

FROM THE HEADMASTER.

"Hen Gymru fynyddig, paradwys y bardd"

Twelve months ago when I wrote a preface to the Handbook for the Educational Journey of the Technical High School, our party was on the eve of departure for Kirkby Lonsdale amid the lakes and mountains of Westmorland: this year's expedition is to LLANGOLLEN on the River Dee in the most attractive of the hill districts of North Wales. This place moved John Ruskin to write:-

"The Vale of Llangollen is a true valley between ranges of grandly formed hills, and the village of Llangollen is one of the most beautiful and delightful in Wales or anywhere else."

As on previous Journeys, you will have your carefully planned and well-balanced programme of outdoor education and recreation, and this will include visits to most places of local interest, so you should have enough to engage your attention profitably. Remember that in a school project of this kind you have a good opportunity to cultivate one of the qualities most essential to a happy and useful life, namely, the ability to understand and work smoothly with other people. I am sure you will not neglect it.

George Borrow knew the Wild Wales of his time and could think of two reasons for visiting the country: to dig lead from the hills and to learn the Welsh language. You may not returned heavily laden or very fluent in a strange tongue, but you will gain much profit from this venture.

God speed and

Siwrnai dda i chwi!

B S Howard.

ORGANISATION OF TECHNICAL HIGH SCHOOL PARTY.

COACH I				COACH II	
GROUP A		GROUP B		GROUP C	
Mr. E. G. Newell		Mr. E. G. Bennett		Mr. A. Clements	
Baucutt, R.	T4	Bartlett, R.	T3	Betts, D.	2A
Broom, C.	T4	Gamble, K.	T3	Howe, A.	2A
Eastwood, C.	T4	Ginger, P.	T3	Hutcheson, B.	2A
French, D.	T4	Gray, W.	T3	James, P.	2A
Jeynes, R.	T4	Jones, R.	T3	Kingdon, R.	2A
Spring, J.	T4	Lewis, H.	T3	Penn, A.	2A
Scott, A.	T4	Powell, R.	T3	Spring, P.	2A
Webb, P.	T4	Nightingale, J.	T3	Hobson, D.	2B
Webster, C.	T4	Scott, A.	T3	Hobson, G.	2B
Whiting, R.	T4	Simmonds, P.	T3	Johnson, T.	2B
Wright, J.	T4	Spriggs, J.	T3	Montier, P.	2B
Avil, P.	G4	Steel, J.	T3	Smith, T.	2B
Craddock, R.	G4	Stones, D.	T3	Tansley, M.	2B
Denton, A.	G4	Swift, M.	T3	Cadd, R.	G3
Garratt, J.	G4	Taylor, R.	T3	Montgomery, R.	G3
Lee, A.	G4	Walker, G.	T3	Perkins, M.	G3
White, A.	G4	Williams, P.	T3	Snedker, A.	G3
Turland, A.	G3	Church D.	C3	Stanton, M.	G3
Turland, L.	G3	Walden, D.	C3	Tipping, R.	G3

Dormitory allocation will be made on arrival at
"Eirianfa".

GENERAL NOTES.

THE COUNTRYSIDE:

Assist in maintaining the good name of the School by treating the country with the reverence due to natural beauty. When passing over fields always keep to the footpaths and avoid trampling down mowing grass or standing crops. Close and securely fasten all gates. Do not leave litter about, and after an outdoor lunch see that all refuse is gathered up and carefully disposed of.

Be particularly careful with regard to fire, especially in dry weather. Do not burn used lunch paper out of doors. Many townspeople do not realise how easily disastrous heath and forest fires are started.

GUIDES:

On a number of excursions we shall have experienced local people with us who are there to help. Ask sensible questions and act with courtesy, for this will be repaid a hundredfold and we shall leave behind a good reputation.

QUARTERS:

Like the Hostel of last year, the House in which we are staying is one of great character, well furnished and beautifully situated in its own grounds. We must therefore at all times conduct ourselves properly in it and any instruction which may be given by the Manager or staff must be promptly and quietly obeyed for by so doing our visit will be made the more fruitful and happy.

LLANGOLLEN.

(JUNE 27th - JULY 4th, 1953).

SATURDAY, June 27th.		Journey to Llangollen. (Lunch break at Shrewsbury)
	a.m.	Service in Llantysilio Church.
SUNDAY, June 28th.	p.m.	Walk in district. (Panorama Walk - World's End.)
	Evening	Talk by Rev. Prys Darbyshire-Roberts, Llantysilio.
MONDAY June 29th.		Day Excursion to Liverpool - Docks - Tunnel. (Picnic Lunch - New Brighton)
	a.m.	Visit to Valle Crucis Abbey and Horseshoe Pass.
TUESDAY, June 30th.	p.m.	Chester - Conducted tour of City and Walls.
	Evening	Cricket Match v Llangollen Grammar School.
WEDNESDAY July 1st.		Day Excursion to "Showdonia" via Corwen, Bettws-y-Coed, Capel Curig and Beddgelert. (Picnic Lunch). Return via Penrhyndendraeth, Ffestiniog, Bala and Corwen.
THURSDAY, July 2nd.	a.m.	Visit to Moel Fferna Slate Quarries.
	p.m.	Walk across the Berwyns to Glyn Ceiriog.
FRIDAY, July 3rd.	a.m.	Walk - eastward along the canal bank.
	p.m.	Trip down Vale of Clwyd to seaside at Rhyl.
SATURDAY, July 4th.		Journey back to Northampton.

DAILY ROUTINE.

7.30 a.m. Rising Bell.

8.15 a.m. Roll Call by Senior Boys.

8.30 a.m. Breakfast { Sunday 9.0 - Roll Call 8.45.
{ Saturday 8.0 - Roll Call 7.45.

9.00 a.m. Morning Prayers.

Sick Parade.

9.15 a.m. Inspection of Dormitories by Duty Masters.

9.30 a.m. Issue of pocket money by Group Masters.

9.45 a.m. Assembly for Morning Programme.

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1.00 p.m. Lunch.

2.00 p.m. Assembly for Afternoon Programme.

4.30 p.m. Tea.

7.30 p.m. Dinner.

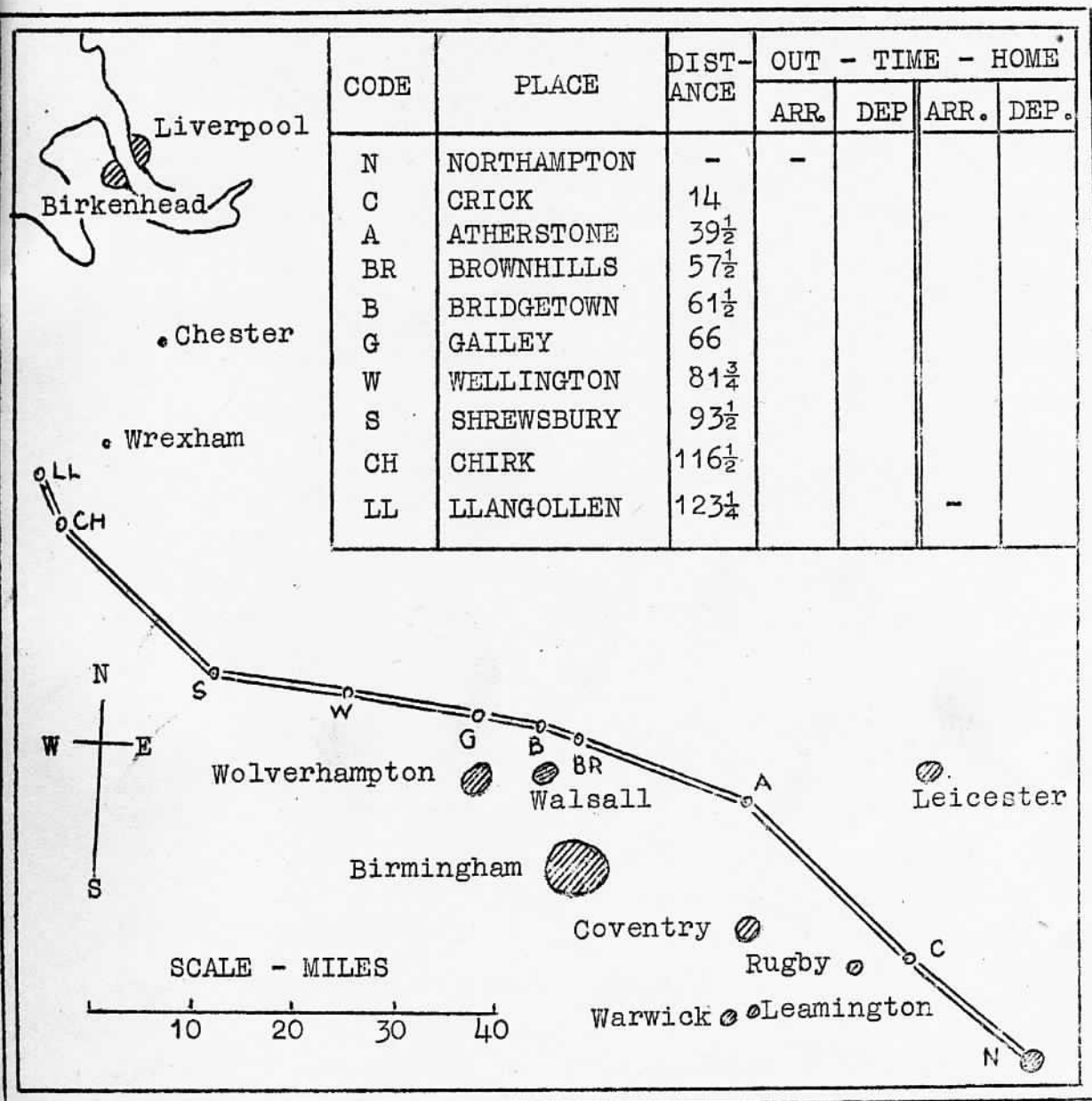
9.15 p.m. Roll Call by Senior Boys.

9.30 p.m. Assembly for Prayers.

Bed.

10.30 p.m. Lights out. Silence.

OUR JOURNEY TO AND FROM LLANGOLLEN.



From Crick to Llangollen we journey along the Watling Street (A5).

THE ROUTE TO NORTH WALES.

The way up to North Wales inevitably takes us along the great national highway of the Watling Street - probably the oldest routeway in the British Isles and possibly known long before the coming of the Romans. We in Northamptonshire are familiar with this road which we join near Crick, 4 miles from Rugby after passing through Harlestone and West Haddon. The road at this point travels almost 'dead' straight for many miles through the flat and low lying marls of the English Midlands.

At Atherstone we skirt the edge of the Warwickshire coalfield and we shall see the pithead gear of the Nuneaton coalfield and also see the open cast workings along the roadside.

Three miles from Lichfield the road turns abruptly westwards and passes near Cannock, an extension of the South Staffordshire coalfield.

