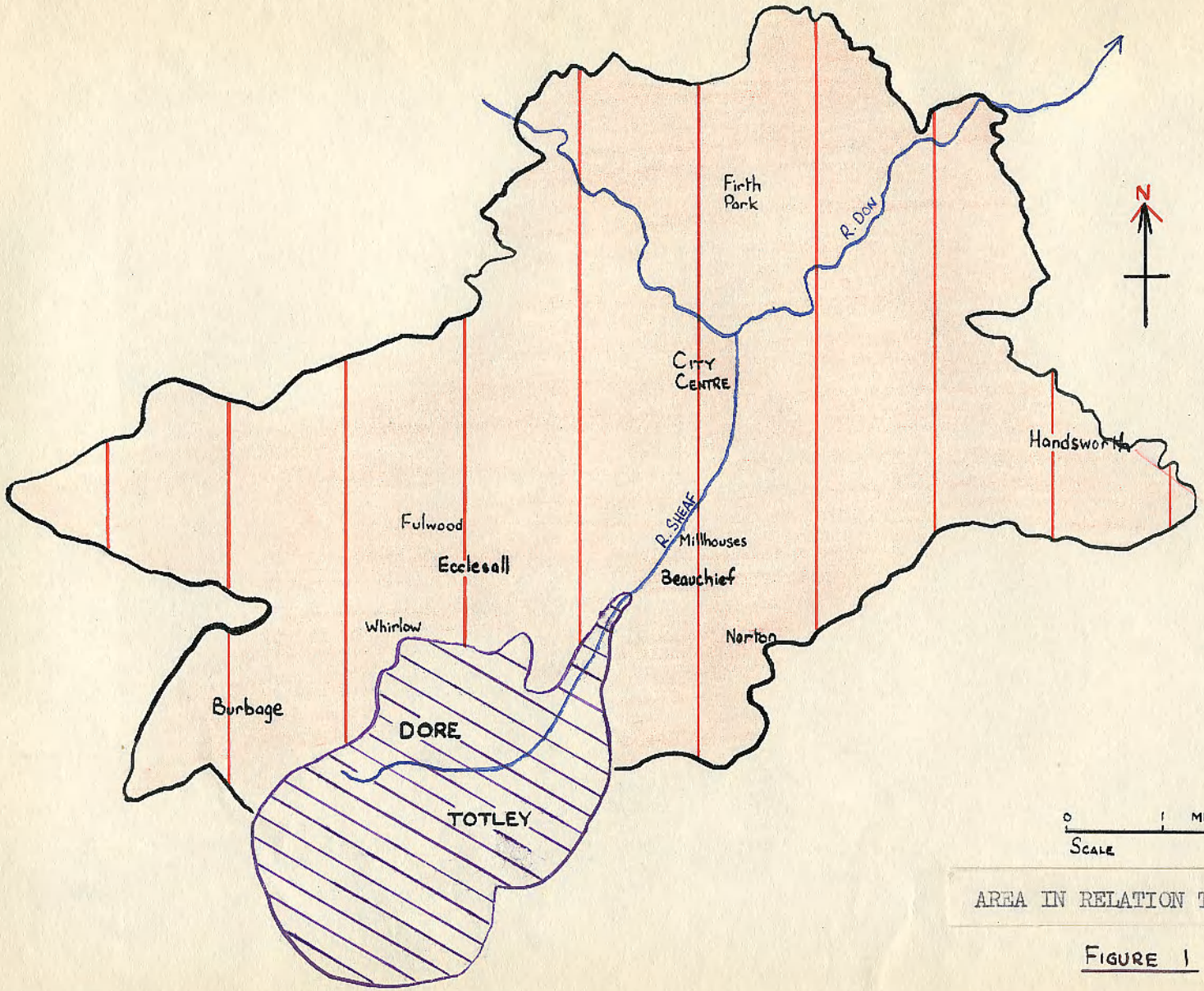
A GEOGRAPHICAL STUDY OF DORE AND TOTLEY

