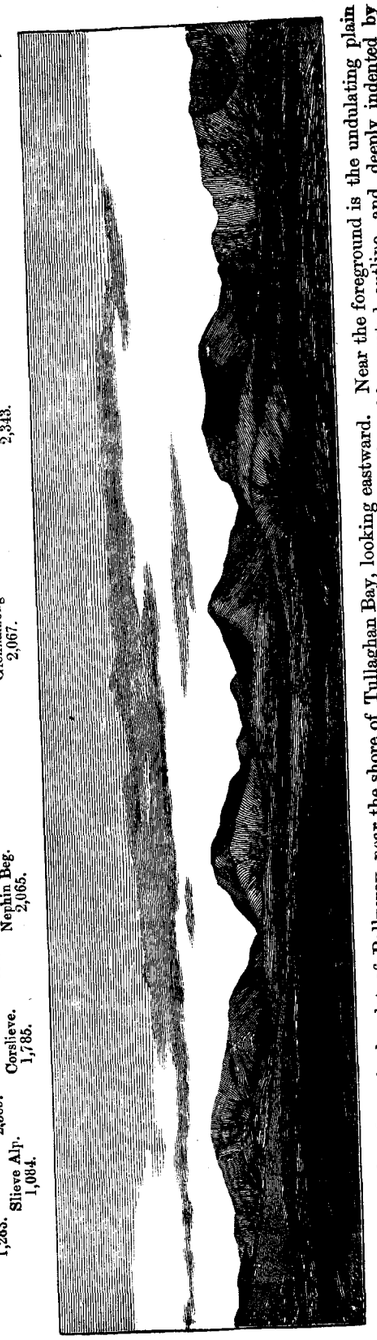
PANORAMIC VIEW OF ERRIS MOUNTAINS FROM BALLYCROY.



This view is taken from the hamlet of Ballycroy, near the shore of Tullaghan Bay, looking eastward. Near the foreground is the undulating plain of schist and gneiss. The mountain range consists chiefly of quartzite overlying the shistose rocks, with serrated outline, and deeply indented by glens and corries.

Memoirs of the Geological Survey.

EXPLANATORY MEMOIR

TO ACCOMPANY

SHEET 63 AND NORTHERN HALF OF 74
OF THE MAPS

OF THE

GEOLOGICAL SURVEY OF IRELAND,

INCLUDING THE

COUNTRY AROUND NEWPORT, MALLARANNY, BALLYCROY, AND THE MOUNTAINOUS DISTRICT SOUTH OF BANGOR AND CORICK, IN THE COUNTY OF MAYO.

BY

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AND

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PREFACE.

THIS Explanatory Memoir has been drawn up by Mr. Symes, Senior Geologist, who surveyed the greater part of the district of which it treats; other portions having been surveyed by Messrs. Wilkinson and M'Henry during the years 1877-78. The district is one of the wildest and most inaccessible in Ireland, but is not devoid of many features of geological interest.

EDWARD HULL,
Director.

Geological Survey Office, Dublin,
December, 1880.

THE

GEOLOGICAL SURVEY OF THE UNITED KINGDOM

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The observations made in the course of the Geological Survey, are entered, in the first instance, on the Maps of the Ordnance Townland Survey, which are on the scale of six inches to the mile. By means of marks, writing, and colours, the nature, extent, direction, and geological formation of all portions of rock visible at the surface are laid down on these maps, which are preserved as data maps and geological records in the office in Dublin.

The results of the Survey are published by means of coloured copies of the one-inch map of the Ordnance Survey, accompanied by printed explanations.

Longitudinal sections, on the scale of six inches to the mile, and vertical sections of coal-pits, &c., on the scale of forty feet to the inch, are also published, and in preparation.

Condensed memoirs on particular districts will also eventually appear.

The heights mentioned in these explanations are all taken from the Ordnance Maps.

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EXPLANATORY MEMOIR

TO ACCOMPANY

SHEET 63 AND NORTHERN HALF OF 74 OF THE MAPS

OF THE

GEOLOGICAL SURVEY OF IRELAND.

CHAPTER I.

PHYSICAL GEOGRAPHY.

THE area about to be described lies wholly in the county Mayo, and has for its northern limits the undulating tract of country stretching south of Bangor and Corick; for its eastern, Nephin mountain and the Croaghmoyle range; for its southern, Clew bay, and for its western it has part of Curraun Achill and part of Blacksod Bay.