The road now proceeds to Oakengates and Wellington, a market town for the rich agricultural region around and thence to the famous fortress town of Shrewsbury lying on a great bend of the Severn where the river begins to cut its great gorge.

At this point the character of the scenery changes as we begin to leave the sedimentary rocks of soft sandstones and marls and enter upon the very ancient and igneous rocks of eastern Wales.

Oswestry lying at the foot-hills of the Berwyn mountains is by-passed by some four miles, and we pass through Chirk and finally arrive at Llangollen which is a valley town of the River Dee as it breaks through the Ruabon and Berwyn mountains.

This town is a market centre for the cattle and sheep farmers of the hills and is beautifully placed on the Dee where it almost gorge-like.

The A5 road (Watling Street) now follows the Dee as far as Corwen on the Welsh uplands, where it turns westwards to Bettws y Coed, making use of the Nant Ffraneon pass to reach Bangor on the Menai Straits and terminating at Holyhead, the ferry port for Ireland.

WATLING STREET.

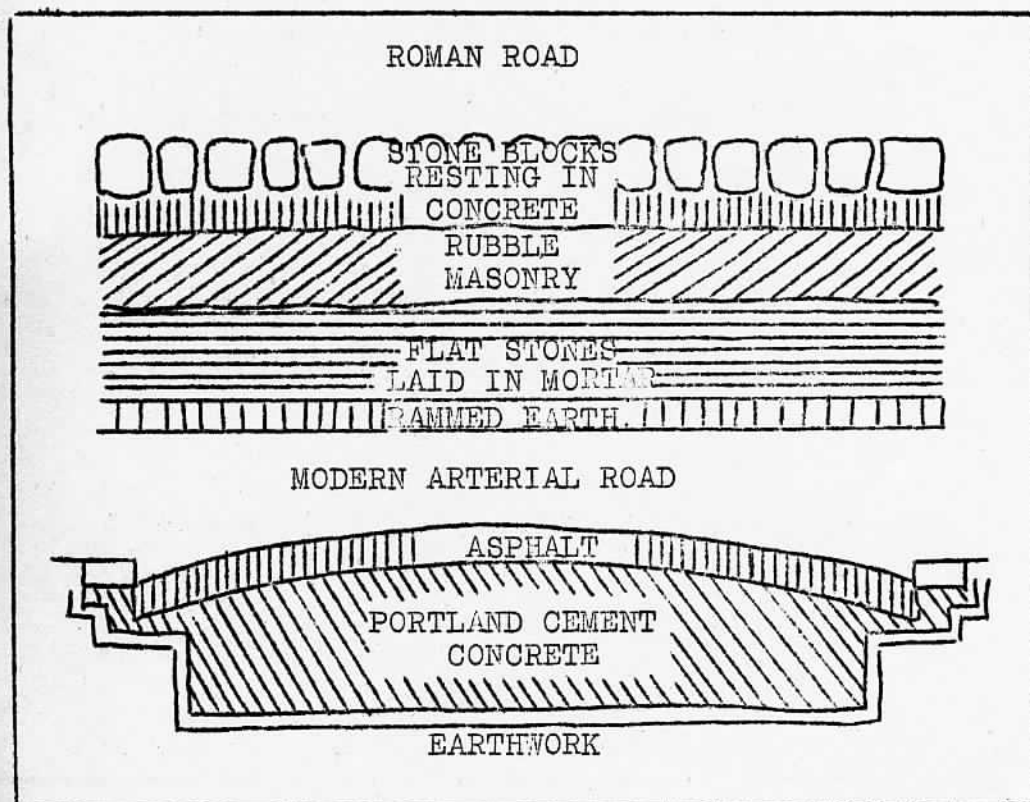
Much of our journey to North Wales will be along A.5. This is the Ministry of Transport's name and number for the road still known as the Watling Street. Although paved and, probably, straightened in parts by the Romans, the Watling Street was trodden out long before the invasion of 43 A.D. It was probably a New Stone Age trackway, marked along its course by tall, standing stones, a route by which amber from the Baltic and pottery from France, were carried to exchange for the gold of Ireland. Then, as now, it ran from Dover, in a northwesterly direction, fording the Thames near London, crossing the Icknield Way at Dunstable and continuing to Chester by way of Wall. From Chester it ran to Bangor, then across the Menai Straits to Menai village and through Anglesey to Holyhead.

In mediaeval times it was known as one of the four great roads of England. Legend and story explained its building and name, but, though interesting, they cannot be said to be historically true. One story said its builder was a British king, Mulmutius, who gave to all who travelled its length freedom from arrest by his creditors; another said its name came from a Roman Officer Vitellianus, who supervised its building; while a third story, perhaps correct, drew its name from Verulamium, the Roman name for St. Albans, by way of a corruption, Werlam.

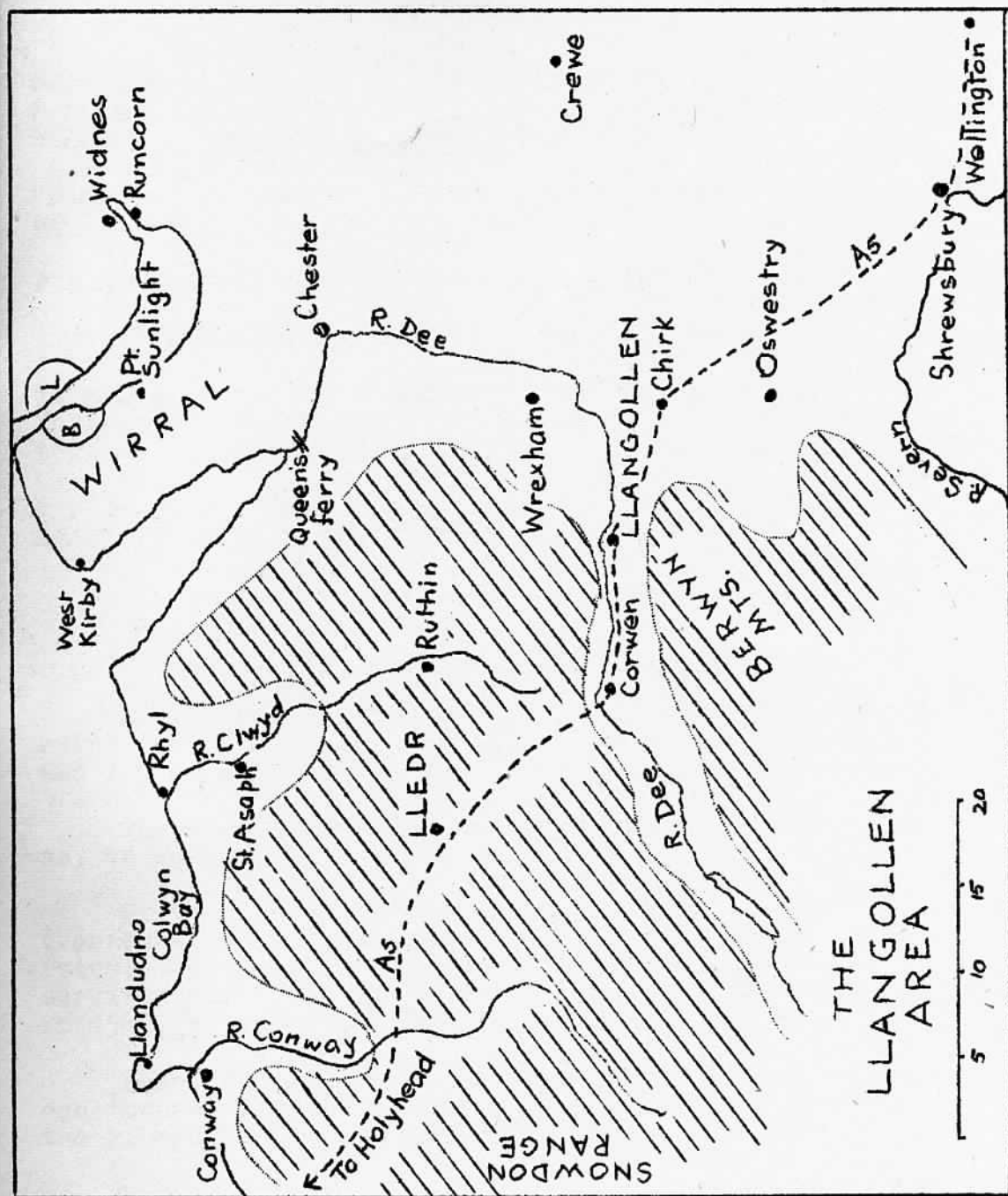
If the Romans did not survey it in its entirety, they built it, and engineered its crossing over river, marsh and hillside. To them also we must ascribe the deviation to Wroxeter, where was a Roman town and the Headquarters of a legion. In a distant province, such as Britain was, under Roman rule, the first purpose of a road was military. Not all Roman roads were designed for war, but the main highways certainly were. They were arteries along which the legions were to march rapidly and safely. Hence they were direct, straight if possible - along the Watling Street there are eleven straight lengths, of which some are more than 25 miles long - and raised for security from sudden attack as a platform above the surrounding countryside. As might be expected Roman engineering, magnificent near the Capital, became progressively worse as the provinces were the more remote. But, as a main highway, the Watling Street was soundly constructed. Its surface, 'The summa crusta' was paved, and the sublayers, from the foundation of large flat stones, carefully graded.

Probably because during the Middle Ages, English Trade was directed to the Continent, particularly France for wines and Flanders for cloth, the Watling Street suffered less deterioration than the Ermine Street, our Great North Road. The paving stones, squared and smooth-faced were removed for building, but a usable surface was left. Towards the end of the Seventeenth Century an increase in internal trade led to a public demand for Highway improvement. The Turnpike was devised when bodies of private gentlemen undertook to repair and resurface lengths of the King's Highway. A toll was charged to recoup their expenses and yield a profit: the users paid to repair the roads.

As road-users, from 1890 onwards, grew in number fresh surfaces were devised and laid to cope with heavier, faster, wheeled vehicles but the course of the Watling Street remained the same. It is still the straight (street) way to Waeclinga (Saxon for St. Albans), it still



by-passes the cathedral town of Lichfield. Even its length is the same: to the Romans it was 220 millia passuum (thousands of steps); the A.A. gives it as 22 $\frac{1}{2}$ miles. Once wide enough to take two chariots abreast, or four legionaries in line, it can now take four streams of motor-traffic: the tyres of our coaches



SOME FACTS CONCERNING LLANGOLLEN.

Beautifully situated in the vale of Llangollen with a Fourteenth Century bridge, one of the traditional Seven Wonders of Wales, over the River Dee.

"Plas Newydd" the well-known former home of the "Ladies of Llangollen" is now the National Theatre of Wales.

There are associations with Borrow's "Wild Wales".

1 mile north is Castell Dinas Braw on the hill.

1 $\frac{3}{4}$ miles N.N.W. is the foot of the famous 1300 feet high Horseshoe Pass which provides fine views, especially towards the rocky Edlwyseg Hills in the east.