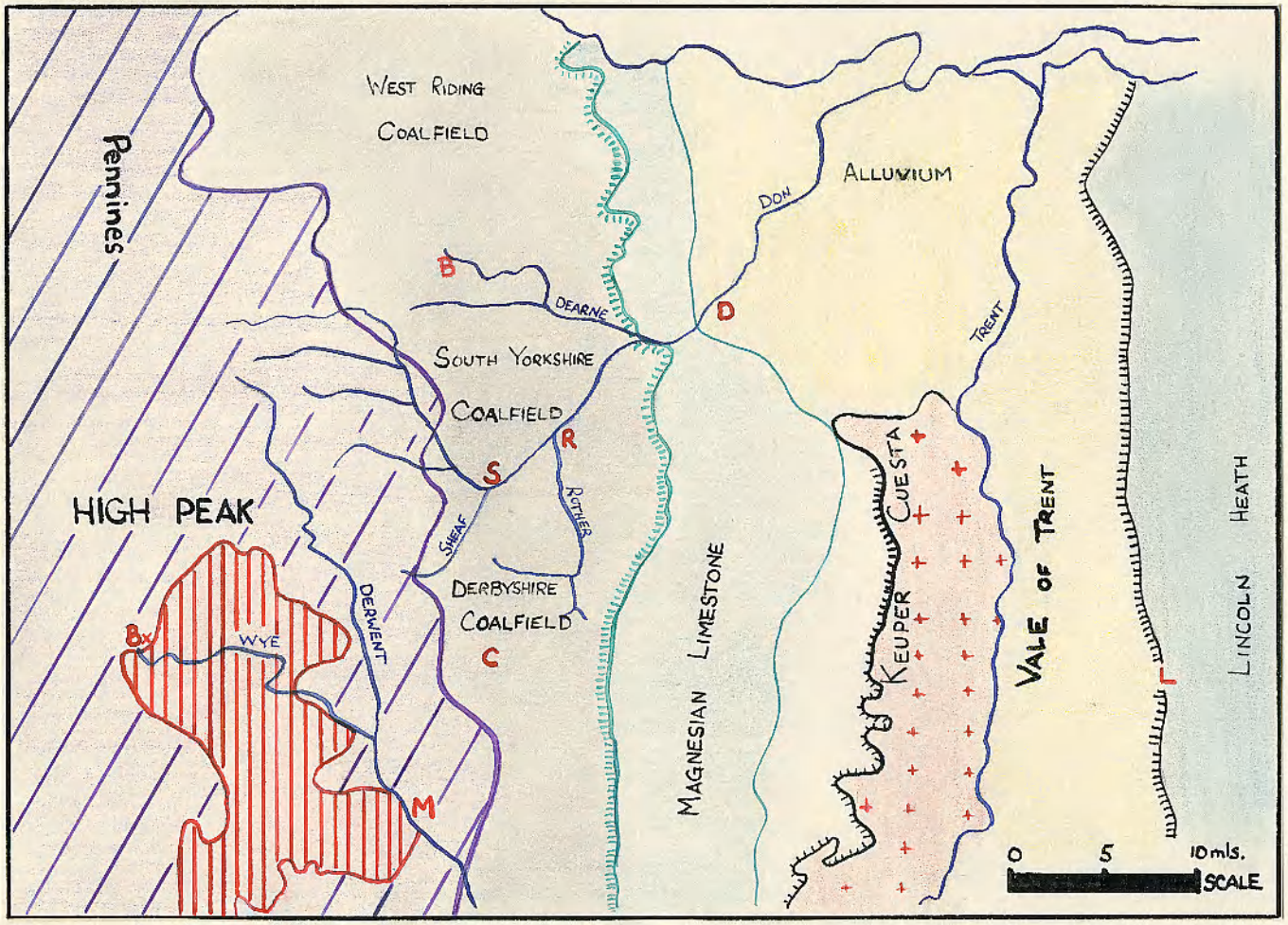
S. Greenhoff

Second Year Advanced.