The only town of importance is Newport and the rising village of Mallaranny.

The N.W. portion of Sheet 63, with the exception of two elevations a short distance N. of the village of Ballycroy, respectively of 432 and 791 feet, is occupied by a gently undulating plain, covered by deep drift and bog, the latter extending to the sea, and in many instances even below low water mark in the shallow bay of Tullaghan.

The principal elevations in the north as well as in the centre of the district are the mountains of Maumykelly, 1,203 feet; Corsleive, 2,369; Nephin-beg, 2,012, and Corranabinna, which form an amphitheatre (facing towards the W.) with the lesser range of hills, the principal being Slieve Alp, 1,084 feet.

The country for the most part does not present that rugged outline so characteristic of metamorphic districts, in consequence of the general direction of the mountain ranges being in the line of strike of the rocks, which is nearly magnetic N. and S., except in the southern part, where the spur runs across the beds. The serrated character is very well seen for some distance E. and W. of a place locally called the "Jingling Stones," which is a narrow passage between Glennamong and Corranabinna, not over 2 feet wide at any place, with a sheer precipice of 800 feet at either side.

The most conspicuous elevation in the district is Corsleive, as it stands out in bold relief, with a very steep escarpment for several miles along its eastern side, caused by a well marked line of fault. West of Slieve Alp the country for several miles is covered with a thick coating of bog over an undulating country, at heights ranging from 100 to 400 feet above the sea, and in addition in many cases clothing the sides of the mountains. This tract of bog extends also to the slopes of Glennamong and Corranabinna

to the W. and S., and is in many places very soft and dangerous to walk on. It covers an area of about 30 square miles.

The valley between Corsleive and Slieve Alp though not so extensive is a well marked feature. There is an entire absence over the whole tract of cultivation, except small patches along the alluvial banks of the rivers.

To the E. and N. of Corsleive the ground again is one extensive tract of bog.

In the centre of the district the tract stretching from where the head waters of the Owenduff river meet, eastward by Lough Avoher, to the meridian through Keenagh, is characteristically rugged, and contains several points of considerable elevation, viz.: Birreencorragh (2,295), from which radiate two spurs, one northward towards Keenagh, the other north westward, including between them the valley which gives origin to the Deel river; Glennamong (2,074), on the rugged cliff line stretching from the Bawnduff river south westward towards Claggan Mountain, from which also radiate two spurs, one N. westward, the other eastward in a curve towards the trig. sta. 1,066, convex towards the south; Bullaunmore (1,274), an issolated hill; and others of less eminence. A serrated ridge runs parallel to the Altaconey river on the west side, including the trig. points 937 and 908; and at the latter point it bends due west to that marked 1,336, S. of Nephin-beg.

Along the southern margin of Sheet 63 and northern of Sheet 74 the country is very mountainous, high ranges of hills blending in with those to the north, and south of these hills the country undulates in gentle slopes to Clew Bay. The highest points of the mountain range are Owenduff (1,509) and Curraun Achill (1,784) west of Bellacragher Bay, while to the east of the bay are Claggan (1,266), Treel (1,437), Bengorm (1,912), Lettermaghera (837), and Buckoogh (1,935), which lies east of Lough Feeagh.

Rivers.—The entire of the west of the district forms the catchment basin of the Owenduff river, which takes its source from the mountains to the S.E., and flowing in a N.W. direction receives, about four miles from its discharge into Tullaghan Bay, the Tarsaghaunmore river, which rises in the Corslieve range.

Corsleive mountain forms the watershed between the last mentioned catchment basin and that of the Owenmore. The Owenmore rises in the eastern flanks of Corsleive and Nephin Beg, and passes out of the district on the north.

An elevation of about 800 feet forms the watershed separating the Owenmore, the Deel, and the Srahmore.

The Deel flows through a low country covered with an enormous thickness of bog, and having very thick alluvial deposits margining its banks, and passes out of the district on the west.

The Srahmore river, formed by the junction of the Altaconey, Srahrevagh, and Gowlaun rivers, flows to the south, having large alluvial tracts also along its margin, and passes

into Lough Feeagh, which receives the Glennamong river from the west, and finally into Clew Bay, where it receives the name of the Burrishoole river.

To the east of Lough Feeagh the Skirdagh river rises from the eastern slopes of Buckoogh, and the southern of Birreencorragh, and flows in a south easterly direction until it joins the Newport river, which flows into Clew Bay by the town of Newport.