4 miles north is the picturesque, lovely Plas Hchaf or Eglwyseg manor house, surrounded by woods.

THE ABBEY OF VALLE CRUCIS.

At the foot of the famous Horseshoe Pass, these ruins are of a Cistercian Abbey, founded about 1200 A.D. and lie in a beautiful valley not far from Llangollen.

The name Llangollen may have reference to this abbey as, in Welsh, Llan, means "a church".

Parts of the abbey church, built in the usual transeptal form with aisled nave and chancel, survive in ruins. The Chapter house, with the dormitory above, survives almost in its entirety, for, after the Dissolution in 1540, it was used as a farmhouse.

Happily few alterations were made and the visitor can inspect the Fourteenth Century Chapter House and admire the ribbed vaulting which carries the dorter above.

Parts of the cloister and outbuildings also survive.

It is interesting to know that the monastery's annual income reached in 1540 the figure of £188.

SHREWSBURY.

Shrewsbury is beautifully situated on a bend of the Severn, with the fine English and Welsh Bridges and a wealth of old and interesting half-timbered houses and inns.

The Castle, parts of which show Thirteenth Century work, was converted into a house in the Eighteenth Century and now belongs to the Corporation.

The nearby Council House, with its fine Seventeenth Century timbered gateway, was once the residence of the Lord President of the Council of the Marches of Wales.

The Abbey Church is Norman to Perpendicular with monuments and opposite it stands the lovely Fourteenth Century Refectory Pulpit.

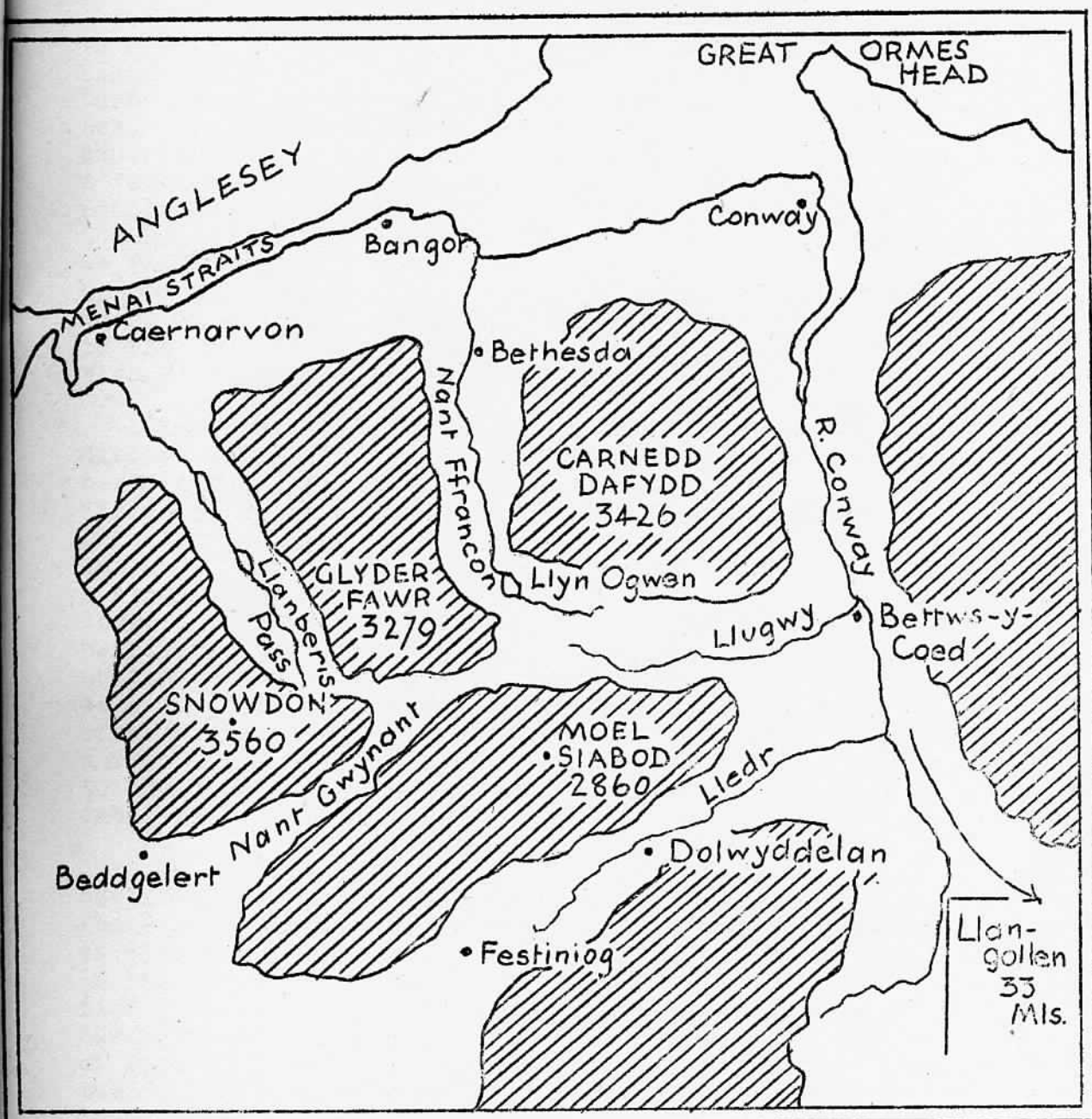
The Old School, Sixteenth to Seventeenth Century, is now the Free Library and Museum, containing Roman remains from Wroxeter (q.v.) while the magnificent new school buildings lie over the river.

In a half-timbered house on Wyle Cop, now a shop, King Henry VII lodged in 1485 before the battle of Bosworth.

Grope Lane and Butcher Row are picturesque and some of the finest timbered houses are in the suburb of Frankwell.

The Quarry grounds by the river have grand lime avenues.

The Mount was the birth place of Charles Darwin and Admiral Benbow was born in Benbow House on Coton Hill.



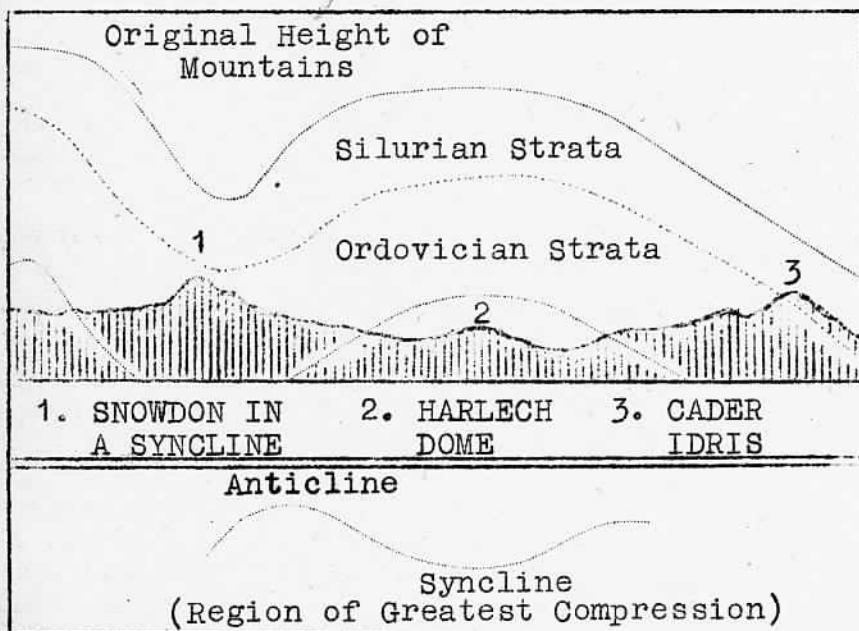
THE HIGHLAND MASSES AND PASSES.

The Lledr and Llangollen Valleys in which we are going to stay for a week are well known to holiday makers of Llandudno and the N.Wales coast. Our attention will be turned more to the mountains and the valleys than to the sea. To those who have not visited Wales before the experience will be almost as stimulating as a visit to a foreign country since the scenery, the climate, the people and their language are unlike anything belonging to the English Midlands. There are small settlements we shall probably visit where scarcely any English is spoken at all and there are vast tracts of uplands and moors where not a settlement of any description is found: in the Midlands we can never go above a mile or so without finding a house or village.

The fact that the whole of the environment is so different has produced a different race of people possessing certain very marked characteristics. The typical Welshman "tends to be hot tempered, but his temper is recovered as quickly as it is lost. He is extravagant in thought and language, a born story teller and an expert at improving a story where the bare outline of truth seems to him to leave the result lacking in colour. He is intensely patriotic, passionately devoted to his native land and its customs and prizing loyalty above material advantage. He is a lover of poetry and a keen musician and also possessed of a melancholic habit which causes him, often apparently unreasonably, to pass with rapidity from wild exaltation to the depths of despair and to acquire a sense of fatalism."

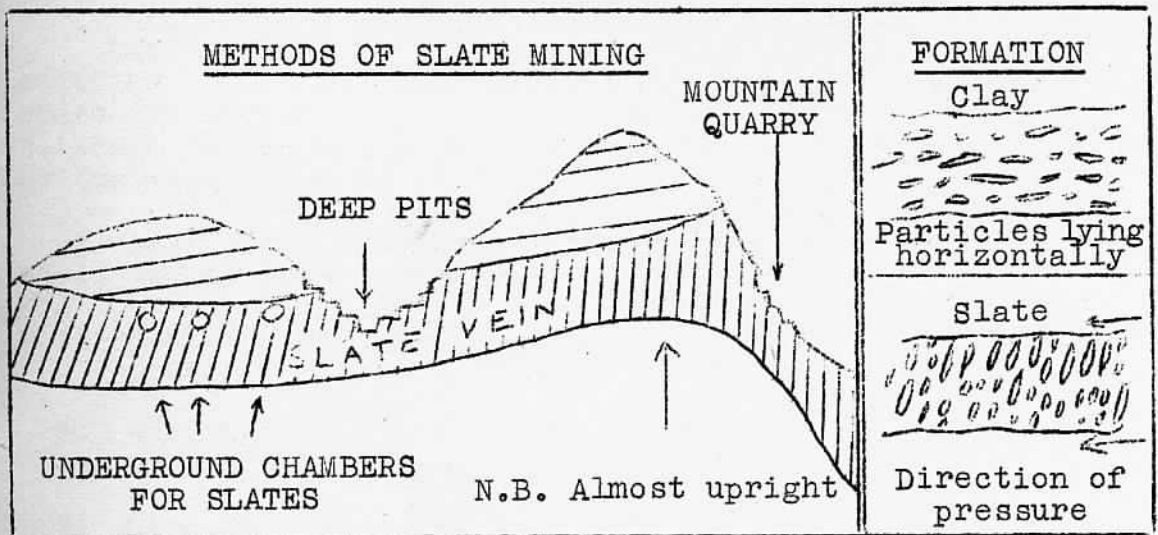
In order to understand this environment it is essential to know something of the geological formation of the scenery and this takes us back to the very beginnings of things. We know that for countless centuries the whole of this area was beneath the sea, for almost everywhere we find fossils of those living creatures which could only have existed in the oceans. In the course of millions of years the area was slowly uplifted above the waters and subsequently erosion by ice, running water, wind and sun began to wear away the surface, the resulting sediments being taken down the rivers and into the oceans, covering their floor with deposits which were compressed by the mass of water from above and the internal pressures from beneath. About 350,000,000 years ago the area was subject to volcanic activity on the ocean floors, the lava spreading out, in some cases piling up and in other cases flowing for miles. (This depended on the chemical nature of the erupted material).