AREA IN RELATION TO SHEFFIELD.

FIGURE 1



PHYSICAL STRUCTURE OF GENERAL AREA

FIGURE 2

DORE and TOTLEY

INTRODUCTION.

The parishes of Dore and Totley are situated five and six miles, respectively south-west and south of the City of Sheffield. If one had approached the city from the north by railway, after passing through the great industrial heart of the city, one would hardly believe that this pleasant district, south of the city was within the confines of Sheffield. (Figure 1.)

Hunter describes Sheffield's position in "Hallamshire," 1869, "the distance of the parish of Sheffield from the eastern and western seas is nearly equal; and although it is further from the most northern point of Scotland than from the southern coast of England; yet a line which might be drawn nearly straight from Liverpool to Hull passing through Sheffield would divide the island into two nearly equal portions." (Figure 14)

Our thesis area shares allegiance to both Yorkshire and Derbyshire, but the majority of the area falls within the Yorkshire border. The area is perhaps more readily pictured if we disclose that it forms the eastern uplands or "foothills," to the Pennine Chain. (Figure 2)

Both parishes share a long history, and as one becomes familiar with the area, one realises that much of the village life is still preserved, especially at Dore. Today we find old stone cottages hundreds of years old alongside the most modern villas, comparable to the latest in the country. Both parishes have their southern boundaries on "The Green Belt," and we are therefore promised that present expansion will be somewhat restricted, and the natural beauty of the surrounding countryside will remain unmolested by man.

Clearly the two parishes have always been firmly linked together, and as in the past so in the present. One feels the modern uniformity in this chain is symbolised in the single railway station for the two parishes.

The boundary of our thesis area is best explained by means of Figure three.

