and the danger of being caught in a cloud—to which, from its situation, it is more subject than its neighbours—altogether conspire against its being visited by any other than hardy pedestrians: and strangers are cautioned so to calculate their time that night may not overtake them on such places. To be envelop-

ed in a cloud is of itself disagreeable; cloud and night together would be dreadful.

After passing the hamlet of Seathwaite in Borrowdale there are various ways of ascending the mountain at the discretion of the conductor. One way is to leave the Wasdale road at the bridge, proceeding by the side of the gill towards Esk Hause, (which some of our learned topographers have converted into Ash-course,) and then turning up the back of Great-end, which presents its bold rocky front towards Borrowdale, and commands extensive prospects. Beyond this there are two unavoidable dips and rises before the summit of the highest Pike can be gained. Another way is to follow the Wasdale road to Sty-head tarn; from thence, with Great-end crag on the right, pass Sprinkling tarn and join the beforementioned route. This is perhaps the easiest way, but rather circuitous. From Sty-head tarn the ascent may be made by steep clambering to the top of Great-end, which affords fine views by the way, and is nearer than the last. But many—after having arrived at Sty-head and obtained a sight of the pile—will be inclined to take the shortest way, by the foot of the great rocks, with a steep ascent at last to the summit. And those who take the last mentioned route in their progress, should be advised to pass over the different summits in returning; for the sake of the varied prospects which they afford.

The divergency of several vallies from this point,

has been compared to the spokes of a wheel; and in tracing their courses upon a map, the simile may be applicable enough; but, upon the spot, the resemblance is not so striking—the mountains run athwart one another in such a way, that little can be seen of the intervening vallies.

As may be expected from its altitude, the prospect on every side is extensive. We overlook an immense assemblage of mountains, which to particularize would be thought tedious; and a mere list of their names could convey little information. The near ones exhibit the stern grandeur of their rocky summits; but their general arrangement is not so splendid, nor their forms so stately, as when viewed from Helvellyn, or from the ascent to Skiddaw; and there is a deficiency of the rich lowland views that may be had from the latter mountain.

Satiated by mountain scenery, the eye is instinctively turned towards the sea, which opens to a great extent, and shews the various indentations of the Lancashire and Cumberland coasts; with the isle of Walney stretching from the bay of Morecambe to the estuary of the Duddon. The top of Ingleborough may be seen in the distance; but it requires a very clear atmosphere to discern the mountains of North Wales, which stretch out to the right of Black Combe. The Isle of Man is frequently visible; and, when the surface of the sea is covered with a thin film of vapour, the effect at first sight is curious; the island appearing more like an object

in the clouds than one seated in the water. The fells of Coniston exclude the view of Lancaster sands; but an opening, between the Old Man and Dow Crag, directs to the church and castle of Lancaster. Some portions of Scotland appear on the right and left of the Ennerdale and Derwent Fells; and we are just permitted to see a part of the lake of Windermere, between the Low Wood Inn and Bowness; the eastern side of Derwentwater, part of Waswater, with Devoke-water, Sty-head Tarn, and a small mountain tarn above Bowderdale.

From a point a little to the southward, we can take a peep into the head of the vale of Eskdale, far below us; and beyond it, a single habitation in Seathwaite, near the rise of the Duddon. Passing towards Great-end a portion of Crummock lake comes in sight; and from Great-end, and Esk Hause, there are more open views towards the head of Windermere, and the lake of Derwentwater.

SADDLEBACK—being at a greater distance from the station at Keswick than Skiddaw, of somewhat inferior elevation, and the ascent not quite so easy—is seldom visited by strangers. It is better situated than Skiddaw for a view towards the south, and also of the neighbourhood of Lowther and Penrith; but the western view is greatly intercepted.—It has formerly been called Blencathera, and it is from its shape, as seen from the vicinity of Penrith, that it has received the name of Saddleback. Its height is

2787 feet, and its rock is a primitive clay slate, similar to that of Skiddaw. In walking along the ridge it is worth while to notice, how the southern side is formed into a series of deep ravines and rocky projections; while to the north, it descends in a smooth grassy slope: and in a deep hollow, below a rocky precipice on its eastern end, a small, dark tarn is curiously placed.

CARROCK FELL makes one of the flanks of that mountain group, whereof Skiddaw forms the crown. It is upwards of 2000 feet in height; and shews a double pointed summit, on which a space appears to have been once inclosed by a wall. Its basis is a crystalline rock composed of a curious variety of materials; and in its neighbourhood are veins of lead and copper, with other mineral substances highly interesting to the mineralogist and geologist.

BOWFELL rises proudly in view from Windermere and Esthwaite Lakes. It is 2911 feet in height, and sheds the rain water into Borrowdale, Langdale, and Eskdale. It is easiest of access from Langdale, but may be reached from any of the above mentioned vales, or from the vale of Duddon.

GABLE, or GREAT GAVEL—so called from its shape—is a fine object as viewed from Wasdale, from Ennerdale, or from Crummock Lake; it is also seen from Windermere. It is 2925 feet in height,

and is remarkable for a well of pure water on the very summit. This is not a spring issuing in the common way out of the earth; but is supplied immediately from the atmosphere, in the shape of rains and dews. It is a triangular receptacle in the rock, six inches deep, and capable of holding about two gallons; and by containing water in the driest seasons, shews how slight a degree of evaporation is carried on at this altitude. The rock of Gable is a very hard, compact, dark coloured stone, with garnets imbedded.

THE PILLAR—a mountain rivalling the Gable in height—is situated between the vale of Ennerdale and that branch of Wasdale head called Mosedale. It presents towards Ennerdale one of the grandest rocky fronts any where to be met with; and has derived its name from a projecting rock on this side; which was originally called the Pillar Stone, and had been considered as inaccessible, till an adventurous shepherd reached its summit in 1826. The rock is a kind of greenstone, more porphyritic than that of Gable.

GRASMOOR is a bold rocky mountain on the eastern side of Crummock Lake; it is sometimes called Grasmire, a name in no wise corresponding with its appearance. It rises to the height of 2756 feet. The side towards the lake is extremely rocky

and barren; but the eastern side is a grassy slope, and on its summit is a plain of several acres; it affords a good bird's-eye view of the Lakes of Buttermere, Crummock and Loweswater, with their adjacent mountains; and a considerable portion of the Cumberland and Scottish coasts.

GRISEDALE PIKE rises to a lofty apex, as its name implies; it is 2580 feet in height, and is well situated for a view of the vale of Keswick to the east, and a considerable part of the county of Cumberland, with the sea, the Isle of Man and the mountains of Galloway to the west and north.

BLACK COMBE, or COOM, stands near the southern boundary of Cumberland. Forming the extremity of the mountain chain, it may be seen at a great distance; and is a fine station both for land and sea prospects. In 1808, it was made one of Colonel Mudge's stations, in the process of the Trigonometrical survey. He calculated its height to be 1919 feet above the level of the sea. Its substance is a rock of clay-slate similar to that of Skiddaw, covered by a large tract of peat earth, which is cut for fuel, and brought down on different sides of the mountain. By the misprint of a single figure in the longitude of this mountain in the 3rd vol. of the Trigonometrical survey, a great distortion has been caused in some maps lately constructed upon that basis.

CONISTON FELL.—The highest point of Coniston Fell is called THE OLD MAN, from the pile of stones erected on the summit. It is 2577 feet in height, and has a good view of the rocky mountains, Scawfell and Bowfell, and at a distance, the highest point of Skiddaw. Coniston Lake is seen in full proportion, with a part of Windermere. Two tarns appear upon the mountain, the smaller, called Low Water, though on the higher level; the larger, Levers Water; and on the western side of the hill, but not seen from the summit, is Gates Water, lying at the foot of the precipitous Dow Crag. Standing open to the south, unincumbered by other mountains, the Old Man commands a complete view of all the fine bays and estuaries of the Lancashire, and part of the Cumberland coast—the Isles of Walney and Man—and in the direction of the river Duddon, on a favourable day, Snowdon and its neighbouring mountains may sometimes be distinguished.

Beginning to ascend at the Black Bull near Coniston Church, you meet on your left a stream abounding in pretty waterfalls; the copper mines near Levers Water, and slate quarries between Low Water and the summit, can be seen by the way; and the descent may be made at choice more in front of the mountain. Those who admire a lengthened mountain excursion, may begin the ascent at Fellfoot, in Little Langdale, and surmounting the Carrs and the Old Man, descend to Coniston.

The summit of the hill, as well as the quarries on its sides, is of a fine, pale blue, roofing slate. A considerable portion of the mountain is formed of a very hard rock, which some have denominated Petro-silex; and between this and Coniston Church, on the western side of the stream, the commencement of the darker coloured slate may be observed.

FAIRFIELD — 2950 feet above the level of the sea — makes a fine mountain excursion from Ambleside, commencing the ascent at Rydal, encircling Rydal head, and returning to Ambleside by Nook end. Lakes and Tarns to the number of ten, may be enumerated in this excursion; viz: Ulswater, Windermere, Esthwaite, Coniston, Grasmere, and Rydal lakes; and Elterwater, Blelham, Easdale, and Grisedale tarns: oftener than once, may eight of them be reckoned from one station. Here is likewise a good view of the different creeks and inlets of the sea towards Lancaster and Ulverston.

LANGDALE PIKES,* called Pike of Stickle, and Harrison Stickle, are by their peculiar form distinguished at a great distance. They afford some good views to the south east: but being encompassed on other sides by higher mountains, the prospect is somewhat limited. Harrison Stickle, the higher, is 2400 feet above the level of the sea: it is more

* These Pikes should always be distinguished from the Pikes of Wasdale Head, by some called the Pikes of Scawfell.

easily ascended, and has the better prospect towards Rydal and Ambleside; but the Pike of Stickle has the advantage of catching, through an opening in the hills, a view of Bassenthwaite lake, and the foot of Skiddaw—from which Harrison Stickle is by higher grounds excluded.

HIGHSTREET may have taken its name from an ancient road which now appears as a broad green path over this mountain. It is probably the highest road ever formed in England, being 2700 feet above the level of the sea.—On account of its central situation between the vales of Patterdale, Martindale, Mardale, Kentmere, and Troutbeck, and being connected with others at a little distance; an annual meeting was formerly held here, when the shepherds of the several vales reciprocally communicated intelligence of such sheep as might have strayed beyond their proper bounds; and to enliven the meeting, races and other diversions were instituted; ale and cakes being supplied from the neighbouring villages.—Highstreet affords some good prospects, but being at a distance from any place of entertainment it is seldom visited by strangers. Pedestrians fond of mountain rambles might, with a guide, pass over it from Patterdale into Troutbeck, or Kentmere; or into Mardale, and thence by Hawes Water to Bampton—from whence are roads to Pooley Bridge, Lowther, Penrith, and Shap.

WANSFELL PIKE rises to the height of 1500 feet above Windermere Lake—a moderate elevation compared with many of its neighbours; yet it is not deficient in prospects. It affords excellent views of Windermere, Grasmere, and Rydal lakes; the towns of Ambleside and Hawkshead, with the beautifully diversified scenery in the neighbourhood. Further distant are seen the sands of Milnthorp, Lancaster, and Ulverston, with the majestic mountains of Coniston and Langdale. In a walk from the pike, towards Kirkstone, it is curious to observe Great Gable start out, as it were, from behind Langdale Pikes, and appearing to separate itself from them still further as the spectator makes his progress along this ridge. Wansfell may be conveniently visited either from Ambleside or Low Wood Inn; and a formation of slaty limestone may be observed crossing its southern end.

WITELESS PIKE is attached to the mountain Grasmoor, and rises with a steep ascent to the height of nearly 2000 feet above Buttermere. It commands excellent views of the three lakes of Buttermere, Crummock, and Loweswater; with the summits of all the principal mountains from Helvellyn to those of Borrowdale, Wasdale, Ennerdale, and Buttermere. The Isle of Man is also in sight, and a considerable portion of the shires of Kirkcudbright and Wigton in Scotland.

LOUGHRIGG FELL—the last, and lowest, but not the least worthy of notice—is only 1000 feet above Windermere, and 900 above Grasmere lake; and the moderate degree of exertion required to climb it, will be amply repaid by the prospects. It is just what might be wished in the place where it stands—high enough to command a view of the circumjacent vallies; and not so lofty as to lessen the importance of the surrounding mountains. Windermere shews a fine expanse of water, with its ornamented banks; the town of Hawkshead and its environs, with Blelham Tarn, and the irregularly shaped Esthwaite Water; Loughrigg with its tarn, and Langdale with Elterwater; the beautiful vales of Grasmere and Rydal, with their two lakes, and the town and highly embellished neighbourhood of Ambleside; are the lowland objects. The circumscribing mountains of Coniston, Langdale, Grasmere, Rydal, Ambleside, and Troutbeck, are at such eligible distances that not only their elegantly formed outlines, but also their varied surface of rock and verdure, can be clearly distinguished. A small piece of Coniston Water, and the like of Thirlmere; are just sufficient to shew the place of those two lakes. The mountain Skiddaw seen over Dunmail Raise, and the top of Ingleborough in the direction of the Low Wood Inn; are extraneous objects beyond the common bounds of the panorama.

Station I.—Scawfell highest point, The Pikes.

Latitude 54° 27′ 24″ N. Longitude 3° 12′ W. Height 3160 feet.

	BEARINGS	Distance in miles	Height in feet
Skiddaw	10° NE	14	3022
Ingleborough, *Yorkshire* . . .	58 SE	38	2361
Black Combe, *Cumberland* . .	19 SW	15	1919
Snowdon, *Caernarvonshire* . .	20 SW	103	3571
Holyhead Mountain, *Anglesea* .	37 SW	100	709
North Barule, *Isle of Man* . .	78 SW	49	1804
Sleiph Donard, *Ireland* . . .	79 SW	112	2820
Mull of Galloway, *Scotland* . .	77 NW	68	——
Burrow Head, . *do.* . .	68 NW	51	——
Crif Fell . . . *do.* . .	26 NW	38	1831

Station II.—Skiddaw.

Latitude 54° 39′ 12″ N. Longitude 3° 8′ 9″ W. Height 3022 feet.

Wisp Hill, near *Mospaul Inn* .	9° NE.	45	1940
Carlisle	26 NE	19	——
Cheviot Hill, *Northumberland* .	35 NE	70	2658
Cross Fell, *Cumberland* . . .	82 NE	27	2901
Saddleback	78 SE	4	2787
Nine Standards, *Westmorland* .	68 SE	38	2136
Ingleborough	42 SE	46	2361
Helvellyn	32 SE	10	3070
Black Combe	15 SW	29	1919
Snowdon	19 SW	118	3571
Snea Fell, *Isle of Man* . . .	64 SW	59	2004
Sleiph Donard, *Down*	73 SW	120	2820
Bryal Point, *nearest in Ireland*	82 SW	91	——
Mull of Galloway	89 NW	69	——
Burrow Head	84 NW	50	——
Crif Fell	43 NW	28	1831
Ben Lomond, *Stirling* . . .	30 NW	120	3420
Ben Nevis, *Inverness*	28 NW	170	4358
Queensberry Hill, *Scotland* . .	22 NW	48	2259

Station III.—Helvellyn.

Latitude 54° 31′ 43″ N. Longitude 3° 0′ 21″ W. Height 3070 feet.

	Bearings	Distance in miles	Height in feet
Cheviot	28° NE	75	2658
Cross Fell	60 NE	24	2901
Stainmoor	88 SE	34	——
Ingleborough	45 SE	36	2361
Bidston Lighthouse, *Cheshire*	1 SW	79	——
Garreg Mountain, *Flintshire*	8 SW	87	835
Old Man, *Coniston*	21 SW	12	2577
Snowdon	24 SW	112	3571
Snea Fell	74 SW	61	2004
Crif Fell	40 NW	38	1831

Station IV.—Coniston Old Man.

Latitude 54° 22′ 20″ N. Longitude 3° 6′ 34″ W. Height 2577 feet.

Calf, *near Sedbergh*	East	25	2188
Great Whernside, *Kettlewell*	72° SE	48	2263
Whernside, *near Dent*	71 SE	31	2384
Pennygant	70 SE	38	2270
Ingleborough	64 SE	33	2361
Pendle Hill	44 SE	49	1803
Lancaster	31 SE	25	——
Moel Fammau, *Denbigh*	4 SW	85	1845
Carnedd Llewellyn, *Caernarvon*	23 SW	92	3469
Carnedd David *do.*	23 30′	93	3427
Snowdon *do.*	23 40′	99	3571
Penmaen Mawr *do.*	24 SW	85	1540
Holyhead Mountain	41 SW	98	709
Black Combe	46 SW	12	1919
Snea Fell	84 SW	55	2004
Burrow Head	64 NW	56	——
Skiddaw	4 NW	20	3022

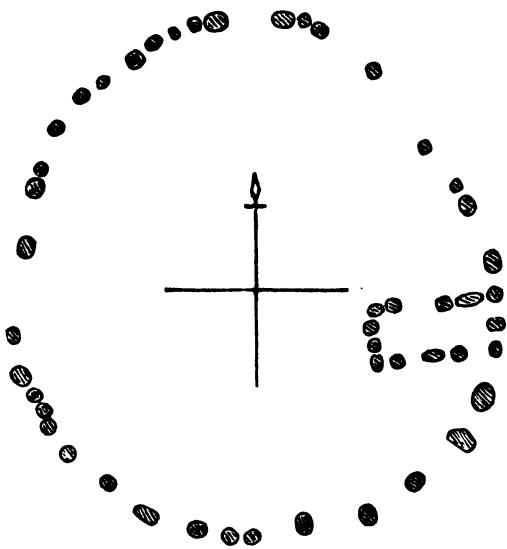
[The foregoing tables are inserted to shew the relative positions and height of some of the principal mountains beyond the limits of the map; without intending to say, that all of them can be discerned from the station under which they are placed.]