The whole structure was subject to folding and compression, was subsequently uplifted above the ocean surface and the usual denudation followed. But the really curious point is that the high peaks and mountains which we see to-day are in effect the valley bottoms of the original landscape!

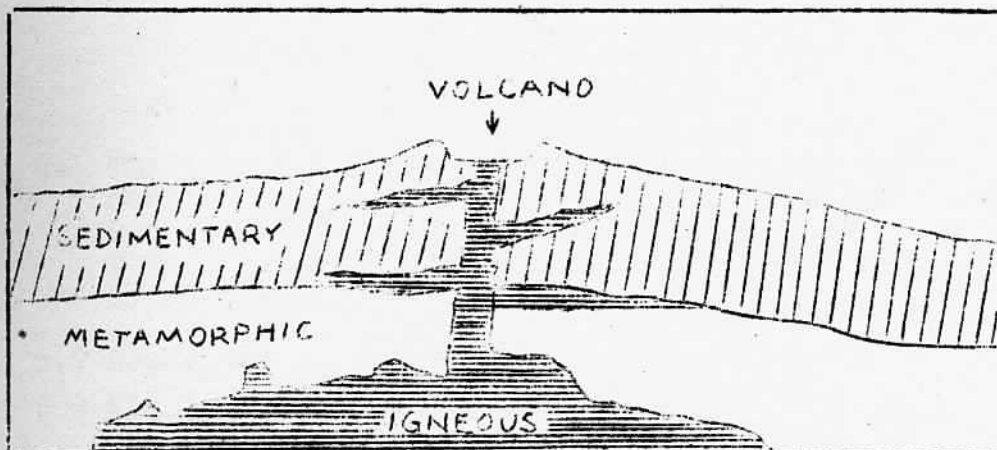


The reason is that when rocks are folded those at the crests of the folds tend to be stretched and to find relief from the strain by cracking, so that they are weakened and more easily worn away. The rocks in the trough, on the other hand, are squeezed and rendered harder and more compact; they are, in consequence, better able to resist erosion and so tend to remain as high ground when the rocks of the crests (anticlines) have been worn to lower levels. The diagram helps us to understand this. Thus Snowdon for instance, is an original valley bottom.

Some of the soft muds and sediments in the former ocean were subject to great pressure and heating and have become what we call slates, but it will be obvious from the diagram that pressure was applied from the side which explains the property of splitting easily, "cleavage".



Most of the rocks of the area are igneous or volcanic but some have been changed by heat and are known as metamorphic rocks. The granites that we find all over the area are composed of quartz, feldspar, mica and other minerals which when they cooled solidified in certain areas which are known as veins. Thus the region is fairly rich in minerals particularly copper, iron, lead and also has a little gold. (Royalty on marriage always use Welsh gold for their wedding rings).



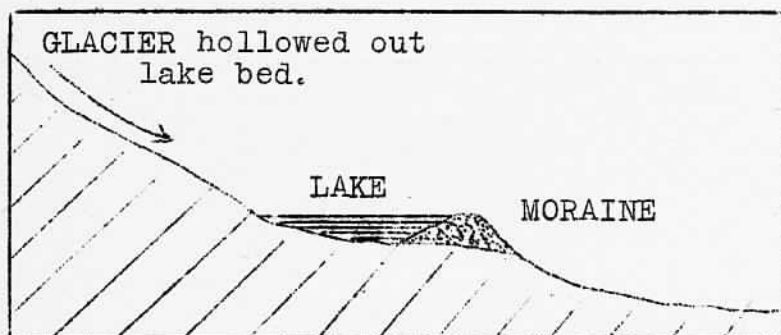
This is the rock formation we have mostly in West Wales.

We can summarise by saying that the whole area is made up of very ancient rocks which in places have been broken through by volcanic rocks but that as we go eastwards towards Llangollen and the Cheshire plain the rocks become younger and softer.

But the whole of this scenery has been greatly modified by the Glacial Period which began about 100,000 years ago and ended in this country 15,000 years ago, although the remnants are still to be found in Switzerland and Norway.

What is the evidence of the passage of glaciers we shall see in this region?

1. U-shaped valleys - the Llanberis and Nant-ffrancon passes.
2. Hanging valleys with waterfalls as we shall see in the Snowdon region.
3. Cirques, or lakes, situated well up on a mountain side and probably formed by the grinding action of a glacier :-



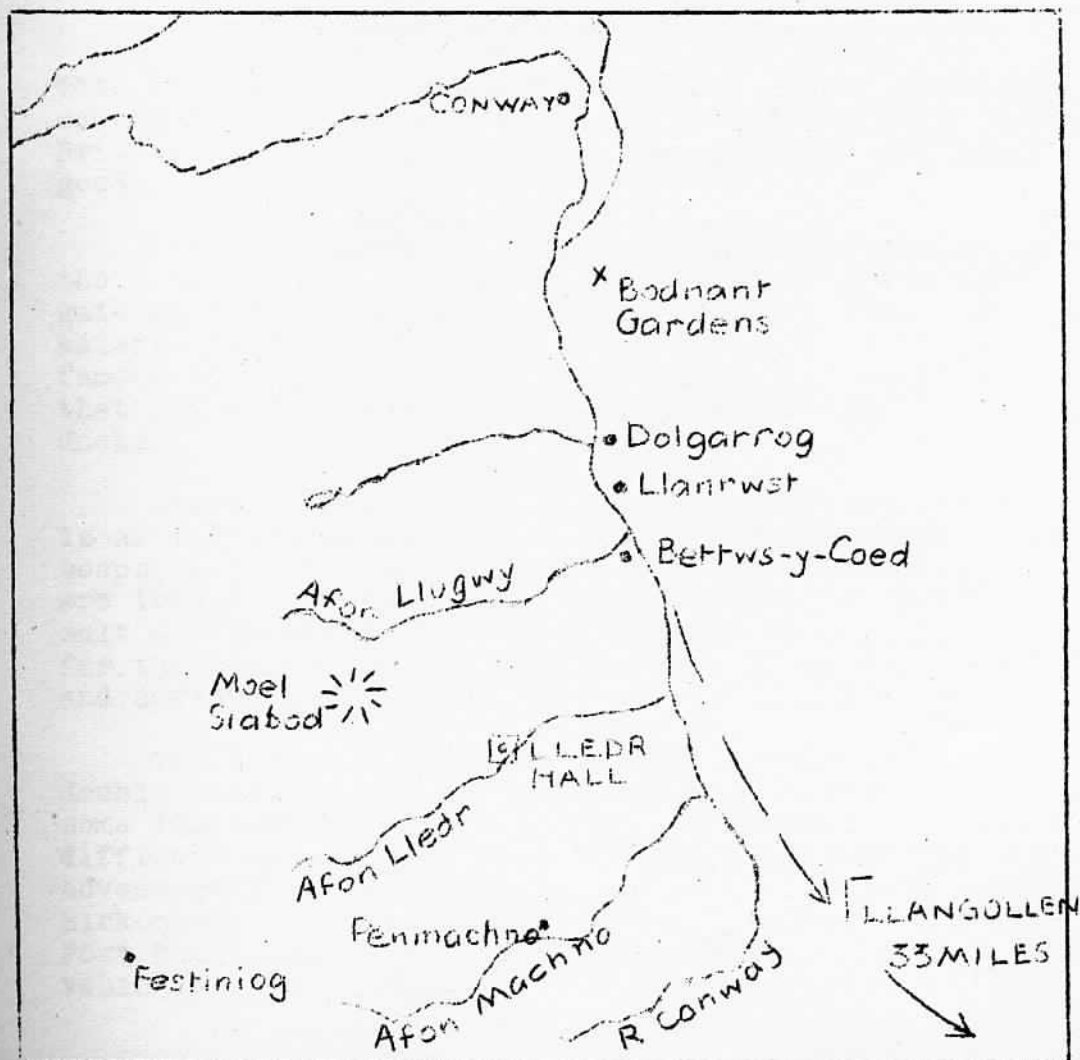
e.g. Llyn Llydaw; Llyn Ogwen.

4. The presence of moraines i.e. boulders and material carried along by the ice and deposited on melting. Sometimes this material has dammed up valleys to form lakes, e.g. Llyn Padarn and Llyn Peris in the Llanberis Pass.
5. Rocks are often deeply scratched showing where the glaciers passed over them. There are examples of the above to be found from the Berwyns in the east to the Snowdon range in the west.

As we wander through this beautiful scenery, let us think from time to time of the effect of the isolation upon the people. If we had been brought up in a remote region, in an area of loneliness, in a district of barren landscape and unrewarding soil we could not possibly be the type of people we are now. Thus environment plays a decisive part in the formation of character.

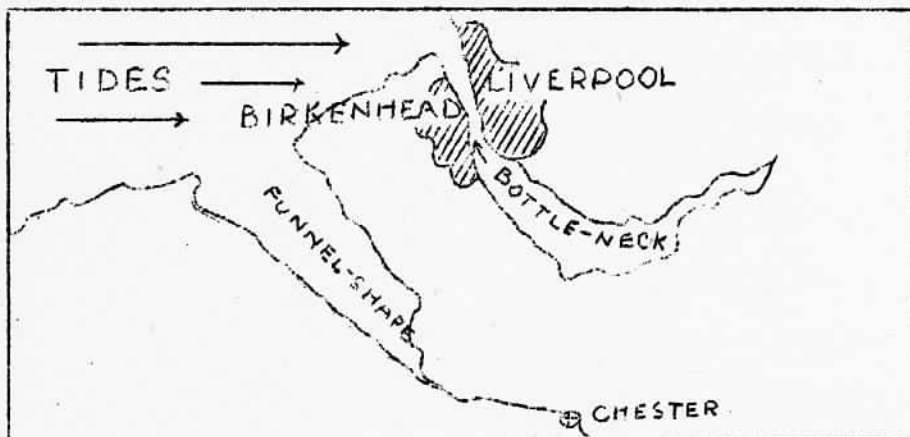
THE CONWAY BASIN.