The only other river of any consequence is the Tireena, which is formed by the junctions of the Owengarve and Glenthomas rivers, and which flows into Clew Bay, about four miles east of Mallaranny.

Lakes.—The principal lake is Lough Feagh, 41 feet above the level of the sea, and separated from Furnace Lough by a narrow and rapid piece of water.

Furnace Lough is a tidal lough, emptying itself into Newport Bay, at Burrishoole. Next in area is Fahy Lough, on the western margin of the district, and close to Blacksod Bay.

Numerous other lakes, such as Bunaveela, Corryloughaphuill, Anaffrin, and the lake on the eastern escarpment of Corsleive, will be alluded to further on.

Chapter II.

Rock Formations and Divisions.

Name.		Colour on Map.
	Aqueous Rocks.	
Recent and Post-Glacial.	Blown sand when forming dunes.	*Uncoloured.*
	Alluvium and Bog,	*Pale Sepia.*
Post-Pliocene,	Drift, sand, gravel, and boulder clay.	*Engraved Dots.*
Carboniferous,	d^2 Lower Limestone,	*Prussian blue.*
	d^1 Lower Carboniferous Sandstone.	*Prussian blue and Indian ink, with yellow dots.*
Old Red Sandstone.	c Sandstones and Shales,	*Indian Red.*
Silurian,	b Conglomerate and Sandstone, probably of "Upper Llandovery" age.	*Light Purple.*
	Metamorphic Sedimentary Rocks.	
	μ Mica Schist,	*Pale Pink.*
	q Quartzite,	*Do., washed with chrome yellow.*
	λ Crystalline Limestone in Schist.	*Cobalt.*
	Δ Hornblende Rock,	*Crimson lake.*
	Igneous Rocks.	
	B Basalt, Dolerite,	*Burnt Carmine.*
	F Felstone,	*Light Vermilion.*

Metamorphic Sedimentary Rocks.

Mica Schist.—The metamorphic rocks of this district bear a very close resemblance to those in the district to the east, being no doubt a prolongation of the altered beds of great thickness which are met with in the mountainous range west of Lough Conn.

In the district now under notice the quartzites and schists occupy the area from the east to the west, and apparently the lowest beds are to be found in the west, but owing to the similarity of the quartzites of the west to those of the east, and the enormous thickness of beds which the steady dip to the east would imply, the probabilities are that there is a repetition of the strata due to N. and S. faults, which, owing to the obscurity of the strata and want of sections, are difficult of determination. One of these faults probably ranges along the shore of Bellacragher Bay, throwing in the quartzite of Owenduff and Curraun Achill, and another ranges across Bengorm and disappears beneath the Old Red Sandstone. Another seems to pass through Lough Feagh, but its position is uncertain. The evidence for such faults is strengthened by the occurrence of the N. and S. fault at Corslieve in the north of the district, and where the same beds can be recognized at each side of the synclinal.

The age of these beds is probably Lower Silurian.

The mica schists are very uniform in composition, being generally hard, glistening, and grey in colour. The foliation of these metamorphic rocks always follows the bedding, the dip and strike of which is remarkably steady. In some places, such as on the slope of Buckoogh Mountain, quartzites in thin bands alternate with the mica schists, while in other places, such as at Claggan Mountain, north of Mularanny, there is an enormous thickness of mica schist without any beds of quartzite.

In the northern portion of the district these rocks are in general of a dark grey or bluish grey colour. Along the flanks of the mountain ranges they become very quartzitic in character, while in the neighbourhood of Glennamong they assume a gneissose appearance, it being in many cases difficult to determine amongst which rocks they should be classed; but as the great mass consists of the typical mica schist, no attempt was made at separating them.

At a point one mile E. of Glennamong trig. station, large masses of white quartz are found with crystals of mica (*Muscovite ?*) and similar large masses occur in the mica schist band, cropping out just below the summit of the same mountain on the W. shoulder.

Mica schist occurs in both hills N. of Ballycroy, and also along the coast at various places. On the shore N. of Annagh Island a coarse garnet schist was observed.

Quartzite.—The quartzites of the mountains to the north of Clew Bay are homogenous, flaggy, highly silicious in section, but along the foliæ specs of white and grey mica are clearly discernible.