THE CRAGS.

Some of the most remarkable Crags are—the Pillar in Ennerdale; Honister Crag near Buttermere; Scawfell Crags, between Wasdale head and Eskdale; Broad Crag on the Wasdale side, and Broad Crag on the Eskdale side of Scawfell Pikes; Paveyark, in Langdale; Rainsbarrow Crag, in Kentmere; Saint Sunday Crag, in Patterdale; Wallow Crag near Keswick, and Wallow Crag near Hawes Water; Wallowbarrow Crag, in the vale of Duddon; Castle Crag in Mardale, Castle Crag in Borrowdale (said to have been a Roman station), and Castle head near Keswick; Green Crag in Legberthwaite, sometimes called the Enchanted Castle or Castle Rock of St. John's; Gait Crag [Goat Crag] in Borrowdale, Gait Crag and Iron Crag near Shoulthwaite, and Gait Crag in Langdale; Dow Crag [Dove Crag] in Coniston Fells, Dove Crags in Patterdale, and Dow Crag in Eskdale; Bull Crag and Littledale Crag in the vale of Newlands; Eagle Crag in Borrowdale, Eagle Crag in Buttermere, and Eagle Crag in Patterdale; Falcon Crag near Derwent Lake; and a Raven Crag in almost every vale—one of the most conspicuous of which is that overlooking Leathes Water.

THE ANTIQUITIES.

A Druidical Circle, 100 feet by 108 in diameter, in a field adjoining the old Penrith road, at the top of the hill, a mile and a half from Keswick.



It is formed by rough *cobble* stones of various sizes, similar to what are scattered over the surface, and imbedded in the diluvium of the adjacent grounds. The largest stands upwards of seven feet in height, and may weigh about eight tons.

A monument of the same kind, but of far larger dimensions, called Long Meg and her Daughters,

stands near Little Salkeld, seven miles N. E. of Penrith. This circle is 350 paces in circumference, and is composed of 67 massy unformed stones, many of them ten feet in height. At seventeen paces from the southern side of the circle, stands Long Meg—a square unhewn column of red freestone, near 15 feet in girth, and 18 feet high.

King Arthur's Round Table is a circular plot of ground about forty yards in diameter, encompassed by a trench and bank of earth; with places of entrance on two opposite sides. It is situated between the rivers Eamont and Lowther, rather more than a mile from Penrith, on the road to Kendal.

Mayburgh lies about a quarter of a mile distant from the last, between the river Eamont and the road to Pooley. An area of near one hundred yards in diameter is circumscribed by a mound, formed of an enormous quantity of pebble stones, apparently gathered from the adjoining lands—surmounted by a fence-wall of more modern date, and shaded by lofty trees. There is an entrance on one side, and near the centre stands a rough porphyritic stone about ten feet in height. The dates and purposes of these two interesting pieces of antiquity, are left entirely to conjecture.

On the common called Burnbanks, near the foot of Hawes Water, there are five tumuli of earth called Giants' Graves. They are from twelve to twenty-five yards in length, and about five in breadth; and look more like the burial place of a regiment, than of individual beings.

A plot of ground near the foot of Devoke Water, exhibits traces of numerous buildings in the form of streets. It appears to have been walled round, and is called the *city* of Barnscar.

Upon the summits of Grasmoor, Binsey, Carrock, and some other eminences, there are remains of structures, consisting chiefly of basin-shaped cavities, walled round, and apparently intended as Beacons. The Beacon, standing in the centre of a large plantation on Penrith fell, is a more modern erection of hewn stone, and commands extensive views of the country. On the west side of the mountain Hardknot, a space of about two acres is encompassed by the remains of a wall, with places of entrance on each of the four sides. There seem to have been towers at the different gates and corners, and several interior erections; but being built without mortar or cement, there is scarcely any part of the walls left standing. It has been called Hardknot Castle.

Stations retaining the name of Castles, when scarcely a vestige of their works remain, are found in several places upon the mountains. They are generally characterized by pieces of freestone, which must have been brought from a distance of several miles, at a time when the roads were very imperfectly formed.

Remains of Castles of a more permanent construction are to be seen at Cockermouth, Egremont, Penrith, Brougham, Dacre, and Kendal. Part of that at Cockermouth has been repaired and is in-

habited; the one at Dacre is used as a farm house; the rest are in various stages of decay.

Furness Abbey is a ruin well worth the notice of the admirer of the works of remote ages. It is situate in a narrow dell, in a fertile district of Lancashire, called Low Furness. It was founded in 1127, by Stephen, afterwards king of England, and involved in the general wreck of religious houses in 1537.

The monks were of the Cistercian order, from Normandy. The dimensions of the ruins are extensive. The church has been upwards of 300 feet in length, and 38 in breadth; the length of the transept near 140 feet; the height of the side walls about 54 feet; and with various apartments and offices, the ruins extend from north to south 500 feet; besides the Abbot's quarters, which stood at a distance, on the site now occupied by the Manor-House. The central tower is levelled with the side walls, and only one of its stupendous arches left standing; yet enough remains to shew the style of architecture, and to give some idea of its former magnificence. A few years ago, the proprietor, Lord G. Cavendish, caused the rubbish to be cleared away; by which many pieces of sculpture were brought to light that had lain buried for centuries.

Calder Abbey lies about four miles south of Egremont. It was founded by the second Ranulph de Meschines, about seven years after that at Furness —on which it was dependent—and on a much smaller scale. Some of the walls, with the arches

which supported the tower, and a part of the colonnade are still perfect; but its dignity as a ruin is somewhat lessened by the mansion of Captain Irwin having been built so closely adjoining.

On the banks of the river Lowther, about a mile west of Shap, may yet be seen some remains of an Abbey of still smaller dimensions; which was founded about the year 1150.

EXPLANATION OF SOME TERMS OF FREQUENT OCCURRENCE IN THE DISTRICT.

Barrow, a term often intended to signify an artificial hill, is also applied to natural ones. There is Barrow on the west side of Derwent Lake, a hill 1200 feet high; there is Whitbarrow near Penrith, and Whitbarrow near Witherslack: Yewbarrow in Witherslack, and Yewbarrow in Wasdale. Latterbarrow explains itself, a hill branching from the side of a mountain: we have Latterbarrow at the foot of Waswater, and Latterbarrow in Ennerdale.

Knot, a small rocky protuberance on the side of a mountain.

Cop, a little round-topped hill.

Dod is generally applied to a secondary elevation attached to one of the larger mountains; and mostly having a rounded summit. There is the Dod on the western side of Skiddaw, another in front of Red Pike; and Starling Dod, nearer Ennerdale. In the

mountain range proceeding north from Helvellyn, are Stybarrow Dod, Watson Dod, and Great Dod. And in Patterdale, Glenridden Dod, and Hartshope Dod.

How generally implies a hill rising in a valley; (the sides of such hills are frequently ornamented with dwellings.) There is the How half way between the Lakes of Derwent and Bassenthwaite; Pouterhow, at the head of Bassenthwaite lake; and Castlehow, at its foot: Great How near Rosthwaite, and Great How near Leathes Water: the How and Butterlip How in Grasmere, the How in Ennerdale, and the How near Loughrigg Tarn, with several others. Numerous diluvial hillocks of a parabolic form are found in the heads of several vales—in both the Langdales, in Greenup vale in Borrowdale, and in the head of Ennerdale, where they are peculiarly interesting.

Scar, escarpment, a range of rock; most common in limestone districts.

Screes, a profusion of loose stones on the side of a hill.

Door, an opening between two perpendicular cheeks of rock: as Mickle Door—Coom Door—Low Door, modernized into Lowdore.

Coom in some districts, and Cove in others, denotes a place scooped out of the side of a mountain; there is Black Coom or Combe; The Coom, and Gillercoom in Borrowdale; Keppel Cove, Brown Cove, Red Cove, Ruthwaite Cove and others in the side of Helvellyn.

FELL, the same as mountain, a large hill.

MAN, a pile of stones on the summit of a hill.

CAM [comb] the crest of a mountain, as well as of a cock: as, Catsty Cam—Rosthwaite Cam.

NEESE [nose] a ridge running from the summit of a mountain steeply downwards: as, Gavel neese —Lingmel neese.

The bill of a bird is called its "neb;" so neb, nab, or snab, like ness or neese, means a promontory or projecting piece of land, either into a lake or from the end of a mountain. There are Landing Nab and Rawlinson's Nab on Windermere; Bowness on Windermere, Bowness, Broadness, and Scarness, on Bassenthwaite lake; High Snab and Low Snab in the vale of Newlands.

HAUSE, the throat, a narrow passage over a height between two mountains, as Esk-hause, Buttermere-hause.

THWAITE is a common termination to names of places, and is understood to signify a piece of land inclosed and cleared. We have Rosthwaite, Long-thwaite, Stonethwaite, and Seathwaite in Borrow-dale; all which endings are locally pronounced long as *whait*. There are Applethwaite near Winder-mere, and Applethwaite near Keswick, Bracken-thwaite in Cumberland, Satterthwaite, and Seathwaite in Lancashire, all usually pronounced short as *thet*.

GRANGE, a farm or habitation near the water, as Grange in Borrowdale, Grange in Bampton, Grange in Cartmel, and Marsh Grange on the river Duddon.

HOLM or Holme, an island, or a plain by the water side.

KELL or Keld, a spring of water.

WATH, a ford across a river.

SYKE, in provincial dialect, is a stream of the smallest class; as Heron-Syke near Burton—dividing the counties of Westmorland and Lancashire.

GILL (sometimes wrote *Ghyll* to secure the hard sound of the *G*) is a mountain stream confined between steep banks, and running in a rapid descent. These Gills are instrumental in enriching the vallies by the spoil of the mountains; they contribute to the formation of a plot of superior land on the side of a valley; or sometimes a low promontory sweeping with a bold curve into a lake.

BECK is a term used promiscuously for river, rivulet or brook; it signifies a stream in the bottom of a vale, and to which the gills are tributary. These becks receive a name from some dale, hamlet or remarkable place which they pass, and in their course the appellation is frequently changed; for instance, a stream running north from Bowfell, and receiving several augmentations in its progress down Borrowdale is called Langstreth beck; then Stonethwaite beck, Rosthwaite beck, and Grange beck till it enters Derwent lake, thence it has the name of Derwent, to Workington, where it falls into the sea.

SEASON FOR VISITING THE LAKES.

The season for visiting the Lakes depends much upon the taste of the Tourist. They may be seen with pleasure at any time from the beginning of May to the end of October, provided the weather be favourable. Pedestrians will feel the month of May an agreeable season, and they will then find more room at the inns. Towards the end of June many professional gentlemen are at liberty, and many students at the Universities find it convenient to spend three months among the lakes, thus blending instruction with healthy recreation. Large parties commonly require more time in fitting out, and are later in arrival: so that the most busy time is generally from the last week in July to the middle of September. The artist will prefer the richly diversified colouring of autumn, which will be in the greatest perfection in the month of October.

To such as make the tour with a disposition to be pleased, every season has its peculiar charms. In spring, all nature is in her most cheerful mood. It is pleasing to observe the daily progress of the different kinds of trees as they spread out their leaves, and the different plants as they expand their blossoms; while the feathered choir enliven the air with their morning and evening songs.—In the middle of summer, all is gay; the heat of the sun may at times incommode, but the lengthened days will afford a few hours for retirement in the shade, and

the evenings are free from the chilling blasts prevalent at other seasons.—In autumn, the fields, the woods, and the mountain sides, display their most splendid variety of colouring, and the air is often favourable for distant prospects; but the days are somewhat contracted, and for long excursions more early rising is required.—Even in winter, the lakes still exhibit the same expanse of water, or else a glassy sheet of ice; the mountains—whether naked, or partially or wholly covered with a mantle of snow—still reign in their wonted grandeur; and the waterfalls are occasionally rendered more striking by the splendid and fantastic forms in which their spray is congealed.

But it should be kept in mind that more rain falls in mountainous than in more open countries, and the showers come on more suddenly. The time of the tourist should be so calculated as to allow him now and then to spare a day; as there is a probability that the greatest part of a day will be sometimes of necessity spent within doors—when the museums of natural history and the exhibitions of paintings will be the principal resources.

GENERAL DIRECTIONS:

WITH NOTICES OF THE VARIOUS OBJECTS PASSED IN EACH ROUTE.

STAGES.

	MILES.
Lancaster, over Sands to Flookborough	16
Flookborough, over Sands to Ulverston	6
Lancaster to Milnthorp, *New Road*	14
Milnthorp to Newby Bridge	15
Newby Bridge to Ulverston	9
Ulverston to Hawkshead	16
Hawkshead to Bowness, by the Ferry	6
Ulverston to Ambleside, by Coniston	22
Milnthorp to Kendal	8
Lancaster to Burton	11
Burton to Kendal	11
Kendal to Bowness	9
Bowness to Ambleside	6
Kendal to Low Wood Inn	12
Kendal to Ambleside	14
Bowness to Newby Bridge	8
Newby Bridge to Hawkshead	9
Hawkshead to Ambleside	5
Low Wood Inn to Penrith	27
Low Wood Inn to Keswick	19
Ambleside to Penrith	25
Ambleside to Keswick	17
Keswick to Cockermouth, *New Road*	13
Cockermouth to Whitehaven, by Workington	16
Keswick to Penrith	18
Penrith to Carlisle	18
Keswick to Wigton	22
Wigton to Carlisle	11

In making the tour of the Lakes, various routes present themselves; the choice of which must depend upon circumstances of taste, convenience, and

mode of travelling. Tourists from the north generally approach by way of Carlisle; those from the south by Lancaster.

Lancaster is a well built town, containing about 11,000 inhabitants. It is a sea-port upon the Lune, over which there is a handsome bridge, and about a mile further up a grand aqueduct by which the Canal is conducted across the river.

The Castle, including the county jail and spacious halls for the administration of justice, occupies a commanding situation. A great part of the building is modern, but there still remains an ancient tower called John of Gaunt's Chair, from which there is a most extensive and beautiful prospect. An ancient Church with a lofty tower stands upon the same eminence. The King's Arms, Royal Oak, and Commercial are the principal inns.

Proceeding from Lancaster, several roads lie before us. The first and most direct is by Burton to Kendal, a distance of 22 miles. Opposite the village of Bolton, about two miles to the right, is a natural cavern, called Dunald Mill Hole: it is inferior in extent and grandeur to some in the West Riding of Yorkshire and in Derbyshire; but to those who have not an opportunity of visiting others, it may give some idea of the nature of these subterranean cavities.—Warton Crag on the left, and Farlton Knot on the right of the road, are two stratified hills of limestone, rising to a considerable height: the latter said to be nearly 600 feet above the road.

The second line, through Kirkby Lonsdale, is rather more circuitous, but the drive along the fertile and beauteous vale of Lune is most delightful; and several objects—among which we may enumerate Hornby Castle, built by Lord Monteagle; Thurland Castle; and the ancient bridge at Kirkby Lonsdale, with its picturesque accompaniments of rock, wood, and water—are well worthy of notice. And those who have half an hour to spare, should on no account omit visiting the Church-yard, and viewing the pleasing landscape which there and along a bank leading therefrom is spread before the eye: Casterton Hall, the residence of Mr. Carus Wilson, and Underley Park, the seat of Mr. Nowell, are prominent features in the charming scene.—From Lancaster to Kendal by this road is nearly 30 miles.

Should the ruins of Furness Abbey be an object of contemplation, the shortest way is to cross the Lancaster and Ulverston Sands, which on a fine day, may be considered a very interesting ride.

FROM LANCASTER TO ULVERSTON AND FURNESS ABBEY.

Miles.		Miles.
4	Hest Bank . . .	4
10	Kents Bank . . .	14
2	Flookborough . .	16
1	Cark	17
3	Canal-foot . . .	20
2	Ulverston . . .	22
5	Dalton	27
2	Furness Abbey . .	29
7	Return to Ulverston .	36

It is to be understood that these sands can only be crossed in the absence of the tide, and the proper time for setting out may be known at Lancaster. Every day, during the time of crossing, guides are in attendance to point out the place of fording the several rivers, and a stranger should contrive to set out in company with some person acquainted with the route, or to follow one of the coaches. The distance over the sands varies, as the way is obliged to be made more or less circuitous according to the state of the sands. The Lancaster sands may be estimated at 10 miles, those of the Leven at 3 or 4. The views in crossing extend over the whole expanse of Morecambe Bay; and the different inlets and points of land, with the villas, villages and woods upon their sides and the lofty mountains rising in the distance, make a most delightful prospect.