You will notice from the accompanying map that the River Conway has no right-hand tributaries but at least four tributaries on the left bank of which the Lledr is one. This is reputed to be the most beautiful valley in Wales and is relatively unexplored since it lies off the main highway to Llandudno or Holyhead. The valley is well-wooded and gorge-like throughout its entire length, leading to Portmadoc and Harlech. The western side is dominated by the mountain mass of Moel Siabod 2860' (pronounced "Shabod") from which the Snowdon range can be seen in all its glory. Dolwyddelan is the chief town and market centre and here is the Castle where Llywelyn the Great was born, the fortress dating from 1180. We shall doubtless find that the Lledr is an excellent centre for the exploration of Snowdonia



L I V E R P O O L.

Liverpool is a modern port and little is known of it before 1700 for Chester was the port for N.W. England but the silting up of the Dee led to its decline. The very shape of the two estuaries is interesting for one leads to silting and the other to a scouring action.

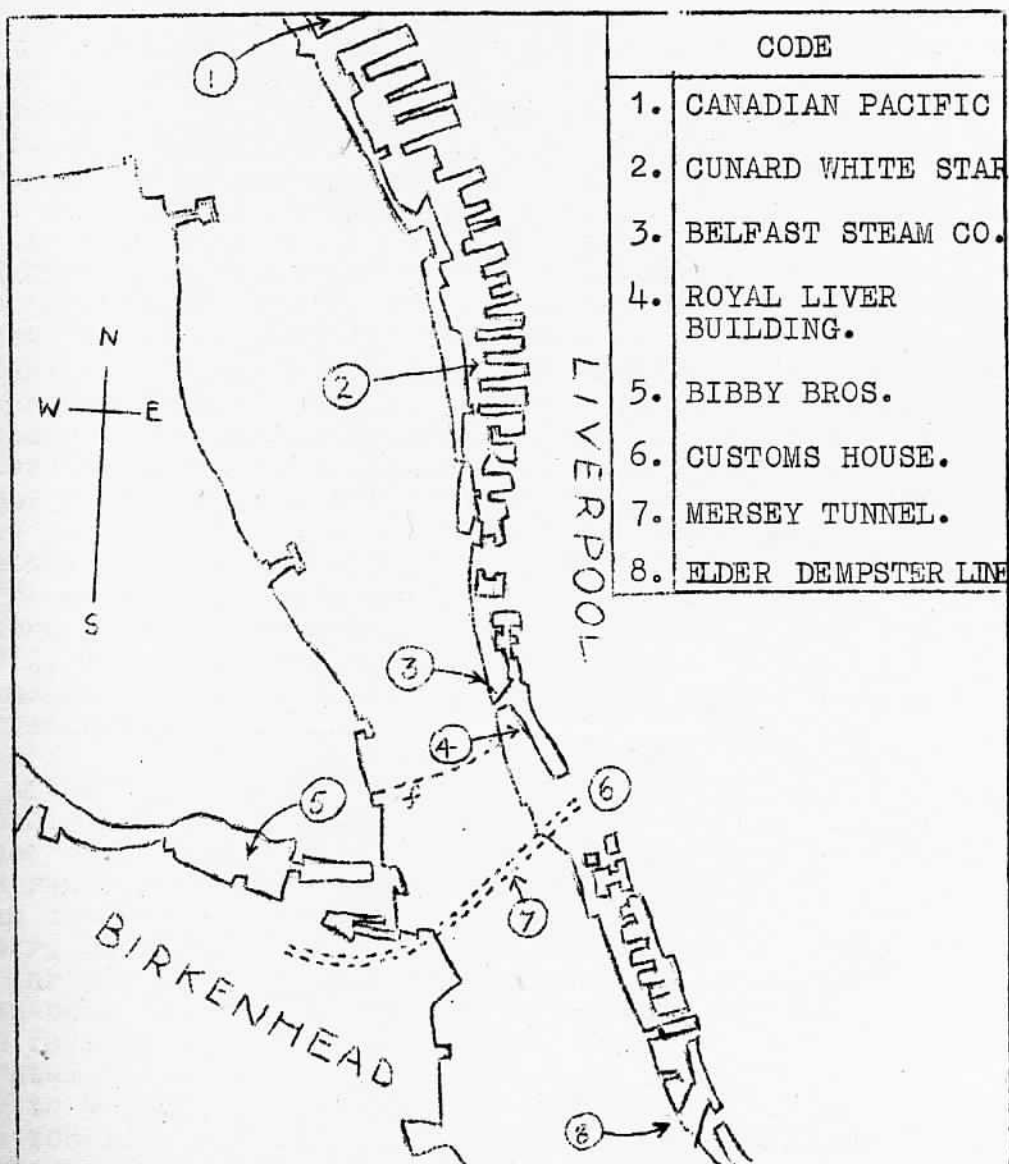


This and the opening up and settling of the Americas caused the rise of Liverpool as the second port of the British Isles and undoubtedly the greatest exporter of goods.

The 2000 acres of docks are constructed alongside the banks of the Mersey and to each dock there is a dock gate so that at low tide the dock basins remain full of water. Here are the docks used by some of the most famous shipping lines in the world and there is no doubt that you will see ships entering or leaving one of the docks.

Apart from its many shipping activities, Liverpool is an industrial city as well, manufacturing foodstuffs, soaps, refining sugar, making paints. The chief exports are iron and steel manufactures, chemicals, textiles, salt and machinery. The chief imports are grain (by far the biggest in the U.K.) sugar, wood, oil, vegetables and cotton.

The Mersey Tunnel was opened in 1934 and has a double carriage way for slow and fast traffic, dipping some 100 feet under the bed of the Mersey. It was a very difficult engineering feat but has proved of the greatest advantage for connecting up two industrialised areas - Birkenhead with its ship building, soap and margarine at Port Sunlight, and the Lancashire region. Over 6,000,000 vehicles pass through the tunnel each year.



Lever Bros., the great soap making firm have developed and own Port Sunlight. This area was selected because of the ease of import of vegetable oils from overseas.

AN OUTLINE OF THE HISTORY OF NORTH WALES.

Before the Roman Invasion of 43 A.D. the mountain area we know as Snowdonia was owned by a Celtic people called the Decangi. They had at an earlier date conquered and intermarried with the New Stone Age men, of slighter build and darker skin, who had settled here long before the birth of Christ. These Decangi were subdued by the Romans, probably from Chester, by 78 B.C., and paid tribute to the Roman Emperor down to the end of the Fourth Century A.D. After the Romans left in the Fifth Century A.D. the ruler of North Wales claimed the overlordship of all Britain. His capital was at Deganwy, near Llandudno, but his pretensions outstripped his power. In never-ending conflicts with the Saxons of Mercia he was worsted, and his successors hemmed in by the building of Offa's Dyke from the Dee to the Wye. The final insult was to be stigmatized by the name of Welsh, a Saxon word for foreigners. During the Ninth Century North Wales became known as Gwynedd and its Prince asserted claims to be overlord of Central and Southern Wales. Frequent raids into the Midlands brought, in 1062, a sharp war with the Saxons led by Harold Godwinsson Earl of Wessex, in which the Prince of Gwynedd was treacherously slain.

After the conquest of England, probably to rid himself of unruly barons, William I encouraged baronial attempts to conquer Wales and Scotland. The South and South West of Wales rapidly fell to Robert Fitz-Hamon, Earl of Gloucester but in the North resistance was more stubborn. From Chester, Hugh the Wolf, first Palatine Earl of Chester, made inroads into Gwynedd but no more. In fact, during the anarchy of Stephen's reign 1136-1154, there was a Welsh revival and victory in South Wales at Cardigan but the fatal divisions persisted. When Henry II restored order to England he extended his power into South Wales, where rebellious Normans had joined with the native Welsh, and the new King, even in 1171, extorted homage from the Prince of Gwynedd.

It was in the Thirteenth Century that the Welsh under two Princes of Gwynedd, Llewellyn the Great and his nephew Llewellyn, came near to achieving national unity and independence of English rule. By war, by treaty, barter and marriage during the reigns of Richard, John and Henry III, Llewellyn the Great forced the Welsh chieftains to admit his overlordship. Before he died, in 1240, he had claimed that his homage to the King of England was personal only and Wales itself a free and independent

Principality. The candle flared up before flickering out. Seeking helpers against the English King, Llewellyn, nephew of Llewellyn the Great, allied himself with the Baronial Party under Simon de Montfort against Henry III and his son Prince Edward. De Montfort's defeat in 1265 sounded the end of Welsh independence. Already South and much of Central Wales were under English rule; Gwynedd alone resisted, and kept an uneasy peace from 1264 to 1281, when Llewellyn's brother, Prince David, rose against the English.

When Hawarden Castle in Flintshire was captured in 1282 Edward I determined on the Conquest of Gwynedd. His first attack was against Anglesey, "the granary of Gwynedd"; his second was to encircle Snowdonia with a chain of strong points. Llewellyn, last Prince of Gwynedd, was slain in a skirmish near Builth-on-Wye, but Prince David was captured. To hold his new conquest Edward turned his strong-points into such castles as he had seen in the East while on Crusade in the Holy Land. It was during the rebuilding in concentric form of Caernarvon Castle that, in the Welsh House, still to be seen, was born Edward I's second son. He came to be known as Edward of Caernarvon and, for a jest, Edward I presented him to a gathering of Welsh chiefs as, "a Prince of Wales who could speak no word of English". This frivolity became reality in 1301 when Edward of Caernarvon was proclaimed the first English Prince of Wales.

In Edward I's legal and administrative reforms, Gwynedd was divided on the English model into six counties, dominated by concentric castles, and the King used Welsh mercenaries in his armies; this example was followed by Edward III during the Hundred Years War, which brought a hundred years of peace to Wales. But the disturbances in England following the deposition of Richard II in 1399, had their counterpart in Wales. Here a gentleman of Richard's Court, Owen Glendower, slighted by Richard's supplanter Henry IV raised a flame of rebellion in Wales. Until 1408 he had much success but, following earlier patterns, disunity in his ranks weakened and ruined his cause. Wales paid a high price for her rebellion and, during the Wars of the Roses, 1461 to 1485, no Welsh chieftain took advantage of England's trouble to assert his country's independence.

By 1483 the claims of the House of Lancaster were vested in a young Welshman, Henry Tudor, Earl of Richmond, whose mother was descended from Edward III of England.

From Brittany, with French help, Henry Tudor crossed to Wales. Landing at Milford Haven he marched through Wales to the Midlands of England. Here, on high ground, near to the village of Bosworth, his treason prospered, and so ceased to be treason. The last Plantagenet King, Richard III, was slain in battle. More prudent in exposing his body to danger, Henry Tudor survived, to become Henry VII. So, at last, Wales had a native Prince of Wales, who was also King of England.

In 1536 an Act of Union formally amalgamated the two countries. In the same year began the systematic spoliation of both Welsh and English Monasteries. From then onwards the Tudor rulers through their Council of Wales sought to anglicize their Welsh subjects. English was made the sole language of the law-courts. Commercial and industrial activities centred on the towns sharpened differences between English speaking towns and Welsh countryside. Only in the last 50 years has Welsh Nationalism revived and taken some steps to secure its aims.

POSTAL ADDRESS.