No beds of amorphous or conglomeritic quartzite were observed. In the north of the district these rocks range from typical massive greyish white to flaggy, micaceous, and crumbled quartzites. In mass they occupy the centre of the mountain ranges, becoming interstratified with bands of mica schist to the W. These bands gradually increase in thickness until the quartzites finally disappear, and only typical mica schist is seen as far out as the coast line.

In the extreme S. W. corner of Sheet 63 another mass of quartzite occurs, having similar bands of mica schist along the flanks of the mountain.

The same order seems to have been maintained originally east of Corsleive and of the main mass of the quartzites, but in the latter case most of the schists are concealed by the Carboniferous rocks, which are brought directly down against the main mass of the quartzites by an immense fault.

Thin even-bedded flaggy micaceous quartzite is exposed in the river on both sides of Owenduff Bridge; also in the mountain N. of Tarsaghaunmore River, and on the shore S. W. of Fahy Lough, where it assumes a considerable thickness.

Crystalline Limestone.—A bed 15 feet thick of highly micaceous limestone occurs in the mica schist at Temple Funna, a mile and a half N. E. of Ballycroy; this was the only limestone observed in the western portion of the district.

On the southern slope of Mount Eagle, which lies north of Buckoogh Mountain, crystalline limestone was found forming two bands, one of 12 feet and the other of 12 inches, traversing the mica schist at right angles to the strike of the foliæ. A mile N. E. of this a band of limestone schist, much weathered, was found, which coincided with the bedding of the schist, and a mile and a half north-west of Mount Eagle schistose limestone was observed in two places, the one where the strike corresponds with the foliæ, and the other where it is at right angles. From such evidence we may assume that these limestones are due to infiltration, as if they were of the same age as the associated rocks further evidence of their existence would no doubt be found along the bedding of the mica schist, which is so regularly deposited, and which is not so highly metamorphosed as similar rocks in other places.*

Hornblende Rock is very rare; only one boss was observed, and that was in conjunction with the crystalline limestone to the north of Mount Eagle.

Aqueous Rocks.

Upper Silurian.—The only evidence of rocks of this class is to be found in the high ground, about two miles east of the town of Newport, where the beds are a prolongation of the enormous mass which is so well displayed in the district to the east, and which has already been described in the Memoir to accompany Sheet 75.

---

*I do not concur in this view.—E. H.

The rocks at Laplagh hill consist entirely of conglomerates which dip at different angles, chiefly towards the west; the blocks composing them are of quartzite and granite, the former predominating, and the size rarely exceeds that of a man's fist.

No trace of fossils were found among these beds, and their age has been determined from their lithological resemblance to Upper Llandovery beds, in other parts of the county Mayo, and from their geological position, as they are found to intervene between the metamorphosed Lower Silurian rocks on the one hand and the Old Red Sandstone on the other.

The Old Red Sandstone is very well defined, having as a conformable capping the Lower Carboniferous Sandstone, and over that the Lower Carboniferous Limestone. It presents a well marked feature on the northern shores of Clew Bay, extending, as it does, from Curraun Achill, on the extreme west of Sheet 74, along by Mallaranny, covering the southern slopes of Glendahurk, Bengorm, and Lettermaghera, as far as Furnace Lough, where it has probably been denuded away, but to the east of the lake it is found on the southern and eastern slopes of Buckoogh, and passes out of Sheet 63, on the south of Knockaffertagh. These beds of Old Red Sandstone, with their capping of Carboniferous sandstones and flags, are separated from the Upper Silurians already mentioned by an enormous fault, which is traceable along the Newport Valley, by Beltra Lough (Sheet 75), and which throws down the Old Red Sandstone and Carboniferous rocks on the north.

They are always found resting on the metamorphic rock, which being highly inclined, and the sandstone but slightly so, at the junction, the boundary can be easily traced.