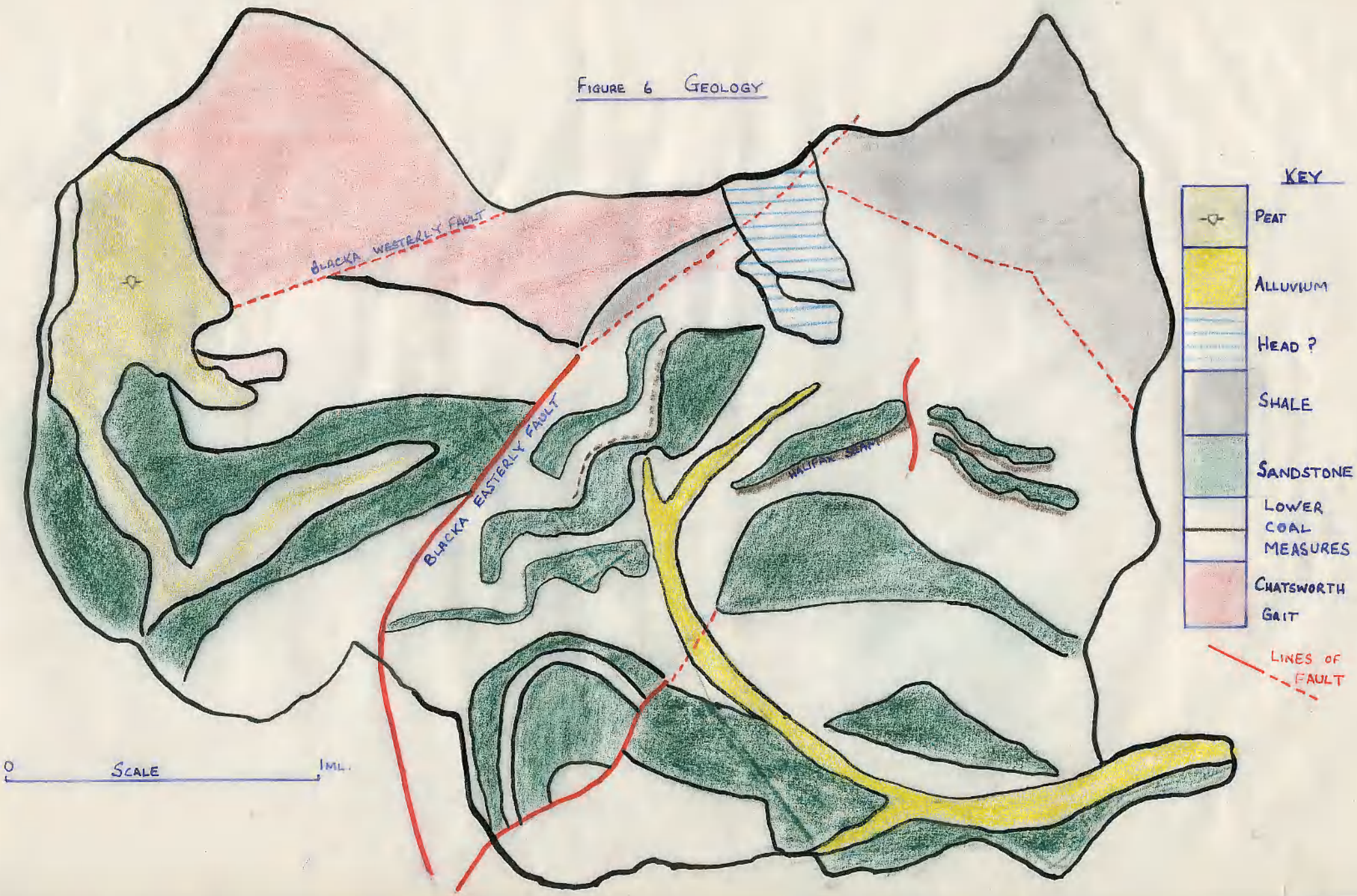
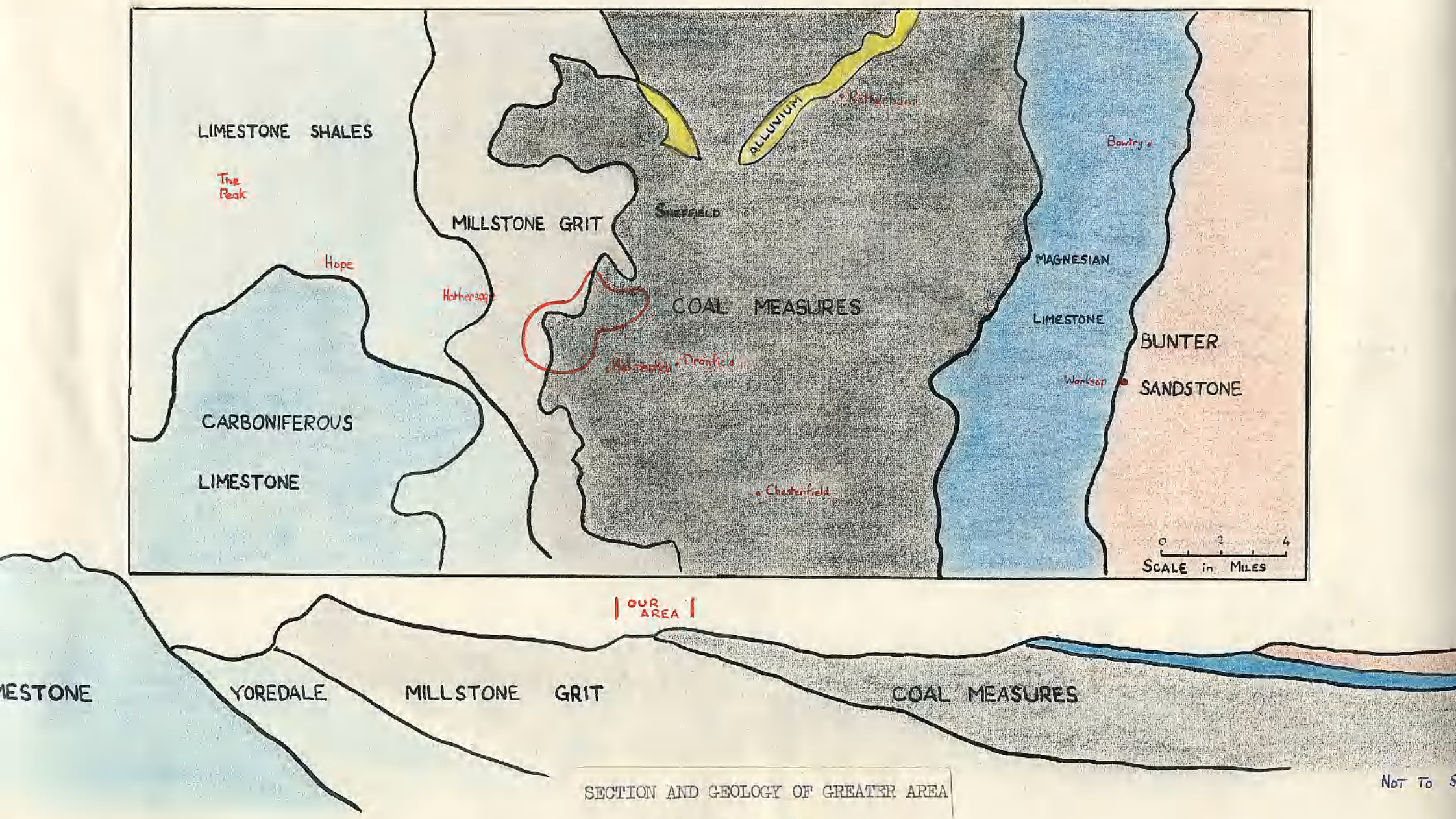