Name

(Northampton Technical High School),

Co-operative Holidays Association,

"EIRIANFA",

Llangollen,

Denbighshire.

TELEPHONE NUMBER:

(Emergency only).

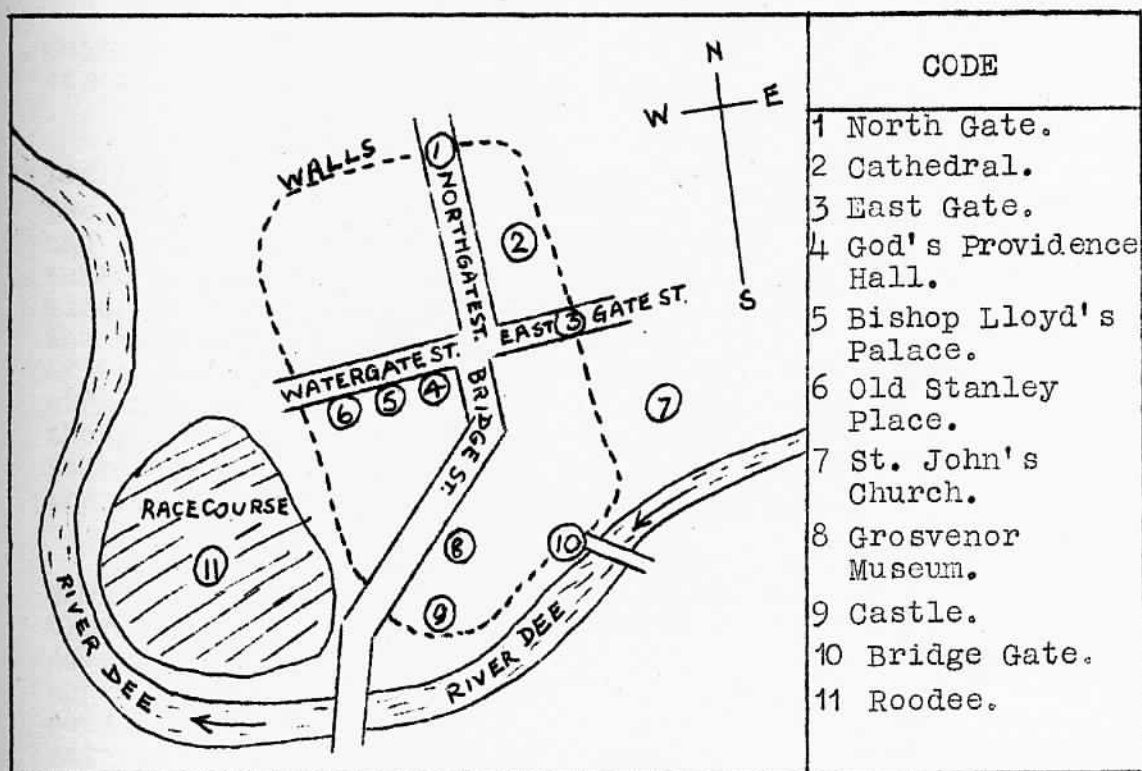
LLANGOLLEN 2216.

CHESTER.

As the name Chester, from L. castrum, a camp, would suggest the city's origin lay in a Roman military encampment. A permanently fortified barracks, of the typical rectangular plan, it was placed on gently rising ground by the banks of the River Dee. In time it became the headquarters of the Twentieth Legion and a centre for the conquest and subjugation of the tribes of North Wales. The rectangular lay-out of the Roman camp, with its two main roads intersecting at the Forum, can still be traced in the plan of the modern city. In the Grosvenor Museum are to be seen many articles used or erected by Chester's citizens 1,900 years ago. Other remains of town houses and temples lie beneath Chester's shops and houses.

CHESTER

PLAN SHOWING MAIN ROADS IN TYPICAL ROMAN PLANNING.



Although abandoned during the first waves of Saxon and Scottish attacks from across the Irish Sea, the site was too important to remain empty and in ruins. Alfred the Great's daughter, Ethelflaeda, Lady of Mercia, constructed there a Saxon burgh, a fortified outpost and, from 907 A.D., there is a record of continuous habitation.

It was not until 1070 A.D. that Chester surrendered to William I who had crossed the Pennines, then trackless, in a blinding snowstorm to bring his troops before Chester's walls. The town was now put under a Norman Earl who was given, since Chester was under constant attack from the Welsh, special powers and privileges, making him almost a Prince in his own lands. By 1238 however the borough, on the death of Ranulf, Earl of Chester, who had been a leader of the Barons in 1215, bought from Henry III its Charter, and the right to the title of Mayor for its first citizen. At this time the city was already a leading port for the Irish trade, and notable for its import of furs the best of which, from each cargo, belonged of right to the King. Over the years, however, the estuary of the Dee silted up, and, in spite of desperate efforts by the townsmen of Chester to prevent it, the Irish trade passed to the rising port of Liverpool.

Chester can boast of two, unique features; a complete circuit of mediaeval Walls, and the Rows.

Since we are to see both these, in addition to the Cathedral and the Grosvenor Museum only a very brief historical outline is here presented.

First, then, the Walls. These date from the late Twelfth Century and are perfect for a circuit of nearly two miles. Four Gates, North Gate, Eastgate, the Watergate and Newgate gave admission to the city. Here tolls were taken from incoming traders. At the North Gate was the place of execution, and a Mediaeval prison in the care of the Sheriffs of the city. At intervals, and at the angles of the Walls, towers, hexagonal, or rounded, gave added strength to the defences. So strong were these that though besieged for almost two years during the Civil War, it was not until 1646 that the fortress surrendered to the Parliamentary troops.

The Rows are unique. No other town can boast of a similar feature. They are two tiers of shops, the upper tier being recessed back from, and over, the lower tier. Access to and from the covered walk in front of the upper tier is given by flights of steps from the pavement bordering the street. It is known that these Rows existed as early as the Fourteenth Century and a probable guess at the reason for their peculiar construction, is that the lower tier of shops was built in front of Roman ruins, and the upper tier on top of them. As was usual in a mediaeval city, tradesmen in the same wares monopolized particular streets and hence came such names as Mercers' Row and Fleshmongers' Street.

A Cathedral is the Church of a Bishop. There has been on the site of Chester Cathedral a sacred building since Roman days. Like so many of our English Cathedrals the one here was once an Abbey Church and its Bishop was the Head of the Monastery, though the actual government of the Monks was in the hands of the Prior. As at Peterborough, there are many remains of the monastic buildings. The Monastery was dissolved in 1540.

Chester possesses a Castle but, like Nottingham Castle, little remains of the mediaeval fortifications. As at Northampton, the castle was a Royal property and the Mayor of Chester had no power within its bounds. Here a Royal official exercised authority in the name of the Prince of Wales, with whose title, from the Fourteenth Century onwards, the Earldom of Chester was merged.

There really was, once, a Jolly Miller who lived on the banks of the River Dee. His mill, a water-mill, was on the city side of Old Dee Bridge, 1282, at the foot of Bridge gate and, no wonder he was jolly, for he held the monopoly of grinding all the city's grain.

Chester Races, which draw large crowds to the Roodee, go back to 1540 when a cup was presented to the winner of a horse-race. The Roodee, now the racecourse, is a flat space of 65 acres area, named, by joining two Saxon words, "rood" meaning "cross" and "ey" an island.

ARCHITECTURE.

(Learn to use your Eyes)

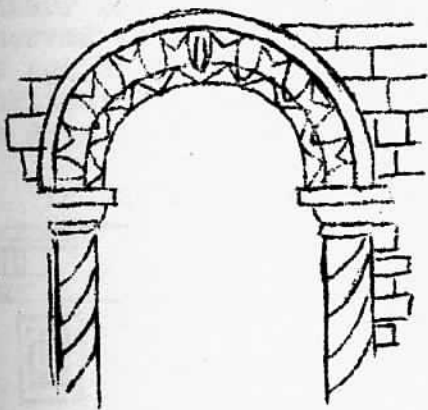
You may be wondering what kind of contribution Art can make to an Educational journey. By knowing something about the look of things you can determine when they were made, from what they were made, and something about the state of mind of the maker.

The histories of ancient civilizations have been written from the remains of buildings, pots, weapons, tools, ornaments, sculpture and modelling and some crude drawings and paintings. Making things is an earlier skill than writing and reading.

If you went to a strange town where the people spoke a foreign language, you would only be able to reconstruct the town's history and the story of its growth and the kind of people who live in it by using your eyes. You would have to do your own detective work.

The history of the towns and cities you will be visiting is not to be found only in text books and museums; it is written in the walls and buildings and the streets through which you will be passing.

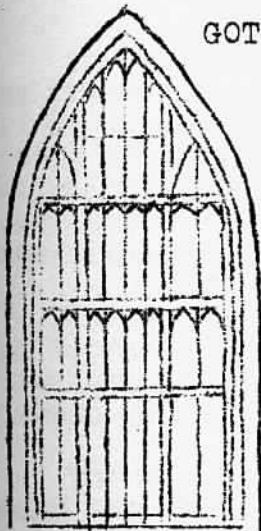
The oldest part of a town almost always is in the centre, forming the heart. This is true of Northampton. The Guildhalls, wool markets and butter markets of the



Middle Ages are still to be found there, and though the foundations of the churches may be Norman, frequent restorations and additions may represent each subsequent era. In the next belt round the central core will be found houses of the Sixteenth and Seventeenth Centuries. Chester is famous for its Elizabethan or Tudor black and white buildings, but not all Tudor houses were wood and plaster. This may

indicate that bricks and stone were scarce round Chester in those times.

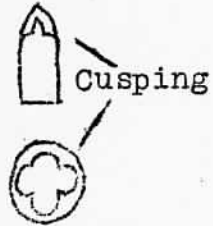
GOTHIC



From 1250 the pointed arch, beginning as this lancet window, developed into elaborate and enormous stained glass windows. This design also allowed for greater spanning and a greater height in vaulting a roof or aisle.

In stone mullioned windows the design of the mullions or bars is called tracery. Each arch is curved as shown in the illustration.

A round window has cusping. Names for the different



periods are: Early English, Perpendicular.

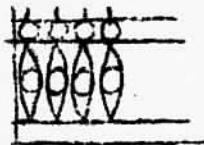
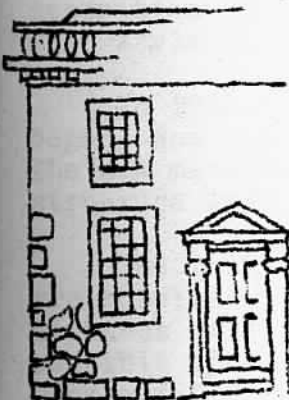
In these styles of architecture, houses as well as churches and other public buildings were erected, but few houses have survived which is why Gothic, for example, is falsely known as "church" architecture.