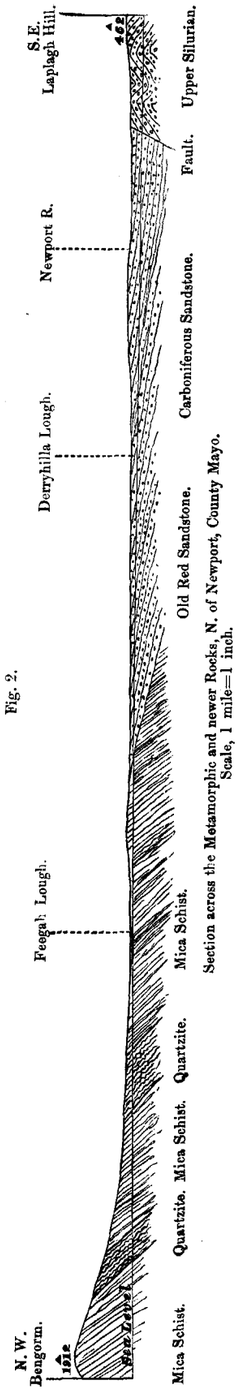
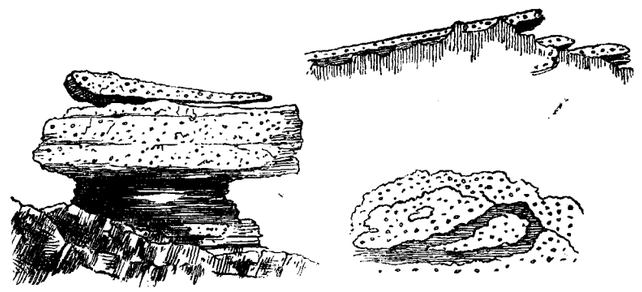


Fig. 2.

Fig. 3.



Plan and Section of the conglomerate resting on the Mica Schist, showing peculiar weathering at Curraun Achill.

On looking at the map in the neighbourhood of Curraun Achill it would strike the observer that this formation was of enormous thickness, especially as over a large area the beds have a steady dip to the south;* such, however, is not the case, as the ground rises steadily from sea level to 1,784 feet in the space of 2¼ miles, which would give a slope of about 9°, and, as the actual dip over that distance averages 10°, the inference is that the beds would only attain a slight thickness on the face of the slope. To the north of the trigonometrical point 1,784 the sandstones and conglomerates rest horizontally, and form a precipitous escarpment of about 150 feet on the highly tilted mica schists and quartzites, and if you add to this another 150 feet it will probably be near the total thickness of this formation. The same steady dip of these beds continues all along its outcrop to the east.

The formation consists of conglomerates and reddish-brown sandstones interstratified, and differs in its intirety from the Silurian conglomerates, the latter consisting exclusively of conglomerates in which the majority of the pebbles are quartzites, while in the former flaggy red sandstones alternate with a pebbly conglomerate, the pebbles being exclusively vein quartz. The exception to the composition of the pebbly conglomerate occurs only at its base, where, at its junction with the metamorphic rocks it is made up of angular pieces of the subjacent rock. This formation is unfossiliferous.

* From being horizontal at the northern outcrop the angle increases to 20° at the cliffs on the shore of Clew Bay.

Lower Carboniferous Sandstone.—Overlying the Old Red Sandstones, to the north of Clew Bay, there is a fair thickness of this formation, but the thickness is much less than that of the Calciferous series at Ballycastle in the north of Mayo. The boundary between these beds and the older is not well defined, the colour of the sandstones generally indicating the distinction; the probable thickness is about 300 feet.

The beds are uniformly deposited, but present very many gradations from sandstones to shales and limestones.

The uppermost beds, which are well developed in the neighbourhood of Rockfleet Bay (which is part of Newport Bay), consist of highly quartzose thick bedded hard compact sandstones, which are separated from the Lower Carboniferous Limestone beds by about 18 inches thick of black shales. Underneath the sandstones are thin beds of fossiliferous limestone, which rest on slightly calcareous sandstones interstratified with black muddy shales, in which silicified corals are abundant.

As we descend in the series the limestones and shales disappear, and are replaced by ripple marked sandstones, variegated in colour, but in texture very similar to the older sandstones. In the neighbourhood of Newport, on the shore at Drumbrastle, East, there is a good section also of the higher beds of this formation, consisting of:—

	Feet.
Hard calcareous grit,	1
Well bedded black limestone,	3
Thin beds of black shaly indurated limestone, with mica along lamination,	11
Bed of limestone,	1
Hard brown arenaceous limestone micacized along lamination,	12
	28

In the north east of the district there is probably a much greater thickness of the Lower Carboniferous Sandstone than about Clew Bay, as the area occupied is much larger, and there the rocks form the continuation of the series whose entire thickness about Ballycastle (Sheet 53) was estimated at 1,000 feet. Unfortunately, however, the rocks cannot be seen *in situ* owing to the enormous thickness of bog and boulder clay which, in that locality, covers about 35 square miles of country without showing a rock exposure. However, the large east and west fault, which is prolongated into this district from that to the east, exposes in the Keenagh river beds of the Lower Carboniferous Sandstone, consisting of pale flaggy sandstones over argillaceous sandstone with false-bedding, and greenish gray earthy sandstone associated with green and red shales, containing thin pyritous grit bands. Some of the beds here are worked for flags.