FIGURE 6 GEOLOGY


Hathersage Road
Branch Road
Stony Ridge
Nell Croft
Pen House Inn
Strawberry Lee Plantation
Cowstick
Blacka Hill
Blacka Plantation
Lenny Hill
Wimble Holme Hill
TOTLEY MOSS
TOTLEY MOOR
Flask Edge
Brown Edge
Salter Stitch
Salterstitch Bridge
Barbrook Bridge
Peacock Inn
Owler Bar
The Wood Lodge
Old Chapel
Clay Pit
Brick Works
Hollin Hill
Rifle Ranges
Bolehill Lodge
Taylor's Hill
Halfield Farm
Blacka Dike
Totley Bents
Avenue Farm
Fairborn
The Elms
Whitelow New Farm
Whitelow Farm
Roundsegts Farm
Owlet House
Fern Glen Farm
Holt House
Brick Houses
Ash House
Causeway Head
Dore
Townhead
Quarries
Sports Ground
Moorside Farm
Whitelow Farm
Rushley Farm
Ryecroft Farm
Abbeydale Park
Totley Brook
Hillfoot
School
Totley Hall
Little Wood
Totley
Green Oak
New Totley
Barkerfields Farm
Copperas House
Wingerne
Rough Stradmill
Spring

FIGURE 3



SECTION AND GEOLOGY OF GREATER AREA

FIGURES 4, 5.