In the Seventeenth Century travellers from Italy brought news of the wonderful architecture there. The wealthy, determined to be "cultured", paid Italian architects to build their houses. Christopher Wren studied the Italian style and built St. Paul's and most of London's churches in this way. Domes, columns, pediments and architraves bristled from every English country house. The Victorians in the Nineteenth Century revived this style, as may be observed in most towns of any size. The age of the stone rather than the architectural style gives a clue to the date of the building.



In the Eighteenth Century sash windows were invented.

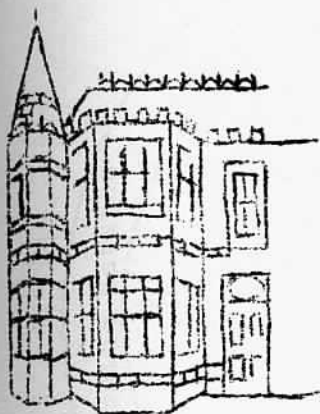
Doorways had pediments and flat columns called pilasters. Roofs were finished off with a cornice and a balustrade. Italian ironwork started a fashion, and you will see many varieties of patterns around you in every town.



The Victorians used steel for their bridges and for the frame-structure of their buildings. They produced bricks by the million, and by the million they built houses which they crammed by the factories and the railroads. The third belt, then, of a normally developed town includes Victorian terrace houses, crowded industrialised districts extending over many acres.

The Georgian buildings have generally been hemmed in and converted into offices and shops, the elegant gardens have disappeared, cobble stones have been removed, streets widened and tarmac surfaces laid.

The Victorians disliked steel and concrete, they hated the railways and factories and industry, dirt and smoke whereby they accumulated their wealth. So the



shops, town halls and large houses and railway stations were built to prolong the previous age. The Gothic style was popular: castles with their battlements, towers and keeps and "old world" atmosphere were copied, yet the Italian classical style continued. The battle between Gothic and classical can be seen in any city street. Look above you to the first storeys of the shops: look at the skyline where you will see turrets and battlements, all useless. Some town halls are like Greek temples. Our

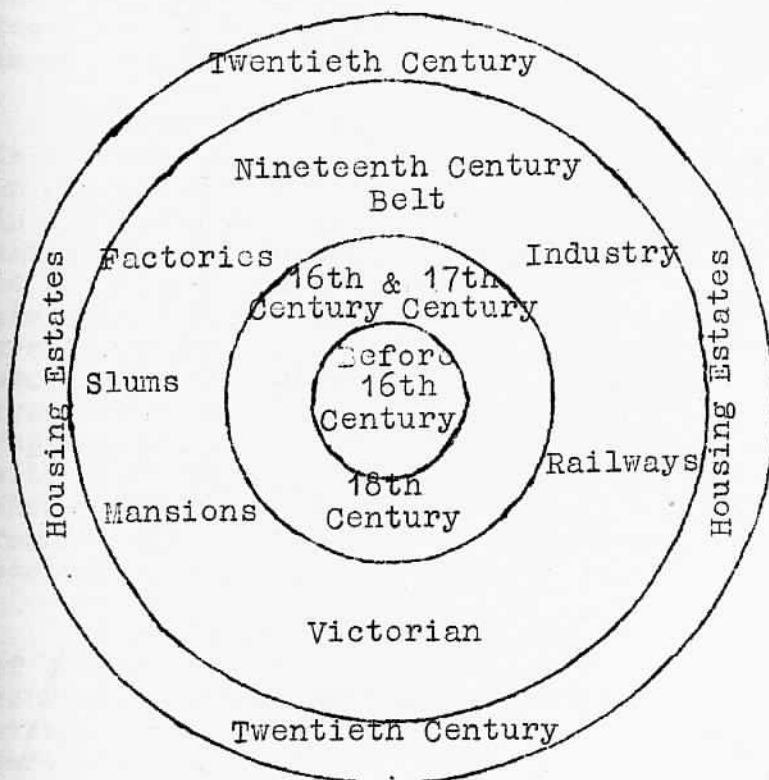
Houses of Parliament was built like a Gothic Cathedral. It was nearly a Greek Temple - they chose between the two styles. The classical style was selected and from 1910 many civic buildings such as banks and town halls were built, in a severe and formal style, with no fussy decoration, and featuring the Grecian pediment and columns. This style is often called "Neo-Georgian."

In 1920 a reaction to the over-ornamental old styles began, and simplicity and "functionalism" were the keywords. The new materials of reinforced concrete and steel frame structure were used without decoration to disguise them.

The main features of these buildings, whether they are hospitals, schools or houses, are the lightness and airiness of them, their clean and hygienic look and a sensible and well thought out planning of the rooms. Look out for sun-trap bungalows as you pass through the suburbs.

On the outskirts of the cities you will find the housing estates. The public conscience was pricked at last, and workers were housed out of the city, in the fresh air in well planned houses with hygienic kitchens.

New towns, which are planned with factories and railways from the start, have no old core and few differing styles of architecture. They have many parks and wide roads; the residential areas are alternated with trees and grassland for the sake of the health of the citizens. You will observe the difference when you drive through them - which do you prefer to live in?



You will be visiting Liverpool Cathedral, which is built in the style of a Gothic Cathedral of the Fifteenth Century. Some people would have preferred a new contemporary design to have been used for this building but that, of course, is purely a matter of taste.

NATURAL HISTORY.

The natural vegetation of a region depends on a number of factors, the chief of which are the climate, altitude, nature of the soil (which depends largely on the rocks underneath the soil), and physiographic factors such as slope, aspect and drainage.

On the character of the vegetation will depend the types of animals to be found in the given locality. The plants and animals together constitute a very complex living community, continually changing, and with its own distinctive character, determined by the interaction of all the influences acting in the locality. The study of such a living community is called "Ecology".

One of the distinctive features of our region is its altitude. This, of itself, gives rise to an example of an ecological unit difficult to find in this country, because we have only a comparatively small area of really high mountainous land. This is the so-called "alpine - arctic" community, taking its name from the fact that it resembles both the arctic regions and the Alps. The Arctic conditions are due to the high altitude. We find the same types of plants and animals in all "alpine-arctic" regions, although of course, the actual species found will be different in the various parts of the world where this type of community occurs. This last remark applies equally to the other types of ecological units, too.

In sharp contrast with the alpine-arctic region of Snowdonia and the higher, bleaker slopes of the Berwyns, N.Wales possesses river valleys, contracted partly because of the difference in altitude and partly because of the difference in drainage. Between these two extremes, the gentler, lower slopes of the mountains provide a gradual transition. The area is also well studded with mountain lakes which, in themselves, provide unique ecological associations.

North Wales shares with the rest of Great Britain, a wide variety of our common plants and animals, but, like most distinctive geographical regions, it possesses its own characteristic types, some of them very rare, and found only in this part of our country, others still rare, but found more widely scattered over the country or even over Europe.

551 It is these rarities which have made the Snowdon district so popular with the field naturalist. In this short description, and on our short visit, it is these "show-pieces" which we must describe and look for, and if we are lucky enough to find them, treat with the respect due to objects of great value.

The alpine-arctic type of community is to be found on Snowdon itself, but probably the best examples are on the mountains to the north-east - The Carneddau. This is the land above the 2,000 ft. contour, although on the bleaker slopes. The community may be found down to about 1600 ft. The typical ground covering is moor grass and mat-grass, with saxifrages, stonecrops and similar plants in less accessible places. In the higher parts, flowering plants tend to be replaced by mosses and lichens. Birds of this zone include the raven, carrion crow, meadow pipit, wheatear and ring ousel, while legend has it that the golden eagle once lived here. The wren, usually a bird of the districts where the winters are usually mild, is quite common here, for no obvious reason. Several species of insect are to be found only in this part of Wales. The most common mammal of the area is the mountain hare, but it is not a native. It was introduced here by man. On the Glyders, north-east of Snowdon, mountain saxifrage, mountain sorrel, spring sandwort and asplenium (a fern) are to be found on the basic soils (those containing lime), while the hard fern, beech fern, and butterwort are typical of the acid soils. The butterwort is interesting in that it is an insectivorous plant.

551 Descending the mountain slopes, we reach the regions which have been considerably affected by man's activities. It is reasonably certain that the natural vegetation of the hills below 1500 ft. was originally deciduous forest mainly alder and birch. Agricultural pursuits, particularly the grazing of animals, has resulted in the almost complete destruction of the forests. In their place, where drainage is faulty, peat bogs have developed, while grassland occupies the better drained slopes. Where the grassland has been neglected, it has been over-run by heather, bracken and gorse. Several types of grassland can be found, each having its typical dominant grass, such as fescue, moor grass and cotton grass. The most familiar animal of this region is the domestic sheep. The birds of the region are those typical of grassland in most of this country, and as is usual in this type of community, butterflies are plentiful.

The mountainous region of N.Wales is dissected by numerous river valleys, the nature of the river and consequently the nature of its inhabitants depending on the slope of the valley. Most of the rivers are short, and for the main part, swift-flowing, the chief exceptions being the Conway and the Dee. The lower reaches of the rivers are usually lined by a strip of woodland. At one time oak was a familiar tree of the valleys, but it has largely been replaced by conifers, the oak having been used for timber. The mountain ash has been extensively planted, particularly in association with man's dwellings, and even when he has deserted them and they have become derelict the mountain ash he planted remains to mark the site. The animal life of this region is even more varied than that of any of the previously mentioned; the most interesting animal is the pine marten, a rare mammal related to the weasel and polecat which are much more common. There is a wide variety of birds and insects.

The lakes and rivers provide good examples of the aquatic habitat. Although their flora contains no plants of great rarity, it is often spectacular. Water lilies, water buttercups, spearwort, musk and yellow iris provide a splash of colour in their appropriate seasons. Reeds and sedges occur in the shallow water, and grow above the surface, but the rare quillwort remains completely submerged. The trout is the common fish of all the rivers, although other "coarse" fish also occur. The Llanberis lakes contain the Welsh char, which is unique in being the only sub-species of vertebrate animal confined entirely to North Wales. The char is an alpine fish, and is thought to show a link between the alpine zone of Wales with the alpine regions of Europe. How it has become isolated in this region is not understood. Of the mammals of the rivers, the otter is noteworthy.

C Y M R A E G

(THE WELSH LANGUAGE)

"To the Englishman, perhaps the greatest of all strangeness is a strange language in a familiar country. After crossing the Channel to France, he expects to hear French spoken, for he is in another country. But it is always a shock to him, in his own island as he would call it, to encounter people who speak a strange language among themselves, apparently from choice, because they seem able to speak English without difficulty. After a time, however, he realises that, although he is on his own island, he is in another country. Somewhere on his journey he has crossed an unnoticed frontier."

(WYN GRIFFITH).

"How the ancient speech of the Britons, after battling for nineteen centuries against three such powerful languages as Latin, French and English has survived at all is a mystery; the fact that it is today more studied, more written and more read than ever before is a miracle".

(LLEWELYN WILLIAMS).

"There was a time when any schoolboy who let fall a single word of his native tongue was incontinently beaten by an irate teacher, empowered by law to use every means to eradicate Welsh from Wales".