Flookborough is a village lying between the two sands: it has two comfortable inns fitted for the reception of persons resorting to the medicinal waters of a spring near Humphry Head, two miles distant. At the same distance on the other hand is the small town of Cartmel with its ancient Church; and between Flookborough and the Leven sands, surrounded by a fine park, lies Holker Hall, the seat of Lord G. Cavendish: and on the opposite shore of the Leven are the noble woods of Conishead and Bardsea.

Ulverston is a neat town containing 4500 inhabitants and two good inns, the Sun and Bradyll's Arms,

it communicates with the river Leven by a canal admitting vessels of considerable burthen.

Those who want courage to venture upon the sands, may take the new turnpike road to Milnthorp. From Lancaster to Milnthorp is 14 miles: and here is the option of the Ulverston or Kendal roads. The Ulverston road after passing Heversham and Levens, turns to the left, over some large tracts of peatmoss, having on the right the isolated ridges of limestone, called Whitbarrow, and Yewbarrow, forming lofty scars, on their western sides, and reposing on the slaty rock upon which the road in part is formed. From Milnthorp to Newby Bridge is 15 miles; here is the choice of continuing the Ulverston road, or proceeding along the banks of Windermere, by Bowness and Low Wood to Ambleside.

The new road to Ulverston follows the course of the Leven to Backbarrow, where it crosses the river by a bridge situated among manufactories of cotton, of iron, of pyroligneous acid, and of gunpowder. Leaving Hollow Oak on the left, it passes over some peatmoss, and presently approaches the sands, where it is interesting to meet the flowing tide, as it washes against the breastwork of the road. The river Crake, which issues from Coniston water, is then crossed by a bridge under which the tide flows, and we join the old road near a place called Green Odd, where small craft take in their lading, consisting chiefly of slate, timber, and iron. From Newby Bridge to Ulverston is 9 miles.

A mile west of Furness Abbey, described at page 82, from the top of Hawcoat, there is a prospect over a richly cultivated country and a part of the sea, to a most extensive range of distant mountains: and from the more lofty station of Birkrigg the view of Furness and the surrounding coast is singularly beautiful. Two miles from Ulverston is Conishead, generally called the Priory, a place highly extolled by Mr. West, who says "it is a great omission in the curious traveller, to be in Furness and not to see so wonderfully pretty a place." The mansion has been several years in rebuilding, and when finished will be a splendid residence.—Ulverston is upon the slaty rock, Dalton upon mountain limestone, and the valley in which Furness Abbey is placed is flanked by red sandstone, from which the Abbey has been built. Iron ore is procured in large quantities from veins in the limestone; good specimens of red hematite may here be obtained, with specular iron ore, and quartz crystals.

On leaving Ulverston for the lakes, the road generally preferred leads by Lowick Chapel, where there is a good view of Coniston Lake, with the mountains at its head, and Helvellyn in the distance; and after crossing Lowick Bridge, it proceeds up the eastern side of the lake to Waterhead Inn, distant from Ulverston 14 miles.

At Coniston, besides the views of the lake from its banks, and from its bosom in a boat, the lovers of landscape beauties may find some pretty walks in

the vales of Yewdale and Tilberthwaite. A full length view of the lake is obtained in passing over the hill called Tarnhows, on the road towards Elterwater; and an excursion to Levers Water and the Old Man, on a fine day, would not be thought uninteresting. The geologist may amuse himself by tracing a stratum of transition limestone, alternating with slate, as it bassets out upon the hills, on the north-west of the road leading towards Borwick Ground; just beyond which place lime has been manufactured, on the left of the road to Ambleside. The slate quarries about Tilberthwaite, and the copper mines on Tilberthwaite Fell, and near Levers Water, may also be visited; and on the road to Ambleside, the Brathay flag quarry may be considered worthy of notice.

From Coniston, those who feel no hesitation in crossing the Ferry on Windermere, may proceed through Hawkshead, by the side of Esthwaite Water, to the Ferry; and after taking a view of Windermere, from Mr. Curwen's Station-house, cross the water to Bowness, distant from Coniston Water-head 9 miles. Those who object to crossing the water, may either proceed from Coniston to Ambleside direct, 8 miles; or from the Ferry, by the western banks of the lake to Ambleside, distant from Coniston by this route 14 miles.

Omitting Furness Abbey, some will proceed directly to Kendal. Or for such as wish to enter at once upon the centre of Windermere, there is a

shorter, but inferior road from Milnthorp through Crosthwaite and Winster, in one stage of 14 miles. From Milnthorp to Kendal, is 8 miles; the road crosses the Kent near the ancient mansion of the Howards at Levens; and passes the castellated Hall of Sizergh, the family seat of the Stricklands.

Kendal is a clean and well built town, of considerable trade, and a population of 11,000 inhabitants. It is situate at the junction of the Carlisle road by Penrith, with the Whitehaven road by Ambleside, Keswick, and Cockermouth. The King's Arms and Commercial are the principal Inns. Here is a museum kept by Mr. Todhunter, deserving attention, as exhibiting the natural history and antiquities of the country: as also a marble manufactory carried on by Mr. Webster, where several varieties of limestone are worked and polished as marble.

From Kendal to Bowness is 9 miles, to Low Wood Inn 12, and to Ambleside 14 miles. About 8 miles from Kendal, on either the Bowness or Ambleside road, there is a grand view of Windermere Lake. Near Bowness, are eminences of various degrees of elevation; where according to the taste of the party, the views may be taken either from a higher or a lower station; and from the road between Bowness and Low Wood, the mountains of Coniston and Langdale, with Scawfell Pikes, Great End, and Gable, appear in a most splendid arrangement.

The Mountains of Coniston, Langdale, &c.

as they appear from the road between Troutbeck Bridge and Bowness.

At Low Wood, while the admirer of landscape takes his views of the lake and mountain scenery from the rising grounds; and the angler amuses himself upon the water; the geologist may be employed in examining the position of the transition limestone, and the slate, where they have been worked, in two adjoining quarries near the road, about a quarter of a mile north of the inn. And the neighbourhood of Ambleside affords many pleasing excursions.

BOWNESS TO ESTHWAITE WATER AND CONISTON.

Miles.		Miles.
2	Cross Windermere to Ferry House	2
4	By Esthwaite Water to Hawkshead	6
3	Coniston Water Head . . .	9
3	Borwick Ground	12
5	Ambleside	17

Coniston lake and its environs may be visited from Bowness, first crossing the Ferry on Windermere, and passing beneath the *station*, which is built upon a rock, tastefully ornamented with evergreens and flowering shrubs, and may be visited by the way. Ascending a long steep hill, there is a retrospect across the lake, and a view of the distant summit of Ingleborough. At the top of the hill, there is a prospect of the Coniston mountains, and a mile further on, Bowfell and Langdale Pikes appear in magnificent array. There are some neat houses in the hamlet of Sawrey, and Mr. Beck has a beautiful seat at Grove on the other side of Esth-

waite Water. Here are sweet views over the expanded valley in which the town of Hawkshead is placed, with its church upon an elevated site. From the edge of the water, the Coniston, Langdale, and Grasmere mountains may be seen; and a little of the easternmost point of Skiddaw through the gap of Dunmail Raise, with Seat Sandal, Helvellyn and Fairfield to the right hand.

Passing through the little market town of Hawkshead, where a post chaise is kept at the Red Lion, the road lies over high grounds, and has a steep descent to the inn at Coniston Waterhead, distant from Bowness 9 miles. By taking a boat half way down the lake, its principal beauties are unfolded; and the return may be made either by the head of Windermere to Bowness 13, or to Ambleside 8 miles: but it would be a great omission to forego the beautiful views that might be had on the road from Bowness by Troutbeck bridge and Low Wood to Ambleside.

AMBLESIDE

Is an ancient chartered town; but of small extent, and its market is little more than nominal. It is irregularly built upon a rising ground, commanding good prospects of the adjacent scenery. Post Chaises are kept at the Salutation and Commercial Inns, and there are two other Public Houses that accommodate travellers; besides several houses fitted up as private lodgings.

Here is an exhibition of drawings, and prints, of

the lake and mountain scenery; begun by the late Mr. Green and continued by his family. In the beginning of a tour, these delineations may be useful, in shewing the character of the several parts of the country about to be visited; and on departing from the district, a selection—which can be purchased at a moderate expense—may serve to revive at a future period the pleasing recollection of some favourite scenes. Mr. Green depicted the varied scenery of this interesting region with an ability and industry seldom united in one person; and his *Guide* will long remain a monument of the assiduity with which he pryed into the arcana of the mountains.

FROM AMBLESIDE TO LANGDALE.

3	Skelwith Bridge	3
2	Colwith Cascade	5
3	Blea Tarn	9
3	Dungeon Gill	11
2	Langdale Chapel Stile	13
5	By High Close and Rydal to Ambleside .	18

The Langdale excursion from Ambleside or Low Wood, presents a variety of lake and mountain scenery, scarcely to be equalled in a journey of the same length, during the whole tour. It may be performed on horseback; but many parts of the road will not admit of any kind of carriage, except a cart. Passing Clappersgate, the party may either proceed with the river on the left, to Skelwith Bridge; or crossing Brathay Bridge, take the river on the right, by Skelwith Fold. At Skelwith

Bridge, is a public-house, and a little further up the river, a considerable waterfall; but the road by Skelwith Fold, being on a higher elevation, commands a fuller view into Great Langdale. After the junction of the two roads, there is a view of Elterwater. The road entering Lancashire at Brathay, or at Skelwith Bridge, leaves it again at Colwith Bridge; a little above which, is a pretty cascade. After passing Little Langdale Tarn, the ancient pack horse road, from Kendal to Whitehaven over Wrynose, takes the left hand; the one to be pursued turns to the right, ascending the common to Blea Tarn; near to which the Langdale Pikes exhibit their most magnificent contour. Leaving the tarn and solitary farm house on the left, proceed to the edge of the hill, where you will have a fine view of the head of Great Langdale, into which the road steeply descends. A curious waterfall may be seen in Dungeon Gill,—a stream issuing between the two Pikes, and falling among rocks of a peculiar flinty appearance. Mill Beck is the stream flowing from Stickle Tarn, and gives name to two farm-houses, at one of which it may be convenient to leave the horses, while visiting Dungeon Gill. Following the road down Great Langdale, the traveller will arrive at Thrang Crag, where the rock in a slate quarry is excavated in an awful manner; and soon after pass the chapel, near which is a small alehouse. Here, taking the road to the left, we come to a second prospect of Elterwater; and at

a little distance on the right, the works lately erected for the manufacture of gunpowder. Near the farm-house called High Close, there is a fine view over Loughrigg Tarn, with Windermere in the distance; and crossing a road leading from Skelwith Bridge, we come in sight of the peaceful vale of Grasmere, near the station recommended by Mr. West. The road from thence is formed along the skirts of Loughrigg Fell, in a kind of terrace, from whence there is a rich view of the lake of Grasmere on the left. Further on, the road approaches Rydal Water, and soon after passing that, and the village of Rydal, the turnpike road is joined, and in a mile more the excursion is concluded at Ambleside after a most pleasing circuit of eighteen miles.

A variety of shorter excursions may be made from Ambleside; a walk of seven hundred yards from the inn, to the waterfall of Stock Gill, will not be neglected; and one of a mile and a half may be taken to the falls at Rydal. A ramble round the lakes of Rydal and Grasmere—round, or over Loughrigg Fell—a more elevated walk to Wansfell Pike—or the still more lofty circuit of Fairfield, on a favourable opportunity—will not fail to please such as delight in extensive prospects. Those who have not already seen Coniston, may make an excursion thither: and Ulswater may also be visited from hence, by the steep carriage road over Kirkstone, which in the length of three miles and a half rises to the height of 1300 feet above Ambleside;

and in two miles and a half falls upwards of 900 feet to the foot of the hill on the other side. From thence the road leads by the small lake of Brothers'-water, and through a pleasant valley to the inn at Patterdale; distant from Ambleside 10 miles. The return may be made the same way, or proceed along the side of Ulswater to Penrith, 15 miles more. Or it may rather be preferred to stop at Pooley Bridge; from whence Hawes Water and Lowther Castle may be visited. Some who travel on horseback might choose a ride over the mountains Wrynose and Hardknot, through the vale of Eskdale to Strands in Nether Wasdale, about 24 miles; and next day by Waswater, Styhead, and Borrowdale, to Keswick 20 miles.

AMBLESIDE TO ESKDALE AND WASDALE.

Miles.		Miles.
3	Skelwith Bridge	3
1½	Colwith	4½
2½	Fellfoot	7
2	Top of Wrynose	9
2	Cockley Beck	11
4	Dawson Ground, Wool Pack .	15
3½	King of Prussia	18½
3	Santon Bridge	21½
2½	Strands, Nether Wasdale . .	24

This tour may be made on horseback, or with some little difficulty in a cart; taking the road to Little Langdale as before described, and following the old pack-horse road over Wrynose and Hard-

knot, both of which hills are very steep. Near the road on Wrynose are the three shire stones of Cumberland, Westmorland, and Lancashire. From Westmorland we here pass into Lancashire; and at Cockley-beck into Cumberland. From the top of Hardknot there is a view of the sea and the Isle of Man in the horizon; and half way down the hill on the right are the ruins of a place called Hardknot Castle.

The small river Esk winds along a narrow valley, among verdant fields surmounted by rugged rocks, and about a mile and a half down the valley is a public-house, formerly the sign of the Wool Pack, about 15 miles from Ambleside. On the left hand, in travelling down the valley, there are two remarkable cascades. The first is seen from the road; but the other, which lies beyond the chapel, requires a walk of more than half a mile to view it. From the hamlet of Bout, a dim track leads over Burnmoor to Wasdale head; but the road should be kept, nearly to Santon Bridge, when it turns off to the right, to the Strands at Nether Wasdale; where there are two public-houses. After seeing Waswater, parties on horseback may (and with a cart it will be necessary) go by Gosforth to Calder Bridge, from thence by Ennerdale Bridge, and Lamplugh, to Scale Hill, and thence either by Buttermere, or Lorton, to Keswick. Sometimes this excursion has been varied, by returning from Wasdale, by Ulpha to Broughton, and thence by Coniston to Ambleside.

AMBLESIDE TO KESWICK.

1½	Rydal	1½
3	Swan, Grasmere	4½
4	Nag's Head, Wythburn .	8½
2½	King's Head	11
6	Keswick	17

The route from Ambleside to Keswick lies through the midst of lake and mountain scenery. At one mile from Ambleside a road crossing Pelter Bridge on the left, leads to Langdale, or round Loughrigg Fell. To the right, among ancient oaks, stands Rydal Hall, the patrimonial residence of Lady le Fleming, who has built and endowed a neat Chapel in the village. Above the chapel is Rydal-mount, the residence of the poet Wordsworth; and beyond the hall, the Rydal Waterfalls. The next object is Rydal water, with the heronry upon one of its islands; and a little further, the extensive slate quarry of Whitemoss. The road is then conducted to the margin of Grasmere water, and gives a good view of that admired vale. At the further end of which, between the branches of Easdale and Greenburn, stands Helm Crag, distinguished, not so much by its height, as by its summit of broken rocks, which Mr. Gray likens to "some gigantic building demolished;" Mr. West to "a mass of antediluvian ruins;" Mr. Green to the figures of a "lion and a lamb;" and Mr. Wordsworth to an "astrologer and old woman;" and the traveller who views it from Dunmail Raise, may think that a mor-

tar elevated for throwing shells into the valley, would be no unapt comparison. A road turns off on the left, to the Church and the Red Lion Inn, the Swan is on the turnpike road, at the distance of four miles and a half from Ambleside.

The long hill of Dunmail Raise is next to be ascended. It rises to the height of 720 feet above the level of the sea; and yet it is the lowest pass through a chain of mountains which extends from Black Combe on the southern verge of Cumberland, into the county of Durham. Having overcome the steepest part of the road, Skiddaw begins to shew his venerable head in the distance; and here is a retrospect over Grasmere vale, and through a vista of mountains, extending as far as Hampsfield Fell, near the sands of Lancaster. At the highest part of the road, a wall separates the counties of Westmorland and Cumberland; and a large heap of stones is said to be the cairn or sepulchre of Dunmail, last king of Cumberland, who was defeated here by the Saxon monarch Edmund, about the year 945. The lake Thirlmere or Leathes' Water now comes in view, and the road passes between the Inn and the Chapel of Wythburn, rather more than eight miles from Ambleside; and something further from Keswick. The mountain Helvellyn is now upon the right; but the road lies so near its base, that the full height of the mountain cannot be seen. After passing a little way upon the margin of the lake, we come to another steep ascent, where Arm-

both-house, the residence of Mr. Jackson, on the other side of the water, is a good object; but Dale-head-hall, the manorial seat of Mr. Leathes, on this side, is hid by a hill. Having passed the summit, there is a delightful view through the vale of Legberthwaite, with its prolongation of Fornside, and Wanthwaite — together constituting what is commonly called St. John's vale—beyond which the lofty Saddleback, with its furrowed front, closes the scene.