Lower Carboniferous Limestone.—The basin to the east of Clew Bay is formed of limestone not separable into the usual subdivisions as elsewhere. As the few exposures show the beds to be lying at very low angles, it is inferred that the entire consists of Lower Limestone. The towns of Newport and Westport are

both situated on it. The description of the rocks at Westport will be found in the Memoir to accompany Sheets 83 and 84. About Newport few exposures are met with, as the country west and south of it is covered with a great thickness of boulder clay forming peculiar dune-shaped hills, the valleys between these hills rarely exposing the subjacent strata. A mile to the south of the town a quarry exposes dark blue limestone with shale partings; the beds are almost horizontal.

At Brockagh, about three miles S. E. of Newport, the Rossow River cuts through a considerable thickness of dark blue and black well-bedded crystalline limestones, which are probably the lowest beds of this formation.

On the eastern margin of Sheet 63 the Lower limestone is exposed north of the great fault, the strike of the beds being at right angles to the direction of the fault, and the dip at high angles from 25° to 40°.

Igneous Rocks.

Basalt and Dolerite.—A few narrow dykes are met with in the different formations, one in the quartzite south of Nephin-beg, one in the quartzite south of Bunaveela Lake, and three in the Old Red Sandstone south-east of Buckoogh; owing to the short area they traverse, and their insignificance in width, they afford very little information.

Felstone.—Three parallel dykes of felstone traverse the schists along the foliæ in the low ground approximate to the large fault on the east of the district, by which they are cut off at their northern extremities. The dykes are continuous for some distance, and can be accurately traced in the river course. One of these weathers rapidly, another decomposes the schists adjoining; no further evidence could be obtained of a similar rock throughout the area under description.

Post-Pliocene (Drift).

Boulder Clay.—In the southern portion of the district the boulder clay must have been of very considerable thickness, forming as it now does those remarkable dune-shaped hills and islands in Clew Bay south of Newport.

The plan of these hills is always oblong, the axis generally lying in an east and west direction, and the greater number of them being more than 100 feet above the level of the sea, without any rock formation *in situ*.

Their composition is identical with one another, well striated and polished blocks of limestone being set in a matrix of blue pasty clay.

North of Clew Bay the composition of the boulder clay varies according to its position with the subjacent rocks, red sandstone blocks over the Old Red Sandstone, and mottled sandstones and a few limestone blocks over the Lower Carboniferous Sandstone. Further north, and especially towards the north-east of the dis-

trict, the boulder clay occupies a very large area over an undulating country, and is capped by a great thickness of bog. Where a section was observed the following blocks were noted:—chert, Carboniferous conglomerate, Old Red Sandstone, schists, grits, quartzites, and a few granite blocks.

In the west of Sheet 63 along the shore, and river banks, boulder clay and gravel is exposed in some instances of considerable thickness.

On the shore S. of Fahy Lough there is a cliff exposed consisting of stiff boulder clay at the bottom, and coarse gravel and sand towards the top, the whole being about 35 feet, in which are well scored boulders of schist, red sandstone, and coarse conglomerate, the latter evidently having been carried by ice from the country to the S. and S.E., a distance of 10 or 12 miles.

Around the shores of Tullaghan Bay numerous large transported blocks are met with in various places.

West of Corsleive, boulder clay drift seems to be comparatively absent or covered with bog. It is best seen in the river sections, where it principally consists of blocks of quartzite and schist in a tough yellow clay, and of rounded blocks and boulders of Carboniferous sandstones in a similar clay in the river sections E. of Corsleive. Along the slopes of Corsleive and Nephin-beg there is a well-marked talus, consisting principally of quartzite *debris*.

Moraines.—In the Corsleive range, as well as that to the south, several well-marked moraines were noted, particularly to the N. and W. of Nephin-beg, in a series of hummocks along the base of the mountain. One in particular filled the valley between Nephin-beg and Corsleive, damming the water and forming several lakes, as Scardaun, and some smaller ones not noted on the maps.

Other lakes were formed in a similar manner, such as Nambrackkeagh, Drumderg, Adanacleveen, and Kilnabinnia, east of Corsleive.