(WILSON MACARTHUR).

"Welsh has survived because it represents something - a spirit, a culture, a national character, an atmosphere unlike its compeers in Scotland, Ireland, Cornwall and the Isle of Man, that cannot survive the transformation into English."

(Prof. E.W.ZIMMERMAN).

At the present time in many parts of Wales, Welsh is as much the language of the schools as English and if there are still many of the older folk who have little English, bi-lingualism is almost the rule today. In many of the places you will visit Welsh is still the speech of every-day and the home.

ON PRONOUNCING WELSH NAMES.

"Have a go" at pronouncing the Welsh place-names properly. After all, you would blush to pronounce the word "BOULOGNE" as if it were English.

Welsh place names merely look formidable. In general they are fairly easy to pronounce. Try this one :-

Llanfairpwllgwyngyllgogerychwyrndrobwl -
llantysiliogogoch .

(An Anglesey place-name meaning "The church of St. Mary in a wood of white hazel near a rapid whirlpool and near St. Tysilio's church close to a red cave").

The Welsh Alphabet.

(As in English unless mentioned).

- A = Long as in FAR : short as in MAN
B =
C = as K. Never as S.
Ch = As in Scottish LOCH. Never as in CHURCH.
D =
Dd = As TH in THE, THIS. Not as in THING.
E = Long cf. HAIR. Short cf. THEN
F = As V in VINE.
Ff = As F in FINE.
G = As in GO. Never as J.
Ng = As in SING.
H =
I = Long as EE in FEED. Short as I in PIG.
L =
Ll = No English equivalent. Cf TL in ANTLER.
M =
N =
O = Long cf. SORE. Short cf. HOP.
P =
Ph = As in PHONE.
R = As in HORRID. Well trilled.
Rh = Not heard in English
S = As in SAT. Never as Z.
T =
Th = As in THING. Not as in THIS.
U = Cf. French TU.
W = Long as OO in COOL. Short as OO in TOOK.
Y = Has two sounds as heard in HONEY
("uh" and "ee") (cf. Welsh HYNNY).

N.B.

PONT - Y - PANT is pronounced PONT - UH- PANT
(Not Pont - ee - Pant).

BETTWS - Y - COED is pronounced BETOOS-UH-COYD.
(Not Betoos - ee - Coyd).

Ll seems to be a difficult sound to make, but the following hints should get you very near to it.

(a) prefix the liquid "l" with "t" as in "antler"

Thus LLANDUDNO = TLANDIDNO.

LLYN (lake) = TLIN.

(b) prefix the liquid "l" with "ch" sound in the Scots word "loch".

Thus LLANDUDNO = CHLANDIDNO

LLYN = CHLIN.

(N.B. You can forget (a) and (b) - If you put the tip of your tongue above your teeth and breathe you can't help pronouncing "ll").

Most Welsh place-names are descriptive of the physical characters or setting of the feature or spot concerned. For example :-

PONT-Y-PANT = the bridge in the hollow.

BETTWS-Y-COED = the chapel in the woods.

CRIB-GOCH = the red ridge.

MYNYDD MAWR = the big mountain.

Other names refer to historic or legendary persons, Such as,

CARNEDD LLYWELYN = the cairn of Llewelyn

LLYN IDWAL = Idwal's lake.

BEDD-GELERT = Gelert's grave.

Some names, especially those connected with historical events, with persons, or with legends, may be very old and the original associations difficult to determine, whilst, with the passage of time, names of all kinds may have been so altered that, in spite of the ingenuity and scholarship expended in efforts to explain them, the meaning of some of them is still obscure. In addition to this, many place-names have suffered severely at the hands of those who have tried to spell them phonetically without regard to their meaning. Fortunately, the majority of names we shall meet with present little or no difficulty.

The chief difficulty about Welsh is not its pronunciation but its MUTATIONS. In certain circumstances the initial letters of some Welsh words are changed or MUTATED. This means that you cannot find

them, as such, in a dictionary or a vocabulary.
The mutations of most frequent occurrence in the
place-names of North Wales are :-

C becoming G, P becoming B, T becoming D,
M becoming F, D becoming Dd, and G disappearing
altogether. For example :-

CRAIG has the same meaning as GRAIG.

PONT as BONT, TAN as DAN, MOEL as FOEL, BACH as FACH,
DU as DDU, GLAN as LAN.

WORDS WHICH, WITH THEIR MUTATIONS, ARE OF COMMON
OCCURRENCE IN THE PLACE-NAMES OF NORTH WALES.

ABER	=	where one river joins another or a river falls into the sea : a stream.
AFON	=	river
ALLT	=	a wooded cliff, hill
BACH	=	little, small.
BEDD	=	grave
BETWS	=	bede house, Chapel (old spelling BETTWS)
BLAEN	=	head, extremity (plural BLAENAU)
BRAICH	=	arm
BWLCH	=	pass, defile.
BRYN	=	mount, hill
CADAIR	=	chair, seat. (also spelt CADER)
CAE	=	field
CAER	=	foot
CAPEL	=	Chapel
CARN	=	cairn, heap of stones (plural CARNEDDAU)
CARREG	=	stone (plural CERRIG)
CEFN	=	ridge
CELLI	=	grove, bower
CEUNANT	=	ravine
CLOGWYN	=	cliff, precipice
COCH	=	red
COED	=	trees, a wood.
CRAIG	=	rock (plural CREIGIAU)
CRIB	=	crest, ridge (plural CRIBAU)
CROES	=	cross
CWM	=	valley (Snowdonian CWM - amphitheatre- like hollow at the head of a valley).
DINAS	=	fortification, city.
DOL	=	meadow
DRWS	=	door
DU	=	black
DWFR	=	water (also DWR)
FFYNNON	=	well, spring.
GALLT	=	wooded cliff
GLAN	=	a bank or shore
GLAS	=	green, also blue (plural GLEISION)

GLO	=	coal
GWASTAD	=	level, smooth
GWYN	=	white
HAFOR	=	summer residence
LLAN	=	a church, a village near a church
LLECH	=	slate
LLECHOG	=	slaty
LLYN	=	lake (plural LLYNNOEDD, LLYNNAU)
MAEN	=	stone (plural MEINI).
MAES	=	field
MAWR	=	great, big.
MELYN	=	yellow
MOEL	=	bare rounded hill
MYNYDD	=	mountain
NANT	=	brook, valley, glen
OGOF	=	cave (old form GOGOF)
PANT	=	hollow ground
PEN	=	head, top
PENMAEN	=	rocky headland
PENNANT	=	upper reaches of a glen
PLAS	=	mansion, hall
PONT	=	bridge
RHAEADR	=	waterfall
RHOS	=	moor
RHYD	=	ford
SARN	=	causeway
SYCH	=	dry
TAN	=	under, beneath
TRAETH	=	strand, shore, beach
TWLL	=	hole, hollow
YSBYTY	=	hospice (hospital).

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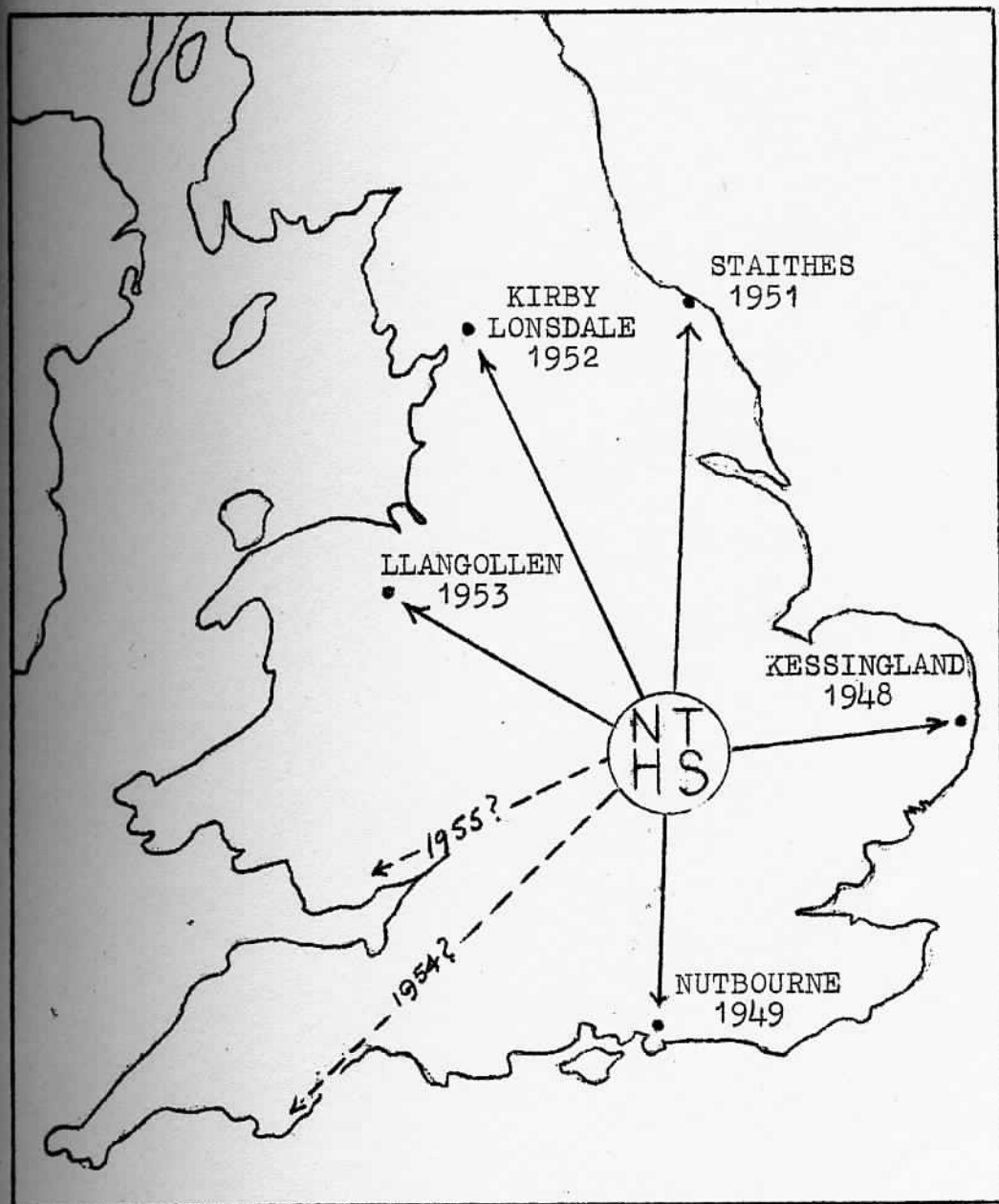
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E. G. BENNETT,
EDITOR.

S U M M A R Y O F A C H I E V E M E N T .



THE SCHOOL JOURNEYS OF NORTHAMPTON TECHNICAL HIGH SCHOOL.