There is a public-house at the King's Head, six miles from Keswick, and a road turns off on the right towards Threlkeld, passing under the massive rock of Green Crag, sometimes called the Castle Rock of St. John's. Near this, a tremendous thunderstorm in 1749, swept away a mill, and buried one of the millstones amongst the ruins, so that it has never yet been discovered.

The Keswick road inclines to the left, and surmounting the cultivated ridge called Castlerigg, there is a full view of Derwent Lake, with part of that of Bassenthwaite, the town and vale of Keswick, with its surrounding mountains. It was here, that Mr. Gray on leaving Keswick, found the scene so enchanting, that he "had almost a mind to have gone back again."

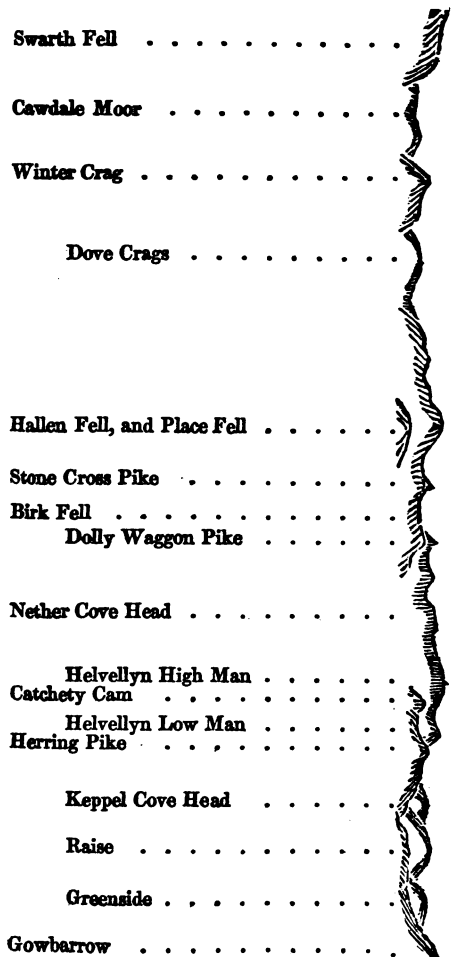
FROM CARLISLE TO KESWICK.

Tourists from the north, when at Carlisle, may proceed towards the lakes, either by Penrith or

Wigton: from Wigton towards Keswick, there are some good views over the Solway Frith; and Bassenthwaite Lake (which some say should be first visited) is seen without deviating from the road—one of the richest views that it affords, being from the top of the pass called the Hause, about four miles after leaving Ireby; there is also a good retrospective view, about five miles before reaching Keswick.

Penrith is a good market town with upwards of 5000 inhabitants. It is a considerable thoroughfare, being situated at the junction of the Yorkshire and Lancashire roads to Carlisle and Glasgow. The principal inns are the Crown and George. From Penrith to Alston Moor is 20 miles, to Appleby 14, to Carlisle 18, to Kendal by Shap 27, to Keswick 18.

Ulswater may be visited from Penrith, either by Eamont Bridge and Tirrel, or by Dalemain, to Pooley Bridge; with carriages the former is generally preferred. A boat may be taken at Pooley Bridge, or the carriage may be driven along the side of the lake, by Watermillock, and through Gowbarrow Parks, by Lyulph's Tower to the inn at Patterdale, 15 miles. From whence, either return the same way, or pass by Brothers Water, and over the very steep hill of Kirkstone, to Ambleside, 10 miles. Or otherwise, turn off in Gowbarrow Park, by Dockray and Beckses, to Keswick 22 miles.



The Mountains of Ullswater:
as seen from Pooley Bridge.

EXCURSIONS TO HAWES WATER.

There are various mountain passes by which Hawes Water may be approached by pedestrians, and a way on horseback through Longsleddale, has been described with a high degree of colouring in some former publications. In planning an excursion, several things are to be taken into consideration; as what kind of conveyance the roads will admit of, how that conveyance is to be supplied, and at what places refreshment may be obtained. Longsleddale is a valley possessing all the requisites of meadows, woods, mountains, rocks, and waterfalls; but they are deficient in that harmony of composition which renders some of the more northern vallies so attractive to the tourist.

The road over Gatescarth, between Branstree and Harter Fell, is steep on both sides, yet such as a horse may be ridden, or rather led; and from the highest part there is an extensive view towards the sea. The pass from Kentmere, over Nan Bield between Harter Fell and High Street, is still more difficult.

Mardale Green, to which the road descends, is about 15 miles from Kendal, and the same from Penrith; it is bounded by the mountains Branstree, Harter Fell, and High Street. From the last of which a narrow ridge, called Long Stile, projects so far as to seclude it from the other part of the valley; and beyond this rises the apex of Kidstow Pike.

Here are two or three dwellings, one of which is a public-house; and the Dun Bull on Mardale Green will be no alarming or unwelcome object to the weary traveller.

But it will generally be found most convenient to visit Hawes Water from Penrith, by way of Eamont Bridge; turning to the right at Arthur's Round Table, to Askham 5 miles; thence by Helton, and Butterswick, to Bampton, nearly 5 more. From many parts of the road, the Castle and noble woods of Lowther, with the lofty limestone rocks of Knipe Scar, are important objects.

Leaving Bampton Grange, with its church, on the left hand, two miles more bring us in sight of Hawes Water. Some will content themselves with travelling a couple of miles along the banks of the lake, and thence return to the Grange for refreshment. At this place there are two public-houses; but not much fitted for the entertainment of strangers.

Those who wish to penetrate the hidden recesses of the mountains, may travel onward to the chapel, which is a small building closely embowered with yews and sycamores, its walls exhibiting some neat monumental inscriptions; particularly one to the memory of one of its ministers, who died in 1799, having served the cure upwards of fifty years.

Here a narrow mountain ridge stretches so far across the valley that it seems to forbid all further progress; but turning the end of the hill, the vale

expands a little at Mardale Green, where a place of refreshment is found about a mile and a half from the head of the lake, and 15 miles from Penrith.

KENDAL TO HAWES WATER BY SHAP.

8½	High Borrow Bridge . .	8½
7½	Shap	16
4	Bampton	20
2	Foot of Hawes Water . .	22

Four miles before reaching Shap, a road turns off to Shap Wells, at the distance of a mile. The water is stated by Mr. Alderson, to be a most genial sanative saline spring, milder than the Harrowgate Purgative Spaw, more active than the Gilsland Water, and in its properties nearly allied to that of Leamington.

From Bampton the party may either return to Penrith or be conducted into the great road at Shap. But to such as make this excursion on foot, or on horseback, it will be found a pleasing variety to turn off the road a little before arriving at Helton, and follow a track over the common called Moor Dovack, which affords a fine view of Ulswater and its neighbouring scenery, and at Pooley Bridge is a commodious inn, from whence the road may be taken by Dalemain to Penrith. Parties making their quarters for a few days at Pooley Bridge, may visit Hawes Water, and Lowther Castle, the magnificient seat of the Earl of Lonsdale, most conveniently from thence.

KESWICK.

Having by different roads conducted the several parties to Keswick, it must be made head quarters for a while, to examine the curiosities of the place — to enjoy the rich scenery in its neighbourhood — and to make excursions, some of a few hours, some of a day, and others perhaps of more than one day.

Keswick has a population of 2000 inhabitants; its principal trade is in the woollen manufactory; here are also several manufactories of black-lead pencils, and one of scythes, shovels, and edge tools. The principal inns are the Royal Oak and Queen's Head; there are other houses where small parties may be accommodated, besides many neatly furnished private lodgings. Here are two museums, exhibiting the natural history of the country, and numerous foreign curiosities: one was established by the late Mr. Crosthwaite, (who published his maps of the lakes about forty years ago,) and is now kept by his son: the other is kept by Mr. Hutton, who has for many years acted as guide to the gentry frequenting the Royal Oak inn, and who has assiduously applied himself to the pursuits of botany and mineralogy, as each in its turn became the fashion of the day. At both the museums and at other places, the various mineral productions of the country are kept on sale. Post chaise and ponies may be had at the inns, with experienced guides for excursions by land; and neat pleasure-boats with intelligent boatmen for the water.

On an eminence at the north end of the town Robert Southey, Esq. L. L. D. Poet Laureate, occupies a delightful situation; Mr. Pocklington, has a pleasant summer residence at Barrow House; and Mr. Stanger, at Dovecote.

For an introduction to the beauties of Keswick vale, a good station will be found on Castlehead—a wooded rock in the centre of the Derwentwater estate, at the distance of half a mile from the inn, and rising to the height of 280 feet above the lake of Derwent, which is here finely displayed, with its numerous bays and islands. Lord's Island, near the shore, was once the residence of the family of Derwentwater; the smaller island of Rampsholm lies beyond it; St. Herbert's Isle nearer the middle of the lake; and to the right Vicar's Isle, on which General Peachy has a house. The circumjacent mountains of Borrowdale and Newlands make a fine panorama. At the head of Borrowdale appears Great End Crag, beyond it a part of Scawfell with the highest of the Pikes. Looking through the vale of Newlands, Red Pike, distinguished by its colour, rises over Buttermere. To the eastward, Wanthwaite Crags, and Great Dod, form the end of the mountain range extending from Helvellyn. To the north Skiddaw rises finely, and Saddleback may be seen over the trees. Crosthwaite Church is a good object in the vale, and over the rising ground beyond Bassenthwaite Lake, the mountain Criffel in Scotland shews his head. This may be thought

The Mountains South-West of Derwentwater:

as seen from Keswick.

too elevated a station for the eye of a painter; but as a general view of the lake, the town, and valley, it is excellent. Some of the lower stations formerly recommended are rendered less inviting by the too great profusion of wood upon the shores of the lake, and upon its islands; but this rock will always remain sufficiently prominent for a prospect; and its substance offers a study for the geologist.

A walk by the water side, to Friar Crag, at the distance of three quarters of a mile, is the favourite promenade of the inhabitants of the town, and affords much gratification to strangers. On leaving the street the prospect is over Crow Park, which at the time of the attainder of the late Earl of Derwentwater, was a wood of stately oaks; but now a fine, swelling, verdant field, on which races are annually held. Beyond this the view embraces the vale and mountains of Newlands, with High-stile presiding over Buttermere in the distance: in the retrospect, Skiddaw rises majestically over the town. On the left, lies Cockshot, a hill thickly covered with oaks, and a tall silver fir upon its crest; the trees intercept the views from its summit, but a walk round its margin may sometimes be taken on account of the shelter it affords. Coming in sight of the lake, Vicar's Isle is most happily placed, the house just appearing among a variety of forest trees with which the island seems wholly covered; but on inspection, it is found to be beautifully laid out in pleasure grounds, and kept in the neatest order.

Along the margin of the water numerous boats are moored, some belonging to private individuals, others kept for the accommodation of visiters; and at the termination of the walk on the low promontory of Friar Crag, the eye is saluted with a full prospect of the lake, bounded by the celebrated mountains of Borrowdale. To the left, near the shore, Stable Hills farm is reared upon the site where stood Lord Derwentwater's stables at the time his mansion was upon the adjacent island. The Parks, part cultivated, part wooded, occupy the rising ground, over which Wallow Crag shews his massive rocky front; those, with the lands betwixt the town and lake, form the Derwentwater estate, now belonging to Greenwich Hospital. Further on lies Barrow House, and above it the pastoral farm of Ashness; beyond the small island of Rampsholm pours the far famed cataract of Lowdore; and Castle Crag appears between more lofty mountains, like a centinel placed to guard the entrance of Borrowdale. To the right of St. Herbert's Isle, Catbells with front of brighter green, shelve into the lake; which is chiefly bordered on that side by the woods of the late Lord William Gordon. Looking through the lateral vale of Newlands, Red Pike appears beyond Buttermere; and more to the right Causey Pike and Grisedale Pike shew their aspiring peaks.

Excellent views of the vale and mountains are also obtained from the Vicarage, from Ormathwaite, from many parts of a road leading by Applethwaite

and Milbeck along a pleasant elevation at the foot of Skiddaw, and from the side of Latrigg. Those who admire higher elevations, may climb to the top of Latrigg—Wallow Crag—Swinside—Catbells—Causey Pike—Grisedale Pike, or Grasmoor; and to crown the whole, for once, to the summit of Skiddaw.

ROUND DERWENT LAKE.

Miles.		Miles.
2	Barrow House, and Cascade . .	2
1	Lowdore, ditto . . .	3
1	Grange	4
1	Bowder Stone	5
1	Return and cross the River at Grange	6
4½	Portinscale	10½
1½	Keswick	12

A delightful excursion may be made round Derwent lake either on horseback or in a carriage. The road lies at the foot of the wooded park of Derwentwater, with the lake on the right, and the lofty rocks of Wallow Crag and Falcon Crag on the left; and in many places it commands excellent views. One, much admired, is on emerging from the wood to the more open common, where the road lies just above the margin of the lake. Two miles from Keswick, a road on the left leads to Watendleth, and we pass Barrow House, the beautiful summer residence of Joseph Pocklington, Esq. A fine cascade behind the house may be seen by strangers on application at the lodge. Another mile brings us to Lowdore, —famous for its waterfall. Here is a neat public-house, where a cannon is kept for the echo, which is

very fine, especially in a still evening. Rather more than four miles from Keswick, we have the hamlet called the Grange, upon the opposite bank of the river.

About Lowdore and Grange, the draftsman will find employment for his pencil; and the geologist will observe the transition, from the blackish clay slate upon which he treads, to the more variously aggregated and paler-coloured rocks on his left hand and before him.

The bridge at Grange might be crossed, as the shortest route; but it may be recommended to proceed forwards another mile to the Bowder Stone—a fragment of rock about twenty yards in length, and half as much in height,—remarkable for being poised upon one of its angles, with a little more support towards one end. But it is not merely for the sight of this stone, that travellers are advised to advance so far. It is chiefly for the prospect here obtained into the interior of Borrowdale, which expands itself as far as Rosthwaite; beyond which the vale is divided into two parts; the one branching off towards Grasmere and Langdale, the other towards Wasdale and Buttermere.

Returning to Grange, the road then crosses the river, and is carried along a pleasant elevation above the woods of Lady William Gordon, the house, formerly called Water End, now Derwentwater Bay, standing sweetly sheltered on the margin of the lake. From this elevation, the lake, with its islands, bays, and promontories, is seen to great advantage.

The road then crossing the pleasant vale of Newlands, joins the Cockermouth road at Portinscale, and reaches Keswick in a circuit of 12 miles.

KESWICK TO BORROWDALE BY WATENDLETH.

On a second excursion to Borrowdale, on foot or on horseback, the road by Ashness to Watendleth may be taken. From a bridge above Barrow Cascade, there is a splendid view of the valley, with the lakes of Derwent and Bassenthwaite; and a little further on, by deviating to the edge of a precipice on the right, the waterfall of Lowdore comes in view, and the lake appears at an awful depth beneath your feet. After losing sight of the lakes, the road lies along a contracted valley, by the side of the stream which supplies the cataract of Lowdore. At the distance of five miles from Keswick, it reaches Watendleth, which consists of a few antiquated cottages and farm buildings, in colour dark as the neighbouring rocks; just beyond which the tarn is placed, amidst a small area of green meadows, surrounded by wild and uncultivated hills. A track leads from thence over the hill, from which there is a fine view of the head of Borrowdale; it then descends steeply to Rosthwaite, whence the return may be made by Bowder Stone to Keswick; a circuit of 14 miles. To contract this excursion, the stream from Watendleth may be crossed about a mile beyond Ashness; then turning towards Lowdore, there is a peculiar view of a part of Derwentwater through the opening above the waterfall.

KESWICK TO BUTTERMERE.

Miles.		Miles.
5	Bowder Stone . . .	5
1	Rosthwaite . . .	6
2	Seatoller	8
2	Honister Crag . . .	10
2	Gatesgarth	12
2	Buttermere . . .	14
9	Through Newlands to Keswick	23

An excursion through Borrowdale to Buttermere may be made on horseback, taking the road as before described as far as Bowder Stone: a mile beyond which, at Rosthwaite, is a small public house. A little further, a road on the left leads by Stonethwaite over the steep mountain pass called the Stake, to Langdale. Tourists have sometimes been advised, by this track to connect Borrowdale with Langdale, in one excursion; but the better way is to explore Langdale from Ambleside, and Borrowdale from Keswick.