The moraine matter dams up small lakes (Corryloughaphuill, Corranabinna, and Anaffrin) which occupy recesses in the cliff line passing by Glennamong. The recess containing Lough Anaffrin is due to faulting in large measure; but in the former two instances perfect *cirques* are observed. Another well-formed *cirque* occurs about 1,000 yards south-east of Glennamong trig. station, directly behind that containing the first named lough above. Several other cirques are also met with in the region in more or less perfect form.

Sand and Gravel.—Resting on the boulder clay on the extreme north-east of the district sand and gravel hills are frequent, and all present an *eskery* form; some are stratified, and present similar external forms and characteristics to the eskers of the central plain of Ireland; their boundary westward is very well defined, the Altnabrocky River, which flows into the Corick River in Sheet 52, separates it from the boulder clay which is to the west.

Erratic Blocks.—Resting on the eskers, boulder clay, high and low ground, blocks of almost every variety are to be met with. On the eskers granite blocks of enormous size are found; these have been transported from the S.W., and the limit of the

boundary of the granite blocks coincides with that already described as the westward boundary of the sands and gravels.

Erratics of red sandstone and fine conglomerate from the north of Clew Bay are found scattered all over the district north of the Old Red Sandstone boundary, and although the highest point at which the Old Red Sandstone has been found, was 1,784 feet above the sea, we find the blocks on the top of the Corsleive range, part of which is over 2,000 feet above the sea.

Ice Striæ.—Very few cases of ice striæ were observed, but there is abundant proof of ice action in the rounding and polishing of the rocks. The ice seems to have travelled from the south, as numerous blocks and boulders of sandstones from the Croghmoyle range of mountains were observed on the summits of Nephin-beg, Corsleive, Maumykelly, &c.

Bog.—As before remarked, to the east of Corsleive the most of the low undulating ground is covered with bog, in which stools of trees are frequent, and in several places where the rivers had cut through the bog to the underlying gravel and clay the bog ranged from 8 to 20 feet in thickness.

To the west of Corsleive, and extending to the S.W. portion of Sheet 63, the entire area is covered with bog, even down to the sea, and is generally of great thickness, especially N. of the Owenduff River, where it must be at least 20 feet. On the shores of Tullaghan Bay, below high water mark, numerous large trunks and roots of trees are to be met with resting in the bog, showing the existence of extensive forest in the locality at one time. At present the whole country is quite destitute of timber of any kind.

Blown Sand.—A beautiful fine white sand occurs along the shore S. of Traboy, extending towards Fahy Lough for a distance of a mile, where it thins out.

GLACIAL STRIÆ observed in this DISTRICT.

County and 6-inch Map.	Townland.	Direction.	Remarks.
Mayo.			
45	Srahmore, . .	N.N.W.	On top of mountain.
46	Bunaveela, . .	N. 45 E.	On W. slope of Bullaunmore mountain.
,,	Coolnabinnia, . .	N. 45 E.	At parish boundary on top of mountain.
65	Bolinglanna, . .	N. 50 W.	On slope of mountain.
	Dooghbeg, . .	N. & S. N. 35 W.	On cliff at shore.
	Do., . .	N. & S. N. 27 W.	On cliff at shore.
67	Rusheens, . .	E. & W.	On shore.

Chapter III.

Principal Faults.

Several faults of Post-Carboniferous age are clearly defined, not only by the physical features presented along their course, but also by the stratigraphical relations of the newer sedimentary to the metamorphic rocks.

On the extreme north of the district a W.N.W. fault throws down the Carboniferous rocks on the east, and produces the bold and precipitous escarpments forming the Corsleive range. The effects of this fault, to the south of Corsleive range, are more or less obliterated by a cross fault which passes along the Skirdaun Valley.

The southern boundary of the Carboniferous rocks just alluded to is also marked by a well defined east and west fault, which enters the district from the east, and throws down the newer rocks on the north, leaving in some places the strike of the Carboniferous beds coincident with the foliæ of the metamorphic rocks.

To the south of Newport a fault of the same age as those just described throws down the Carboniferous rocks on the north, and is a prolongation of a large fault which corresponds with the escarpment of the Croaghmoyle range of hills, and which has been described in the Explanation to accompany Sheet 64.

Older faults are frequent in the metamorphic rocks, but their exact age cannot clearly be determined; whether it was prior or subsequent to metamorphism is uncertain.

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