At Seatoller, about eight miles from Keswick, a road on the left leads to the black-lead mine, and to Waswater; and here the Buttermere road, turning to the right, ascends (by the side of a stream broken into pretty waterfalls,) up a steep hill; from which there are some fine retrospective views of the upper parts of Borrowdale; and Helvellyn soon begins to shew his head over the mountains of Watendleth. In passing the hause, (which rises 880 feet above the level of Derwent Lake,) Honister Crag in majestic grandeur is presented to the view;

between which and Yew Crag, the road now sharply descends. Both these rocks are famed for producing roofing slate of the best quality; and the edges of the road are beautifully tufted with *Alchemilla alpina*. Gatesgarth dale, through which the road now goes, (twice crossing and recrossing the stream,) is a narrow valley strewed with large blocks of stone, fallen from the rocks above; and solemnly shaded by the lofty Honister, which towers to the height of 1700 feet above the vale. We now re-enter upon the same soft clay-slate rock, which we parted from at Grange, and the change is soon apparent in the smoothness of the road.

Opposite to the farm of Gatesgarth, which is two miles from the inn at Buttermere, a shepherd's path leads over the mountain, by a pass called Scarf-gap, and after crossing the narrow dale of Ennerdale, proceeds to Wasdale head over a second and higher mountain called the Sail. The crags on the left of Scarf-gap are, from their form, called Haystacks; and to the right, three adjoining summits are called High-crag, High-stile, and Red-pike. The two first are composed of what some would call a porphyritic greenstone rock, the third of a reddish sienite. Between the second and third is a small tarn, described by Mr. West, as "a large crater, that from the parched colour of the conical mountains in whose bosom it is formed, appears to have been the focus of a volcano at some distant period of time when the cones were produced by the ex-

plosion"! The road, after passing Gatesgarth, touches upon the margin of Buttermere Lake, where a vein of lead-ore is opened by the way-side, and a little further upon the left is the neat sheltered cottage of Haseness. From Keswick to the inn at Buttermere by this route is 14 miles.

At Buttermere, a boat is usually taken upon Crummock Lake, as well for the views of the scenery as being the most convenient way of seeing Scale Force. It is an agreeable walk of half a mile to the water, and after a pleasant little voyage of nearly a mile, a walk of three quarters of a mile reaches to the fall. Travellers may indeed walk from the inn to Scale Force; but the path being wet and unpleasant, a boat is greatly to be preferred. If the weather be unfavourable for using the boat, a good view of Crummock Lake may be had, by riding a mile and a half on the eastern side, to the rocky point called the hause. After the necessary refreshment at Buttermere, it is an agreeable ride of 9 miles through the peaceful vale of Newlands, and by Portinscale to Keswick.

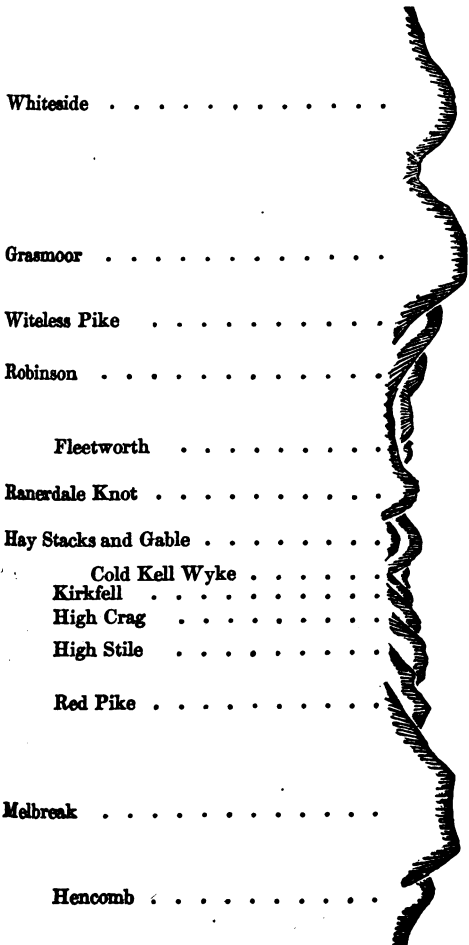
On leaving Buttermere we encounter a steep hill, but the road, as well as the mountain side, is much smoother than the ascent from Borrowdale. In about a mile and a half we reach the top of the hause, and suddenly glance upon the further edge of Derwentwater, with the wooded rock of Castlehead, and Saddleback. The valley is narrow at first, but further on it is beautifully diversified.

DRIVE TO SCALE HILL, AND BUTTERMERE.

Miles.		Miles.
2½	Braithwaite	2½
2½	Summit of Whinlatter . .	5
3	Lorton	8
4	Scale Hill	12
4	Buttermere	16
9	Through Newlands to Keswick	25

The best way for a carriage to Scale Hill or Buttermere, is by the old road towards Cockermouth over the steep mountain Whinlatter, which in the length of two miles rises to the height of 800 feet above the valley. After passing the sixth milestone, a road turns to the left, crossing a brook and winding round the end of a hill, where a fine view is presented over the cultivated vale of Lorton, and as far as the distant mountains of Kirkcudbright.

At Scale Hill, a boat may be taken on Crummock Lake, from whence the mountains surrounding that and Buttermere, may be seen to great advantage. The party may be landed for a view of Scale Force, and again for a walk to the village of Buttermere, and a view of the lake from a hill near it — returning the same way to Keswick. But should there be any objection to taking a boat, the carriage may be driven along the side of Crummock Lake, to the inn at Buttermere, and the return made through the vale of Newlands. This road over the hause is very steep, rising to the height of 760 feet in less than a mile and a half; and for a short distance on the other side descending very rapidly: but, with steady horses, it is quite practicable.



The Mountains of Cranmock and Buttermere:
as seen on the Road between Scale-Hill and Lowenwater.

KESWICK TO WASWATER.

Miles.		Miles.
8	To Seatoller . . .	8
1	Seathwaite . . .	9
3	Sty Head . . .	12
2	Wasdale Head . . .	14
6	Nether Wasdale, Strands	20
4	Gosforth	24
3	Calder Bridge . . .	27

Those tourists who visit Waswater from Keswick, generally make an excursion on horseback for two days: by which plan, Borrowdale and Waswater are seen on the first day; and Ennerdale, Lowes Water, Crummock, and Buttermere on the second. The road up Borrowdale as far as Seatoller, has already been described; from whence the Wasdale road is on the left to Seathwaite;* opposite to which on the right, lies the famous Black-lead Mine. Beyond Seathwaite, the road becomes a mere track, fit only for horses accustomed to the country. A waterfall presents itself to view on the right; and after crossing a rude bridge, the ascent of the mountain is commenced by a winding path. On passing a piece of water called Sty-head Tarn, the bold and lofty crag of Great-end appears on the left; and beyond it, in towering majesty, the highest of the Pikes, rendered more conspicuous by an object lately

* There is a great discordancy in the spelling and pronunciation of local names: this is provincially pronounced *Seewhaite*; while a place near the source of the river Duddon, with the same spelling, is called *Seäthet*.

erected in the prosecution of the trigonometrical survey. Great Gable is close upon the right; but the grandeur of its form is better appreciated at a distance. The highest part of the road at Sty-head is 1250 feet above the first house in the vale, and here a magnificent view presents itself: the small valley of Wasdale head appearing as if sunk below the general level, and the sea at a distance seeming to rise in the horizon. The lake of Waswater is not yet in sight, being hid by a projecting mountain on the left, called Lingmel. A steep zigzag track now descends on the side of Gable, down which the horses may be led; as it is neither quite safe nor agreeable to ride. Crags of the most grotesque forms overlook the road, and the side of the hill is profusely strewed with stones, in some of which garnets may be found imbedded: and in crossing the stream which issues between Gable and Kirkfell, a rock of reddish granite may be seen, where it is denudated by the waters on both sides of the road.

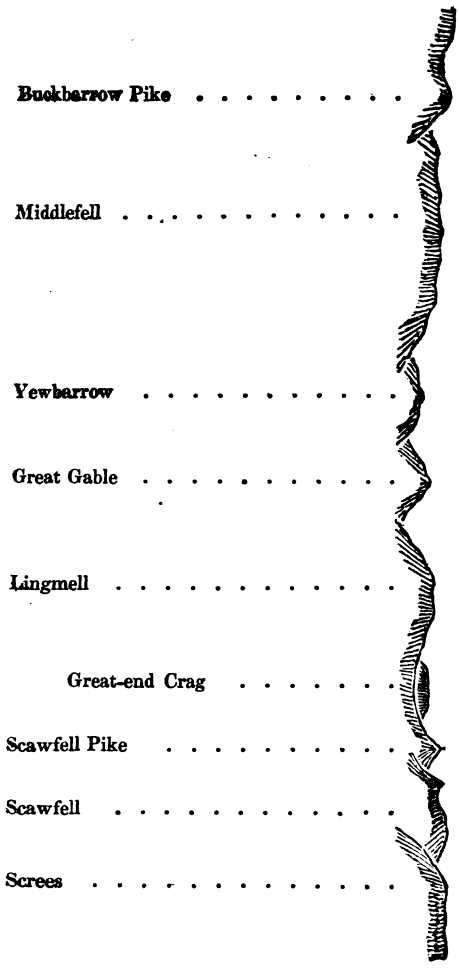
Wasdale head comprises a level area of 400 acres of land, divided by stone walls into small irregular fields, which have been cleared with great industry and labour; as appears from the enormous heaps of stones, piled up from the surplus after completing the inclosures. Here six or seven families have their Chapel of a size proportionate to the number of inhabitants, and in a style according with the situation; and what Mr. Gray formerly said of Grasmere, may with equal propriety be applied to

this vale: "Not a single red tile, no gentleman's flaring house, or garden walls, break in upon the repose of this little unsuspected paradise; but all is peace, rusticity, and happy poverty, in its neatest, most becoming attire."

After passing the inhabited part of the valley, the road approaches the lake, which shews the purity of its water, by the clean blue gravel washed upon its shores. As the road proceeds along the margin of the lake, the screes on the opposite side form a striking object, and the mountains left behind should not be forgotten; retrospective views taken at short intervals, will shew the majestic and varied forms they assume on being viewed from different points.

It has been suggested, that Waswater would be more advantageously seen, by reversing the excursion, so that the principal mountain views would be always in prospect on advancing up the vale. As far as relates to Waswater alone, this is certainly true; but in what concerns Borrowdale, Lowes Water, and Crummock, they are seen to more advantage by this route: besides, tourists generally congratulate themselves, on having passed over the most difficult part of the road on the first day.

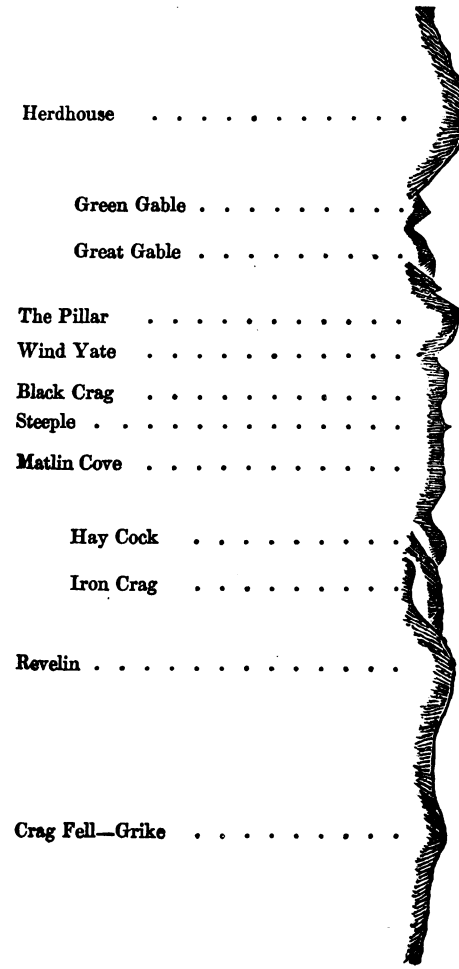
Towards the lower parts of the lake, the shores are more rocky; and the composition of the rock is changed, from a kind of greenstone, to a reddish sienite. At Crook-head, opposite the foot of the lake, Mr. Rawson of Halifax, has built a neat summer residence.



The Mountains round Wasswater:
as seen from the Strands in Nether Wasdale.

A road turns off on the left to Ravenglass; and at the Strands near the Church, there are two small public-houses, at one of which it may be necessary to take some refreshment, after a morning's ride of 20 miles, and none of the best road.

About four miles further, is the village of Gosforth, where a tall column carved with unintelligible characters stands in the church-yard on the right; beyond which the roads from Wasdale, Eskdale and Ravenglass become united. We have now left the mountainous district, and entered upon one more cultivated, where the principal views are to the sea, towards which the road seems fast approaching; and the mountain rocks are succeeded by a red sandstone. From hence it is nearly three miles of excellent road to Calder Bridge, at which place are two neat small inns, where lodgings are generally taken for the night. Three quarters of a mile above the bridge, lie the remains of Calder Abbey, mentioned at p. 82. to which it is a pleasant walk. The path leads over a rich cultivated plot of ground by the side of the river Calder—its banks finely covered with wood. The approach to the Abbey is through a close avenue, terminated by an archway, appertaining to a part of the building now converted to farming purposes, on emerging from which the venerable ruin appears to view. The mansion of Capt. Irwin adjoins the Abbey; and Ponsonby Hall, the residence of E. Stanley, Esq. is at a short distance from the bridge.



The Mountains of Emmerdale:
as seen from Kirkland.

RETURN FROM CALDER BRIDGE TO KESWICK.

Miles.		Miles.
7	Ennerdale Bridge . .	7
3	Lamplugh Cross . .	10
4	Lowes Water . . .	14
2	Scale Hill . . .	16
4	Buttermere . . .	20
9	Keswick . . .	29

From Calder Bridge there is an excellent road of ten miles to Whitehaven; but that usually taken by tourists inclines more towards the mountains, which however on this side present no very interesting features. For some miles the principal prospect is over a cultivated country to the sea, with the Isle of Man, and the Scotch mountains in the distance.

About three miles from Calder Bridge, the two rival points of Scawfell appear over the neighbouring mountains, separated by the yawning chasm Mickle Door; and two miles further, the town of Egremont is seen through a narrow vale on the left. Seven miles from Calder Bridge a part of Ennerdale Lake appears in sight; and after passing the hamlet of Ennerdale Bridge, in which stands the church and two small public houses, the lake is observed from the rising ground in another point of view, accompanied by the grand mountain scenery of Ennerdale, amid which the Pillar rises conspicuous. The road here for a short distance is formed upon the limestone rock, which skirts the mountains. Turning to the right by the public house at Lam-

plugh Cross, in a mile further you pass between the hall and the church; the hall is now rebuilt in the shape of a modern farm house, the only remains of its ancient grandeur being a gateway, with the inscription, "John Lamplugh, 1595." Two miles further, turning round the end of a hill to the right, the small lake of Lowes Water comes in view, accompanied by a rich assemblage of mountains. Soon after passing this lake, that of Crummock presents itself in one of its best combinations; and crossing the river Cocker, you shortly arrive at Scale Hill, distant from Calder Bridge rather more than 16 miles.

If Buttermere has not been previously visited, a boat may be taken upon Crummock Lake, which with a walk from the edge of the water to Scale Force, will make a pleasing variety. In the meantime the horses may meet the party at Buttermere, and the return to Keswick be made through Newlands—making this day's journey nearly 30 miles. Those who have seen Buttermere, may save above a mile, by taking the carriage road from Scale-hill; along which there is a pleasant view of the vale of Lorton; and also a fine view of the vale of Keswick in descending the hill from Whinlatter.—Those who think this circuit too much for two days, may extend it to three, by staying one night at Nether Wasdale, and another at Scale-hill.

To visit Waswater in a carriage from Keswick, it will be necessary to go by Scale-hill and Enner-

dale Bridge or Egremont—stopping two nights at Calder Bridge, and returning the same way, or by Whitehaven.

DRIVE ROUND BASSENTHWAITE LAKE.

Miles.		Miles.
5	Bassenthwaite Sandbed .	5
3	Castle Inn . . .	8
1	Ouse Bridge . . .	9
1	Peel Wyke . . .	10
8	Keswick . . .	18

This being thought less interesting than most of the other lakes, is often reserved to the last; but some have remarked that it ought to be visited first, or before the imagination was too much elated by the more prominent features of the other lakes. However tourists who prefer an easy journey, will find objects to please, in a perambulation of 18 miles round this lake. On the eastern side the traveller would sometimes wish for a nearer approach to the lake; but few would think themselves repaid for the trouble of visiting West's stations at Broadness and Scarness; there is a pleasant halting place at Castle Inn, eight miles from Keswick; and from the foot of the lake the prospect is extensive. There is also a public house at Peel Wyke on the western side, where the road being now improved and conducted nearly on a level with the water, is rendered very commodious for travelling, and at some turnings opens to pleasing views.

Those who are not inclined to make the whole circuit of the lake, may be gratified in a ride of five miles by the foot of Skiddaw, to a station recommended by Mr. Crosthwaite, a little above the road on the common at the end of a wood of larches. Here the principal part of the lake may be seen, with the three bold promontories of Bowness, Broadness, and Scarness, and in returning (if on horseback) take the upper road by Milbeck, Applethwaite, and Ormathwaite, where some of the best views of Derwent and its environs will be found. From thence either take the nearest road to Keswick; or proceed by Mr. Calvert's occupation way along the side of Latrigg, and enter the town by the Penrith road.

KESWICK TO ULSWATER.

Miles.		Miles.
11	Beckses	11
6	Gowbarrow Park . .	17
5	Patterdale . . .	22
	Return the same way; or	
10	Pooley Bridge . .	32
6	Penrith	38

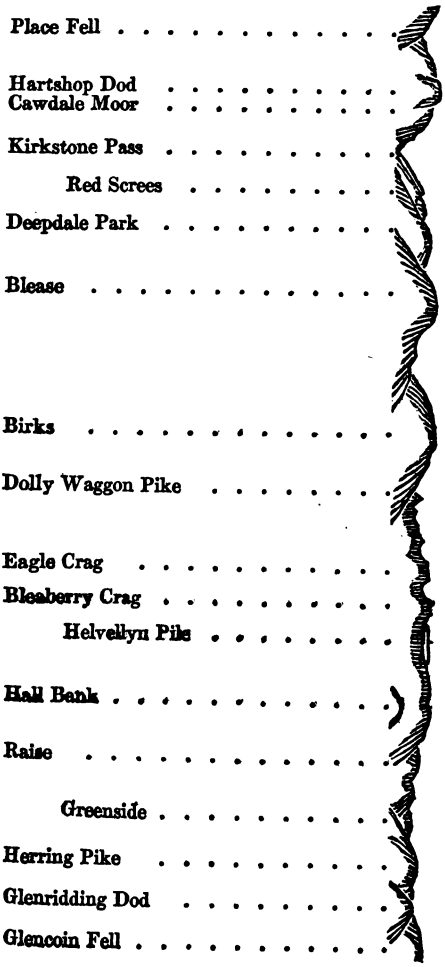
Ulswater may be visited from Keswick on horseback or on foot; leaving the Penrith road a little beyond the second mile-stone, crossing the vale of Wanthwaite, and passing over a bleak mountain side to Matterdale. Carriages are obliged to continue on the turnpike for more than ten miles. Neither of these roads offers any thing interesting, except the views of St. John's vale, and the moun-

tain Saddleback; till they unite at Dockray: but after entering Gowbarrow Park, the prospect of Ulswater is presented in one of its richest points of view. Airey Force and Lyulph's Tower lie a little to the left, and it is then five miles of delightful road to the inn at Patterdale. Some who travel in carriages, go from Keswick to Pooley Bridge, and thence to Penrith or Ambleside; but the want of post-horses at Pooley Bridge is sometimes felt as an inconvenience.

Parties landing at Whitehaven with the intention of seeing *all* the lakes, may commence with Waswater and Ennerdale; and afterwards Lowes Water, Crummock, and Buttermere; or the three last may be visited from Cockermouth.

Cockermouth is a good market-town with nearly 4000 inhabitants. It possesses an ancient castle, has a handsome bridge over the river Cocker, which runs through the town to join the Derwent; and the inns are furnished with every requisite accommodation for travellers.

Lowes Water—however paradoxical it may appear—has its outlet towards the mountains; consequently, in opposition to the general rule, it is best seen by approaching it at the upper end; and the most eligible way from Cockermouth will be by the hamlets of Pardshaw, Mockerkin, and Fangs; by which the lake is taken in combination with lofty mountains; and the road from thence to Scale Hill affords excellent views of Crummock Lake, with the mountains surrounding Buttermere.



The Mountains of Patterdale:
as seen from the Slate Quarry on Place Fell.

From Cockermouth to Scale Hill by this route is about 11 miles. After visiting Crummock and Buttermere, the party may either proceed through Newlands to Keswick, or return through the pleasant vale of Lorton to Cockermouth; and next morning by the side of Bassenthwaite Lake to Keswick. From whence, as may be found most expedient, the tour may be continued to the more southern lakes.

Or this route might be reversed, by parties commencing their tour at Whitehaven with an intention of seeing all the lakes, and concluding at the same place; by taking first Ennerdale, and Wasdale, and going from thence by Broughton to Coniston and the other lakes, reserving Buttermere, Crummock, and Lowes Water to the last; but those who require a conveyance will find a difficulty in procuring it on some parts of this route.

. . . . . .

An attempt to enumerate all the permutations, that might be made in these excursions; or all the pleasing points, from which the varied scenery of this interesting region might be viewed; would be an endless and in fact a useless task. Persons who delight in exploring a country, need only be made acquainted with the outlines: they will feel more pleasure in finding out the rest.

BOTANICAL NOTICES.

It is not here intended to attempt a systematic arrangement of the botany of the district, nor even an enumeration of all the rare plants that may be met with, in a region possessing such variety of soil and situation—but merely a brief notice of some of those which not unfrequently present themselves to the observation of the tourist, without going far out of his way to seek them.

In shallow parts of Lakes, where the bottom is of peat, the Bullrush* and Common Reed rear their heads on high above the water—the leaves and flowers of the White and the Yellow Water Lily float upon the surface; and the bottom is rendered verdant, chiefly by three kinds of plants, namely, the *Littorella lacustris*, which puts forth its long and slender stamina most freely, when in a dry summer it is left uncovered by the water; the *Lobelia Dortmanna* spreads a tuft of radical leaves upon the bottom, and in July, shoots up its spike of delicate pale flowers above the water; and the *Isoetes*

* The Bullrush is employed in making bottoms of chairs; but Dr. Withering is mistaken when he says that it is used at "two years old or still older," the straw invariably dies annually, although the roots are perennial.

lacustris being one of the few plants which perfect their fructification under water, has its leaves pulled up by water fowl, in the winter season, to extract the seeds which lie concealed in their bases.

The *Chara vulgaris* has its habitat in the bottom of Derwent Lake; and when drawn into a boat it gives out its disagreeable odour.

The *Myriophyllum spicatum* is an inhabitant of slow streams. The *Sparganium natans* is found in Derwent Lake near Lowdore; *Sparganium ramosum* is plentiful in ditches between Derwent and Bassenthwaite Lakes; and the *Typha latifolia* in Naddale Beck near Keswick.

The spongy shores of lakes and pools are margined with Horse tail, *Equisetum limosum*. *Hippuris vulgaris* grows in ditches near Cartmel well.

The various leaved Water Crowfoot, *Ranunculus aquatilis*, grows in the river Derwent, at the head of Bassenthwaite Lake; and in the Kent at Kendal. Mouse ear scorpion grass, *Myosotis palustris*, and Water Plantain, *Alisma plantago*, in shallow ditches. *Alisma natans* has been said to grow in Derwent Lake; but its existence there may be doubted.

Hemlock Dropwort, *Oenanthe crocata*, grows in the river Brathay and many other places; the Yellow Water flag, *Iris pseudacorus*, in watery places; *Bidens tripartita* in a ditch near Lowdore; and *Eupatorium cannabinum* near Low Wood Inn and in Nether Wasdale.

Water Cress, *Sisymbrium Nasturtium*, is common in springs and ditches in calcareous soils; but has been rare among the lakes till increased by planting.

Buckbean, *Menyanthes trifoliata*, and Purple Marsh Cinquefoil, *Comarum palustre*, in swampy ground—in the isthmus near Derwent Lake.

Juncus filiformis and *Juncus uliginosus* by the side of Derwent Lake: the latter on shore is a low creeping plant; but when rooted under water it shoots up leaves like hairs to the length of two feet.

The meadows subject to lake floods are covered with various species of *Carex*, and the many headed Cotton grass, *Eriophorum angustifolium*: the single headed Cotton grass or Moss crops, *Eriophorum vaginatum*, grows on boggy parts of mountains, and is the early spring food of sheep.

Schoenus Mariscus in Cunswick tarn, a small piece of water near Kendal—which has proved *too deep* for those who lately attempted to drain it.

The Lily of the valley, *Convallaria majalis*, on an island in Windermere Lake. Solomon's seal, *C. multiflora*, in Castlehead Wood near Keswick.

Different species of the Orchis tribe are found in the meadows—the *Orchis conopsea* on Hartley hill, Buttermere—the Butterfly, *O. bifolia* two miles from Keswick on the Penrith road; and Mr. Nelson has transplanted the Fly Orchis, *Ophrys muscifera*, into his garden at Milnthorp.

Lousewort, *Pedicularis sylvatica*, in moist pastures; *P. palustris* in wet meadows.

Golden Saxifrage, *Chrysosplenium oppositifolium*, is common in springs. Various species of *Saxifraga* are found on Helvellyn and in Longsleddale. *S. aizoides* in watery places on Barrow Side near Keswick. *S. granulata* near the same place, and at Mayburgh. *S. stellaris* near the summit of Skiddaw.

Scurvy Grass, *Cochlearia officinalis*, is abundant in springs on the Patterdale mountains; but is rarely found in other parts of the lake district. The Grass of Parnassus, *Parnassia palustris*, grows in moist elevated pastures. Bastard Asphodel, *Anthericum ossifragum*, in like situations; as also the Bonny Bird-eye, *Primula farinosa*, which is found in Loughrigg—between Lowther and Bampton, and near Cunswick tarn. Sun dew, *Drosera rotundifolia*, in boggy ground on low mountains. *D. longifolia* in Borrowdale, but more rare. Butterwort, *Pinguicula vulgaris* near the edges of bogs. The *Pyrola secunda* has been found by Mr. Hutton, on Castlerigg Fell near Keswick; the *Pyrola media*, and *Impatiens Noli-me-tangere*, by Mr. Just, at Stock-gill Force near Ambleside.

The Cranberry, *Vaccinium Oxycoccus*, in poor boggy ground, near Rydal Water—in Thornthwaite—and most plentiful in Mungrisdale. The Bleaberry, *Vaccinium Myrtillus*, is common in rocky woods, and on mountain sides—in woods near Derwent Lake, and on the Dod at the side of Skid-

daw. Red Cranberry, Cow-berry or red Whortleberry, *Vaccinium Vitis Idæa*, inhabits loftier situations and retains its fruit longer: it reaches the summit of Skiddaw, but is more fruitful on the mountains between Derwent and Crummock Lake.

Crow-berry, Ling-berry, *Empetrum nigrum*, grows on Skiddaw about one third from its summit, in a moist soil—its berries are said to be the food of grouse or moor-game.

Large tracts of peaty moors are covered with Ling, *Erica*, or according to Sir J. Smith, *Calluna vulgaris*, which affords shelter for the grouse; in August its blossoms give the mountains a rich purple hue, and it is the source from which bees obtain a great portion of their honey: a variety with white flowers is rare. *Erica cinerea* grows in places more rocky, some other species are found in Ullock Moss and Gosforth.

Many species of lichens may be found upon the rocks, and on the trees; mosses upon the mountains and heaths; and ferns upon the commons, and in the woods. The many-named Creeper, Club-moss, Stags-horn-moss, Fox-feet, Wolfs-claw, *Lycopodium clavatum*, grows upon dry mountains not very high; the alpine, *L. alpinum*, in more lofty; and the fir leaved, *L. Selago*, in lofty, and more moist places.

The sides of mountains with a dry soil are clothed to a moderate elevation with Brackens, *Pteris aquilina*, which by their changing in September and October from a bright to an olive green, and after-

wards to a russet brown, contribute to that autumnal colouring which is so much admired. The stone fern, *Pteris crispa*, inhabits higher and more rocky situations. *Asplenium Adiantum nigrum*, is rooted in Castlehead rock; and a solitary plant has remained many years in the wall of Crosthwaite church. Harts tongue, *Asplenium scolopendrium*, in rents in limestone rocks in Westmorland—and in a garden wall at Ormathwaite. *Scolopendrium ceterach* on Troutbeck Bridge. Osmund royal, *Osmunda regalis*, in Ullock moss near Keswick.

The large early flowering *Ulex europæus* is the common Whin, in the vicinity of Keswick, where it is far too abundant—a smaller kind *Ulex nanus*, blossoming in autumn, is more prevalent between Pooley Bridge and Askham, in Buttermere and Wasdale, and at Bolton wood near Gosforth, where, intermixed with a large blossomed heath, it gives an appearance of richness to land otherwise barren.

The common Juniper, *Juniperus communis*, erroneously called Savin, grows on the mountain between Wythburn and Borrowdale, on Place Fell, Loughrigg Fell, and most plentiful in the pastures between Windermere and Coniston.

The least Willow, *Salix herbacea*, on the summit of Skiddaw, on Saddleback, Helvellyn, and the mountains between Derwent and Crummock Lake.

Cinquefoil Ladies mantle, *Alchemilla alpina*, on the mountain between Borrowdale and Buttermere, and in Wanthwaite Crags. Spignel, *Athamanta*

Meum, on Bristow Hills near Keswick. One Berry, *Paris quadrifolia*, near Stock-gill Force, on the road side near Bannerigg, and in Lowther woods. Soapwort, *Saponaria officinalis*, under the bridge at Kirkby Lonsdale. Tutsan, Park-leaves, *Hypericum Androsæmum*, and Wake-robin, *Arum maculatum*, are common under hedges near Ambleside, but not found in the neighbourhood of Keswick.

The Wild Vine, Red-berried Briony, *Tamus communis*, ornaments the hedges about Cartmel and Windermere lake; but is rarely found further north.

Pelitory of the wall, *Parietaria officinalis*, near Cartmel well, and on the walls of Cartmel church.

Yellow Poppy, *Papaver cambricum*, in Longsleddale. Yellow-horned Poppy, sea Celandine, *Chelidonium glaucum*, on the coast near Flookburgh. Deadly nightshade, *Atropa Belladonna*, near the same place, and about Furness Abbey.

Henbane, *Hyoscyamus niger*, near Flookburgh. The great Burnet, *Sanguisorba officinalis*, common in fields. Upland Burnet, *Poterium Sanguisorba*, on Kirkhead near Kents Bank, and on Kendal Fell. The Cowslip is common in calcareous soils, but rarely found among the lakes. The yellow Primrose ornaments the edges of woods and thickets.

Thrift, *Statice Armeria*, on Salt marshes, and near the top of Scawfell.

Lands exhausted by excessive cultivation are subject to be overrun by White Tansey, Coltsfoot, and Couch Grass, *Triticum repens*.

The Yellow Corn Marigold, *Chrysanthemum segetum*, was formerly so troublesome in some corn fields, that the land infested with it was considered inferior in value; but by the improved system of husbandry it is nearly eradicated. The Great Daisy, *Chrysanthemum Leucanthemum*, is still common near Windermere and Kirkby Lonsdale.

The Spindle-tree, *Euonymus europeus*, on Barrow Side near Lowdore, and near Clappersgate.

The berry-bearing Alder, *Rhamnus frangula*, in Graithwaite woods—near Rydal Water—and Ullock moss near Keswick. Privet, *Ligustrum vulgare*, and White-beam, *Cratægus Aria*, grow on the rocks at Humphry Head.

The Oak, Ash, and Birch are the principal indigenous forest trees; much of the underwood is of Hasel, which yields large quantities of nuts.

Stunted Yew trees creep up the perpendicular escarpments of the limestone rocks near Humphry Head, Witherslack, and Underbarrow. In Borrowdale it makes a more thriving tree; the bole of one near the Black-lead mine is twenty feet in circumference, and its branches cover an area of twenty yards in diameter: another in Lorton vale is still more umbrageous.

THE

GEOLOGY

OF THE LAKE DISTRICT.

At the time this essay was first published, the structure of the mountainous district of Cumberland, Westmorland, and Lancashire, was but little understood; scientific travellers had contented themselves with procuring specimens of the different rocks, without taking time to become acquainted with their relative position. Since then, the subject has received more attention from persons conversant with geological inquiries; and the following observations have been copied into recent topographical works, without reserve or acknowledgement: but little additional information upon the subject has yet been given to the public. To such as are satisfied with a general outline, these remarks may still be acceptable; and to those who feel disposed to explore for themselves, the facts herein stated may be useful, in directing them more readily to the objects of their research.

It is a question not fully determined among geologists, to what rocks the term primitive, and to which that of transition or secondary, ought to be applied; and it has also been disputed whether the

rocks of this district should be regarded as stratified or unstratified. It is true they present little of that regularity of appearance which is observable in the rocks of many other districts; yet it will be admitted on due examination that they are in some degree stratified.

Granite is understood to occupy the lowest place in the series of rocks hitherto exposed to human observation, and it appears to be the foundation upon which all the others have been deposited; in some countries it also constitutes the peaks of the highest mountains, protruding itself through all the upper or newer formations. That however is not the case in the district under consideration. It is here only exposed to view in the excavated parts of some of the mountains; or where it rises so far as to form hills or ridges, they are of inferior elevation.

That rock of granite which seems best entitled to the distinction of primitive, may be seen denudated in the bed of the river Caldew, near the north-east side of Skiddaw; and in a branch of the river Greta, between Skiddaw and Saddleback, about 1400 feet above the level of the sea. This granite is of a grey kind, composed of quartz, white felspar, and black mica. It is traversed in various directions by veins of quartz; in some of which, molybdena, apatite, tungsten, wolfram, and other minerals have been found.

A variety of granite with reddish felspar, and which from a deficiency of mica, has sometimes been

called sienite, forms the two inferior mountain ridges, called Irton fell and Muncaster fell; it extends to some distance on both sides of the river Esk, and may be seen shooting up in places, almost as far as Bootle, and also at Wasdale head. At Netherwasdale it becomes a finer grained sienite, in which form it extends through the mountains quite across Ennerdale, as far as Scale Force, and to the side of Buttermere Lake. It contains veins of red hematite and micaceous iron ore. Another variety of granite with reddish felspar in large crystals, is found on Shap Fells, and may be observed *in situ* on the road side near Wasdale Bridge, about four miles south of Shap.

Carrock Fell consists of a rock generally referred to the class of sienite, varying its appearance in different parts of the mountain. It contains (besides the usual ingredients of quartz and felspar) hypersthene and magnetic or titaniferous iron ore in various proportions. Near this a considerable quantity of lead ore and some copper has been procured: the lead is smelted and refined hard by, and yields a good portion of silver.

A reddish porphyritic rock occurs on both sides of St. John's Vale, from two to three miles east of Keswick; and a vein or dyke apparently related to the same, but far more beautiful, (being composed of crystals of quartz and bright red felspar, imbedded in a brownish red compact felspar,) is found on Armboth Fell, six miles S.S.E. of Keswick.

It is not well known what place some of these granites, sienites, and porphyries hold in the series of rocks: from the scarcity of places at which their junction with the slate rock can be seen, it is not easy to ascertain whether they have been deposited upon that substance or protruded through it: but the latter seems the more probable supposition.

The greatest bulk of these mountain rocks have been commonly included under the general appellation of slate; although many of them shew no disposition to the slaty cleavage. They may be classed in three principal divisions.

Of these divisions, the FIRST or lowest in the series, forms Skiddaw, Saddleback, Grasmoor, and Grisedale Pike, with the mountains of Thornthwaite and Newlands; it extends across Crummock Lake, and by the foot of Ennerdale as far as Dent Hill; and after being lost for several miles, it is elevated again at Black Combe.

If we regard the granite of Skiddaw as a nucleus upon which these rocks are deposited in mantle-shaped strata, that which reposes immediately upon it is commonly called gneiss; but is rather more slaty and less granular than the gneiss of some other countries. More distant from the granite, the quantity of mica in slate decreases, and it is marked with darker coloured spots; it is then provincially called whintin, and is quarried for flooring flags and other useful purposes. This again is succeeded by a

slate of softer kind, in which crystals of chiastolite are plentifully imbedded; these crystals gradually disappear, and the rock becomes a more homogeneous clay-slate, which, contrary to general observation, has its outgoing at a higher elevation than either the granite or the gneiss.

These rocks are of a blackish colour, and divide by natural partings into slates of various thickness, which are sometimes curiously bent and waved: when these partings are very numerous, though indistinct at first, they open by exposure to the weather, and in time it becomes shivered into thin flakes, which lessens its value as a roofing slate. In some places the thin laminæ alternate with others of a few inches in thickness; which are harder, and of a lighter colour, containing more siliceous matter; they have been by some taken for greywackè slate, though apparently belonging to a different formation.

Rocks of this description have generally been represented as stratified, and the strata parallel to the slaty cleavage; but this proposition should not be received without some hesitation. If it be supposed that these varieties of rock (between which there is no natural parting) have been deposited upon the granite in the order in which they have been mentioned; then, the strata may be said to be mantle-shaped round the granitic nucleus; only interrupted in its continuity by the anomalous rocks of Carrock: but if it be assumed that the stratification follows the slaty cleavage, then it may be said

to have its bearing tending towards the north-east and south-west; dipping generally at a high angle to the south-east, and presenting the edges of its laminæ to the surface of the granite, from the proximity of which the nature and appearance of the rock must be presumed to be altered.

The rocks belonging to this division do not effervesce with acids; they contain no calcareous spar, except a little in some of the veins. They are intersected in places by dykes of a harder kind of rock, apparently of the nature of trap or greenstone. Veins of lead ore occur in several places; and have been worked between Skiddaw and Saddleback, in Thornthwaite, Newlands, and Buttermere; but one in the parish of Loweswater, and one below the level of Derwent Lake, are the most productive at present in this district. A copper mine had formerly been worked to a great depth in a hill called Gold Scalp, in Newlands, and is said to have produced a very rich ore, which appears to have been the yellow sulphuret or copper pyrites. A little cobalt ore has been got in Newlands, and small quantities of manganese in various places. A salt spring near the Grange in Borrowdale, has anciently been of some repute for its medicinal qualities; another has been more recently discovered in working a lead mine near Derwent lake. They both issue from veins in this rock, but their source remains unknown.

The SECOND division comprehends the mountains of Eskdale, Wasdale, Ennerdale, Borrowdale, Langdale, Grasmere, Patterdale, Martindale, Mardale, and some adjacent places; including the two highest mountains of the district, Scawfell and Helvellyn, as well as the Old Man at Coniston. All our fine towering crags belong to it; and most of the cascades among the lakes fall over it. There are indeed some lofty precipices in the first division; but owing to the shivering and crumbling nature of the rock, they present none of the bold colossal features which are exhibited in this.

Great variety of rocks are included in this division, but their nomenclature is so far from being settled, that should two separate catalogues be made out by different persons, they would probably vary in a great many items. Some will find greywackè and greywackè slate in one of these divisions, some in another, and some in all; while others ridicule the name as one invented to supply the defect of a better.

Most of these rocks are of a pale-bluish or grey colour, some of them belong to the family of the greenstones, some are of a porphyritic, others of a slaty structure; differing however from the slates of the last division, inasmuch as these exhibit no distinct partings by which they are to be separated. A reddish aggregated rock of a coarse slaty structure, is to be seen on entering the common on the

road from Keswick towards Borrowdale. It appears to form one of the lower beds of the division, and may be traced each way to some distance. It is succeeded by the more compact dark-coloured rock of Wallow Crag, in which quartz, calcareous spar, chlorite, and epidote, are found in veins. Garnets are found imbedded in some of the rocks on Castlerigg Fell and Great Gable. An amygdaloid rock, containing nodules of calcareous spar, and sometimes of agate, opal or calcedony, is met with in several places; as near Honister Crag—between Bowder Stone and Rosthwaite—on Castlerigg Fell near Keswick—and in Wolf Crag on the road to Matterdale. A curious mixed rock of basaltic appearance is found near Berrier; it skirts the north side of Caldbeck Fells, forms the hill called Binsey, and may be seen on the north side of the Derwent near to Cockermouth. No organic remains have yet been discovered, either in this or the preceding division.

The fine pale-blue roofing slate occurs in beds: (called by the workmen veins:) the most natural position of the lamina or cleavage of the slate appears to be vertical: but it is to be found in various degrees of inclination, both with respect to the horizon, and the planes of stratification. The direction of the slaty cleavage bears most commonly towards the north-east and south-west; while the dip or inclination is more variable; the former may be ascribed to some general operation of nature;

the latter being influenced by local circumstances—such as the weight of a mountain pressing upon one side, while the other side is wanting a support. The direction and inclination of the strata are more distinguishable by stripes and alternations in the colour and texture, than by any natural partings or strata seams; and the slates are split of various thickness, according to their fineness of grain, and the discretion and skill of the workman, without any previous indication of the place where they may be so divided. They do not separate into thin flakes, like those of the former division; but some of them, when long used, are subject to a peculiar species of decay, which operates most powerfully on parts least exposed to the weather.

Most of the rocks of this division effervesce in some degree with acids, but more especially those possessing the slaty structure. They are not very productive of metallic ores, although they afford a considerable variety. Lead ore has been got in Patterdale; copper at Dalehead in Newlands, which is near the northern boundary of the division—it consists of grey and purple copper, with specimens of malachite. A mine at Coniston, near the southern boundary, produces the yellow sulphuret; and a vein of the same was a few years ago opened at Wythburn. Small veins of iron ore are frequently met with, but scarcely thought worth notice. The famous plumbago or black-lead mine of Borrowdale is also situated in this division.

The THIRD division—forming only inferior elevations—commences with a bed of dark-blue or blackish transition limestone, containing here and there a few shells and madrepores, and alternating with a slaty rock of the same colour; the different layers of each being in some places several feet, in others only a few inches in thickness. This limestone crosses the river Duddon near Broughton; passing Broughton Mills it runs in a north-east direction through Torver, by the foot of the Old Man mountain, and appears near Low Yewdale and Yew Tree. Here it makes a considerable slip to the eastward, after which it ranges past the Tarns upon the hills above Borwick Ground; and stretching through Skelwith, it crosses the head of Windermere near Low Wood inn. Then passing above Dovenest and Skelgill, it traverses the vales of Troutbeck, Kentmere, and Long-Sleddale; crossing the two intervening mountains in the direction of the roads which lead over them; so that no relation can be discovered between the direction of the vallies and that of the stratification. It dips to the south-east, while the cleavage of the slate with which it is associated, frequently inclines in an opposite direction.

Towards the south-east succeeds a series of rocks of the same dark-blue colour, and principally of a slaty structure: but accompanied in places with a rock, which breaks alike in all directions. This last has supplied a great portion of the rounded

stones found in the beds of the rivers Kent and Lune; thus furnishing materials for paving the streets, and repairing the roads in the vicinity.

A rock of fine-grained sienite is observed near the foot of Coniston Lake; and one containing a large portion of mica appears in Crosthwaite. The strata seams are more distinct in this than in the preceding division; but, like that, it is not marked by any natural partings in the plane of cleavage. A quarry one mile from Brathay on the road towards Hawkshead, yields excellent flags for flooring; and they are manufactured into tombstones with good effect, by Mr. Webster of Kendal, and by Mr. Bromley of Keswick. This quarry affords a good example of the stratification (or, as some will have it, the rhomboidal crystallization) of these rocks. The cleavage is here nearly perpendicular; and the strata, being from one foot to five in thickness, dip to the south-east at an angle of about thirty degrees. In some districts the layers are so much diminished in thickness, that slates and tables are formed in the plane of the stratification, instead of that of the cleavage; and this has probably given rise to the notion of two distinct cleavages crossing each other under a certain angle. Roofing slate (called black slate, to distinguish it from the pale-blue of the second division) is manufactured in large quantities in the district between Ulverston and Broughton; which is well situated for shipping either by the river Duddon or by canal from Ulverston.

The preference given to the slates from certain quarries as requiring less weight for the covering of a roof of given dimensions, depends not so much upon the specific gravity (which varies at most from 2750 to 2800, or one part in 55) as upon the fineness of grain, which enables it to bear splitting thinner. All the rocks of this division effervesce more or less with acids; they contain some calcareous spar and pyrites; but little metallic ore, except a small quantity of galena, with green and yellow phosphate of lead, which has been got near Staveley; and some yellow copper ore in Skelwith.

Although little notice has hitherto been taken by authors of the difference between the roofing slates of these three divisons, yet a workman of moderate experience will readily distinguish them: and I have endeavoured so to describe the peculiarities of each, that those who may hereafter be engaged in examining similar districts may be better enabled to compare them.

A conglomerate, composed of rounded stones of various sizes, from the smallest gravel, to the weight of several pounds, held together by an iron-shot, calcareous cement, forms a hill of a parabolic shape, about 1000 feet in height, called Mell Fell; and some lesser elevations extending to the foot of Ulswater. These pebbles are apparently fragments of older rocks, rounded by attrition, and must have been transported from some distance, as their composition does not correspond with the rocks of the

neighbourhood. This has been taken by some to belong to the old red sandstone formation; but whether it passes under or only abuts against the adjacent limestone has not yet, I believe, been clearly ascertained.

A large mass of similar composition appears in the bed and on the banks of the river Lune at Kirkby Lonsdale. Its dip indicates that it should pass under the limestone which appears at a little distance; but from other circumstances I am not quite satisfied of that being the fact. Something of the same kind also appears in the river Mint, from two to three miles above Kendal; where it may be seen to rest upon the blue rock; and wherever the subjacent rock can be seen it is always deeply coloured by the iron of the conglomerate. A layer of similar appearance is interstratified with the red sandstone at Barrow Mouth near Whitehaven, and a still newer formation of the same kind adjoins the Cartmel sands near Humphry Head.

A superincumbent bed of limestone, by some called the mountain, by others the upper transition limestone, mantles round these mountains, in a position unconformable to the strata of the slaty and other rocks upon which it reposes. It bassets out near Egremont, Lamplugh, Pardshaw, Papcastle, Bothel, Ireby, Caldbeck, Hesket, Berrier, Dacre, Lowther and Shap; it appears again near Kendal, Witherslack, Cartmel, Dalton and Millum, from whence for some distance its place is occupied by

the sea, and in the neighbourhood of Gosforth and Calder Bridge, a red sandstone intervenes, so that the limestone is either wanting or buried under more recent formations. It dips from the mountains on every side, but with different degrees of inclination; the declivity being generally least on the southern side. In the neighbourhood of Witherslack it forms lofty isolated ridges, while the subjacent slaty rock appears in the lower ground: and it may be seen upon the surface as far as Warton and Farleton Crags, and even as far as Kellet, before it is covered by the sandstone of the coal measures. A remarkable exception, however, occurs in Holker Park, where the mountain rock is succeeded by limestone, and that by sandstone and shale, resembling that which accompanies coal—all within a very short distance. On the north and west of the mountains, the inclination of the newer rocks appears to be greater and the strata thinner; so that the clay-slate of the first division is succeeded by limestone, sandstone and coal, all in the distance of two or three miles. The principal mineral production of this limestone, is iron ore, which is raised in great quantities near Dalton, and also near Egremont.

On external parts of this circle various sandstones and coal succeed each other. At Bolton in Cumberland, the stratification appears to be mantle-shaped round the hill at Catlands, so that the limestone is overlaid by the coal measures nearly on all sides. Quantities of coal are raised in the western

part of the parish, and also to the eastward at Caldbeck and Warnel Fell; and a thin seam of coal has been found interstratified with the limestone at Hesket Newmarket; but it is easily understood, that it would be in vain to search for coal within this limestone circle; consequently it cannot be found in the neighbourhood of the lakes. Coal is raised at Greysouthen, Gilcrux, and Plumbland; and there are extensive fields of coal beneath the town of Whitehaven, at Workington, and on the south side of the river Ellen at Maryport. From Maryport towards Carlisle, and thence to Penrith, is a large tract of red sandstone of unknown depth. To the eastward, the plain of the Eden is bounded by a long range of mountains, called by some the British Appenines, or the Backbone of England. These mountains are stratified, but do not produce coal; except at the northern end towards Brampton. South-east, coal is found on Stainmoor; and more southward, the first appearance of coal is at Hutton Roof, between Burton and Kirkby Lonsdale; and near Ingleton, there is an extraordinary assemblage of slate, lime, and coal.

Bowlder stones are often met with, far removed from their native rock, but do not appear to have been carried over high mountain ridges. The granite blocks from Shap fells are carried over a great part of Westmorland; but are not found in the neighbourhood of the lakes. Bowlders from the sienite of Buttermere and Ennerdale are found on

the west coast of Cumberland; but not in the vales of Keswick or Windermere. The granite of Caldew and sienite of Carrock can be recognized in bowlders in the neighbourhood of Carlisle; but are not seen to the south of Keswick. The famous Bowder Stone of Borrowdale does not come within the present description; but a large block near Skelwith Bridge on the road to Grasmere—one near Coniston Waterhead, and another near Gosforth, as well as many others of smaller dimensions—are far more interesting to the geologist, yielding sufficient scope for conjecture as to the place of their origin, and the mode of their removal.

METEOROLOGY.

Besides the permanent beauties of a country diversified by hills and dales, mountains and lakes, there are transient subjects capable of arresting the attention of the contemplative observer; amongst which are—the mists or fogs—forming over the surface of lakes—floating along the sides of hills—or collected into clouds, hovering upon the summits of mountains.

Mountains have been supposed to attract the clouds with which their summits are so frequently enveloped; but it is more to their agency in forming them, that the accumulation of clouds in mountainous countries may be attributed. Clouds are formed of aqueous particles floating in the atmosphere; and they serve as an awning, to shield the earth from the violence of the sun's rays in hot weather; and to protect it from the rigour of a cold winter's night, by obstructing the radiation of heat from its surface. In the clearest weather a portion of water always exists in the atmosphere in the state of an invisibe vapour; and the higher the temperature, the greater quantity it is able to sustain; so

that when air, fully saturated with vapour, suffers a diminution of its heat, the water is exhibited in the form of mists, clouds, dew, or rain. It has been stated by the late Dr. Hutton of Edinburgh, and more fully exemplified by Mr. Dalton, that the quantity of vapour capable of entering into air, increases in a greater ratio than the temperature; therefore whenever two volumes of air, of different temperatures, are mixed together, (each being previously saturated with vapour,) the mean temperature is not able to support the mean quantity of vapour; consequently its precipitation in the form of clouds and rain, is occasioned, not by mere cold, but by a mixture of comparatively cold and warm air: and on this principle, may be explained many of the phenomena of mist or fog, clouds, dew and rain.

Different portions of the earth's surface, and of course the contiguous portions of air, are differently heated by the sun's rays impinging upon them in various degrees of obliquity; and this difference is naturally much greater in a mountainous than in a champaign country; and on two portions of air thus unequally heated, being intermixed one with the other—either by the ascent of the warmer and lighter part, or by a gentle current of the wind—the vapour assumes a visible form.

The temperature of the earth, from a few yards below the surface, to the greatest depth hitherto explored, suffers little variation between summer and winter. It corresponds nearly with the mean tem-

perature of the atmosphere; being here about 48 degrees of Fahrenheit's thermometer. A body of water, such as a lake of considerable depth, forms a kind of mean between the subjacent earth and the superincumbent air: its surface is influenced by the temperature of the atmosphere, while its lower parts admit of less variation; consequently the surface will in summer be the warmest, and in winter the coldest part. So long as the surface of water retains its fluidity, it helps to meliorate the temperature of the air in its vicinity; and the surface being frozen, the water contiguous to the ice will always be nearly 32°; at the same time the temperature towards the bottom may be some degrees higher.

In clear weather, the surface both of the earth and of water is warmed in the day and cooled during the night; but in very different proportions—the water retaining its heat much longer than the land. It will sometimes happen in an autumnal evening, that the temperature of the air and that of the water of a lake will be equal; and yet before sunrise there will be a difference of twenty degrees or upwards: in this case the air above the water being warmer, will contain more vapour than that above the land, and on their intermixture a mist or fog will be formed; which will continue to float in the atmosphere till it be either dissolved by an increase of heat, or being moved into a colder region, be deposited in the form of dew or hoar frost. Sir

Humphry Davy has observed, that upon some rivers on the continent, a mist or fog began to appear as soon as the temperature of the air was diminished from 3 to 6 degrees below that of the water. This will depend upon the previous moisture or dryness of the air, and partly on the current of the wind; but a fog is seldom seen on these lakes, until the difference of the temperature is more than 12 degrees.

On the disappearance of the sun in a clear evening, a mist is sometimes observed over a piece of moist ground; where it seems to be formed, and for some time kept afloat by a kind of contention between the heated surface of the earth below it, and the colder atmosphere above; but the earth not continuing to afford the necessary supply of heat, the conflict ceases; and the vapour settles on the grass in the shape of dew. When walking along the side of a hill sloping gently towards the west, on the early part of a clear dewy morning, it is interesting to observe the brilliant circle of light, formed round the head of the spectator's shadow, by the reflection of the solar rays from that part of each globule of dew which is directly opposite to the sun.

One fruitful source of the fog so much complained of in the metropolis is smoke, which the cold air above, deprives of its caloric before its contents are sufficiently dissipated in the atmosphere; so that the inhabitants of large towns are enveloped in clouds of their own creating, and obliged to burn candles

at noon-day, while the country enjoys the brilliant light of an unclouded sun.

It has been a matter of surprise to some, that a cloud should seem to remain stationary upon the summit of a high mountain, when the air was moving at a brisk rate. The warm air of a valley being impelled up the inclined plane of a mountain side, into a colder region, is not able to support the same quantity of vapour; and a cloud is formed in consequence: and although the individual particles of which it is composed, are continually moving forward with the wind; yet by a perpetual accession of vapour on one side, and dispersion on the other, the cloud may continue to occupy the same place, and appear to a distant observer as stationary; although its component parts are successively changed: and in this manner may the materials of a cloud be transported invisibly from the summit of one mountain to that of another.

When a dense cloud settles upon a mountain, the wind frequently blows from it on one side with an increased momentum, while on the opposite side its motion is retarded, and a shower commencing on the hills, is generally preceded in its course by a squall—the air displaced by the falling rain, making its escape along the vallies where it meets with the least resistance.

By the unequal distribution of vapour in the atmosphere, the visual rays passing through it suffer a variable degree of refraction; on which account it

is difficult to ascertain, with precision, the altitude of different objects by trigonometrical calculation. In a morning when the air above is clear, and nearly freed from vapour—while that near the surface of the ground is charged with as much as it can contain without destroying its transparency—refraction is at the greatest, objects near the horizon appear more elevated than ordinary, and some are brought in sight that could not otherwise have been discerned: when a little after mid-day—the vapour being more equally diffused—the altitude of an object may be more accurately observed.

A covering of snow makes a kind of barrier between the internal heat of the earth and that of the atmosphere: being a bad conductor, it preserves the surface of the earth from the severity of cold in winter; but in spring, excludes it from the genial effects of the solar rays. In the meantime the contiguous atmosphere suffers more extensive variations; the greatest extreme of cold being experienced when the earth is covered with snow.

THE

FLOATING ISLAND

IN

DERWENT LAKE.

THE existence of this phenomenon has been doubted by some persons, while others, admitting the fact, have contended that the term Floating Island was improperly applied to this subject, as it never changes its situation—being still attached by its sides to the adjacent earth under water. Its occasional appearance, however, is ascertained beyond a doubt; and Floating Island being the name by which it has always been known, there can be no manifest impropriety in retaining the appellation.

It is situated in the south-east corner of the lake, not far from Lowdore, about 150 yards from the shore, where the depth of the water does not exceed six feet in a mean state of the lake. It has been said to make its appearance once in seven years, but this is quite uncertain; it generally rises after an interval of a few years, and towards the conclusion of a warm summer. Its figure and dimensions are variable; it has sometimes contained about half an acre of ground, at other times only a few perches: but extending in a gradual slope under water, a

much greater portion is raised from the bottom, than reaches the surface of the lake. Several large rents or cracks may be seen in the earth about the place, which appear to have been occasioned by its stretching to reach the surface. It never rises far above the level of the lake; but having once attained the surface, it for a time, fluctuates with the rise and fall of the water; after which it sinks gradually. When at rest in the bottom of the lake it has the same appearance as the neighbouring parts, being covered with the same vegetation, consisting principally of *Littorella lacustris*, interspersed with *Lobelia dortmanna*, *Isoetes lacustris*, and other plants common in this and all the neighbouring lakes: after remaining some time above the water its verdure is much improved. For a few inches in depth it is composed of a clayey or earthy matter, apparently deposited by the water, in which the growing plants have fixed their roots, the rest is a congeries of decayed vegetable matter forming a stratum of loose peat earth about six feet in thickness; which rises from a bed of very fine soft clay. A considerable quantity of air, is contained in the body of the island, and may be dislodged by probing the earth with a pole. This air has been found by Mr. Dalton to consist of equal parts of carburetted hydrogen and azotic gasses, with a little carbonic acid.

For the last quarter of a century the times of its appearance have been as follows. In 1808 from the 20th July to the beginning of October; in 1813

from the 7th September to the end of October; in 1815 from the 5th to the end of August: in 1819 from the 14th August to the end of that month; in 1824 from 21st June to the end of September; in 1825 it was above water from the ninth to the 23rd of September; and in 1826 from the 11th July to the end of September: the uncommon circumstance of its appearing in three successive years may be attributed to the extraordinary warmth of the seasons.

It would be tedious to investigate every hypothesis which has from time to time been put forth to account for this phenomenon—with the arguments for and against each—some assuming water, others air, as the chief agent in its production.

A small mountain stream which pours down a rock opposite the place, and runs underground before it reaches the lake, has been employed in various ways to account for its rising; and many a supposition has been advanced, of the way in which air might be conveyed or generated underneath it.

One material circumstance has however generally escaped observation: namely, that the air to which the rising of this island has been attributed, is not collected in a body underneath it; but interspersed through the whole mass: not causing it to float "as a reversed saucer would in a bowl of water;" but by enlarging its bulk, and thereby diminishing its specific gravity. And the most probable conclusion seems to be, that air or gas is generated in the body of the island by decomposition of the vege-

table matter of which it is formed; and this gas being produced most copiously, as well as being more rarefied in hot weather, the earth at length becomes so much distended therewith, as to render the mass of less weight than an equal bulk of water. The water then insinuating itself between the substratum of clay and the peat earth forming the island, bears it to the surface, where it continues for a time; till partly by escape of the gas, partly by its absorption, and partly by its condensation consequent on a decrease of heat, the volume is reduced; and the earth gradually sinks to its former level, where it remains till a sufficient accumulation of gas again renders it buoyant.

But as the vegetable matter of which the island is principally composed, appears to have been amassed at a remote period, when the lake was of less depth than at present, receiving very little addition from the decay of plants recently grown upon the spot; it is reasonable to suppose that the process furnishing the gas cannot from the same materials be continued *ad infinitum:* but that there must be a time when it shall have arrived at its maximum: after which the eruptions will become less extensive or less frequent.

THE

BLACK-LEAD MINE

IN BORROWDALE.

THE mineral substance from which black-lead pencils are manufactured has successively been known by the several names of *wad*, *black-cawke*, *black-lead*, *plumbago*, and *graphite*. In the progress of chemistry and its application to mineralogy, the original term *wad* was abandoned, probably in consequence of the same name being given by the Germans to a substance somewhat resembling this in appearance but of a different nature, viz. an oxide of manganese: the term *black-cawke* might be subject to a similar objection, the word *cawke* being applied by miners to a sulphate of barytes: the names of *plumbago* and *black-lead*, although still retained in common use, tend to convey an erroneous idea of the subject, as *lead* forms no part of its composition, which is found to be principally carbon combined with a small portion of iron: and *graphite*, perhaps the least objectionable term, has scarcely yet obtained currency.

This mineral occurs in various parts of the world, and in rocks of different formation. In this island it has been discovered in Invernesshire, in gneiss, which is considered as one of the primitive rocks; there it appears to be intermixed with a micaceous substance and other hard mineral bodies which render it unfit for pencils. In the borders of Ayrshire, it is found in the neighbourhood of coal, to which it seems too nearly allied: but in no place has it been met with equal in purity to that produced from Borrowdale, in Cumberland, where it lies in a rock of intermediate formation.

We have no account of the first discovery, or opening of this mine; but from a conveyance made in the beginning of the seventeenth century, it appears to have been known before that time. The manor of Borrowdale is said to have belonged to the Abbey of Furness, and having at the dissolution of that monastery, in the reign of Henry the Eighth, fallen to the Crown, it was granted by James the First to William Whitmore and Jonas Verdon, including and particularizing among other things, "the *wad-holes*, and *wad*, commonly called *blackcawke*, within the commons of Seatoller, or elsewhere within any of the wastes or commons of the said manor, now or late in the tenure or occupation of Roger Robinson, or his assigns, by the particulars thereof mentioned, to be of the yearly rent or value of *fifteen shillings and fourpence*." By a deed bearing date the twenty-eighth day of November,

1614, the said William Whitmore and Jonas Verdon, sold and conveyed unto Sir Wilfred Lawson, of Isel, Knight, and several others therein named to the number of thirty-six, chiefly inhabitants of Borrowdale, "all the said manor of Borrowdale, with the appurtenances of what nature or kind soever, *excepted* and *reserved* unto the said William Whitmore, and Jonas Verdon, their heirs and assigns, all those wad-holes, and wad, commonly called black-cawke, within the commons of Seatoller, or elsewhere within the commons and wastes of the manor of Borrowdale aforesaid, with liberty to dig, work, and carry the same, and other their appurtenances whatsoever." In consequence of which reservation the wad or black-lead mine has been ever since held distinct from other royalties of the said manor, one moiety thereof now belonging to Henry Bankes, Esq. M.P. the other half being subdivided into several shares.

This mine is situated about nine miles from Keswick, near the head of the valley of Borrowdale, in the steep side of a mountain, facing towards the south-east, and has been opened at different places where the wad had probably appeared on the surface: the rock in which it occurs is called by Mr. Bakewell, a grey felspar porphry; near the mine it becomes of a darker colour, as containing more iron, the joints being lined with a ferruginous clayey matter: it is intersected in various directions by strings, or small rake veins, containing in some

places a little calcareous spar, or other vein stuff, and sometimes a superficial glazing of black-lead without the substance; but the wad is only found in sops, or bellies, which appear generally to be formed by the intersection or crossing of the veins, and are often at considerable distance from each other, and found with difficulty.

Formerly this mine was worked only at intervals, and when a sufficient quantity had been procured to supply the demand for a few years, it was strongly closed up until the stock was reduced; but of late, it has been obtained less plentifully, and the demand being greater, the working has been continued for several years successively.

An old level, which was re-opened in 1769, was found to have been cut through this very hard rock, without the help of gunpowder; and a kind of pipe vein which had produced a great quantity of wad, having been pursued to the depth of one hundred yards or more, much inconvenience was experienced in working it: to obviate which, in 1798, an adit or level was begun in the side of the hill, which at the length of 220 yards communicates with the bottom of the former sinking; since which time the works have been carried on internally through various ramifications; a survey of which was made a few years since by the late Mr. Farey. Through this principal level the water now passes off, and the produce and rubbish are brought out upon a railway in a small waggon; and over its mouth a house

is built, where the workmen are undressed and examined as they pass through it on leaving their work.

Owing to the great value of this mineral, and the facilities afforded for disposing of it in an unmanufactured state, the greatest precaution has sometimes been scarcely sufficient to keep the workmen from pilfering, and those appointed to overlook them have not always escaped suspicion; yet, it is but justice to the present manager to state, that for upwards of fifty years that he has been employed, he has always sustained an unimpeachable character.

To prevent the depredations of intruders, it has sometimes been necessary to keep a strong guard upon the place; and for its better protection, an Act of Parliament was passed 25th Geo. 2d. cap. 10th, by which an unlawful entering of any mine, or wadhole of wad, or black-cawke, commonly called black-lead, or unlawfully taking, or carrying away any wad, &c. therefrom, as also the buying, or receiving the same, knowing it to be unlawfully taken, is made felony. In the preamble of this Act, it is stated to be "necessary for divers useful purposes, and more particularly in the casting of bomb-shells, round shot, and cannon balls;" however, its use in cleaning and glossing cast iron work, such as stoves, grates, &c. is now well known to every housemaid.

Being capable of enduring a great heat without fusing, or cracking, it is used in the manufacture of crucibles; and its excellence in diminishing friction in wooden screws, and other machinery, makes it

become an ingredient in several anti-attrition compositions; but effects have been formerly attributed to it in dying, and medicine, which were perhaps only imaginary. Yet its principal use is in pencils, for which Keswick has long been famed; and in their manufactory great improvements have lately been made; but though in the vicinity of the mine, the pencil-makers are obliged to purchase all their black-lead in London, as the proprietors will not permit any to be sold until it has first been lodged in their own warehouse. It was formerly used without any previous preparation, being only cut with a saw to the scantlings required, and thus enclosed in a suitable casing of cedar wood; but being generally too soft for some purposes, a method of hardening it had long been a desideratum; and a process has at length been discovered, by which it may be rendered capable of bearing a finer and more durable point, but its colour will be somewhat deteriorated.

Great quantities of pencils are now made of a composition, formed of the saw-dust and small pieces of black-lead, which being ground to an impalpable powder, is mixed with some cohesive medium: for this purpose different substances are employed, some of which make a very inferior pencil; but others, being united at a proper degree of heat, and consolidated by a strong pressure, make a pencil to answer for many purposes, (especially where the writing is intended to be permanent,) full as well as the genuine black-lead.

The specific gravity of the best wad, or black lead, is, to that of water, as two to one nearly: the coarser kind is heavier in proportion, as it contains more stony matter. It comes from the mine in pieces of irregular shape, and of various sizes, requiring no process to prepare it for the market, further than freeing the pieces from any stony or extraneous matter, which may adhere to them. It is then assorted according to the different degrees of purity and size, and thus packed in casks to be sent off to the warehouse in London, where it is exposed to sale only on the first Monday in every month.

In the year 1803, after a tedious search, one of the largest bellies was fallen in with, which produced five hundred casks, weighing about one hundred and a quarter each, and worth thirty shillings a pound and upwards; besides a greater quantity of inferior sorts; and since that time several smaller sops have been met with; in the beginning of the year 1829, a sop produced about half a dozen casks; the best part of which was eagerly bought up at thirty-five shillings a pound; but since that time the quantity raised has been trifling.

By an account published in 1804 the stock then on hand was valued at £54,000, and the annual consumption stated to be about £3,500. This afforded a clue to the assessors of the property tax which soon after came into operation; and this mine—which 200 years ago had been valued at

fifteen shillings and four-pence—was accordingly rated at £2,700 a year. The consumption appears to be constantly increasing; but how far a permanency of supply can be calculated upon, is questionable. The most prolific part of the mountain may be already explored, and the principal body or trunk of the mine excavated, so that posterity must be contented with gleaning from the branches.

THE END.

PRINTED BY A. FOSTER, KIRKBY LONSDALE.