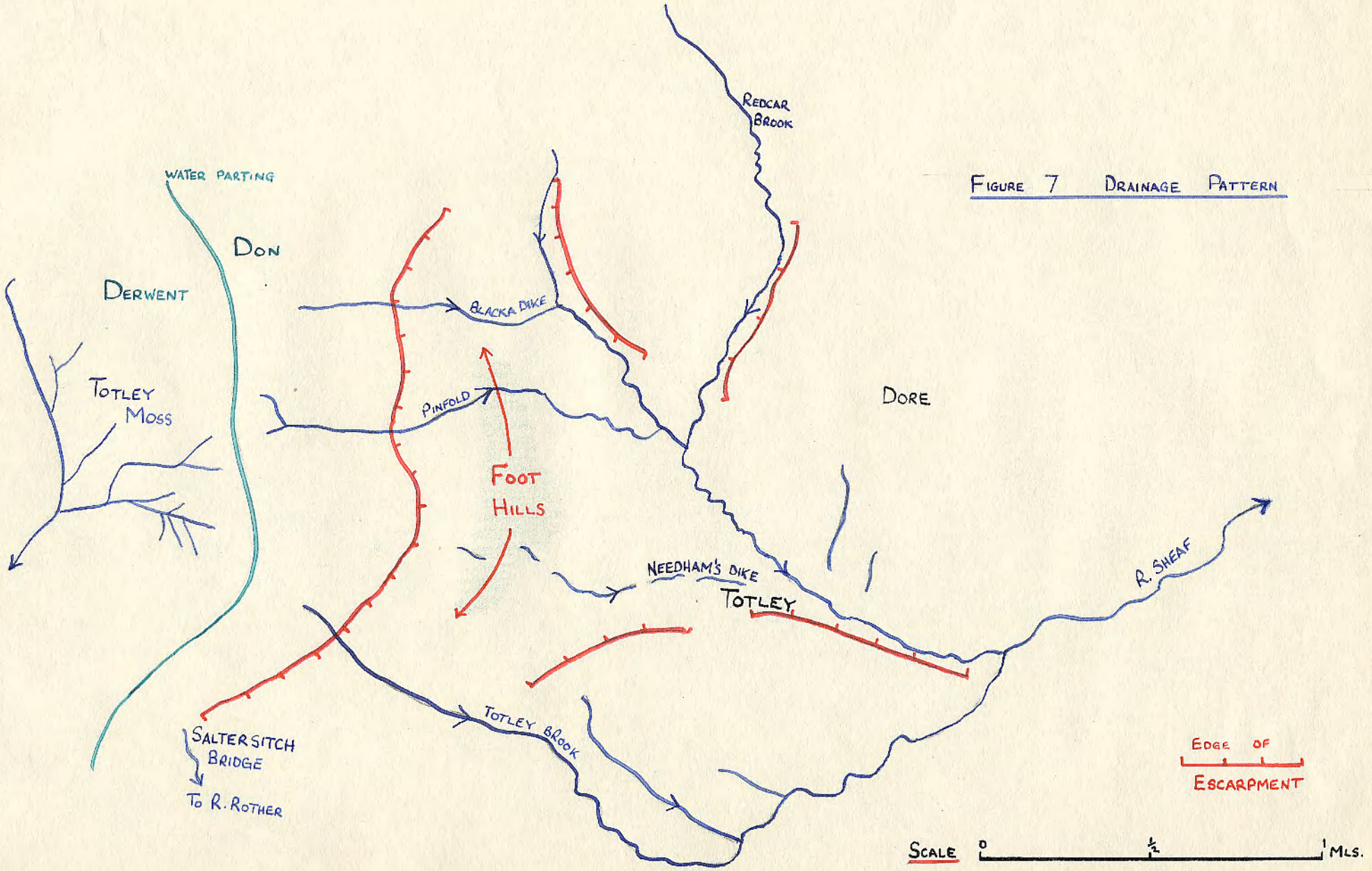


FIGURE 7 DRAINAGE PATTERN

CHAPTER ONE

THE PHYSICAL BACKGROUND.

The parishes of Dore and Totley are but small areas in a larger physical area, the Pennine Chain, and the country to its east.(Figure 1) This larger area offers marked contrasts in landscape and scenery. The shape of the region depends upon the character and arrangement of the rocks. The prevalent dip of the rocks is eastwards, and the strike, or trend is north-south. The older rocks are on the surface in the west, and the newer rocks appear in the east. (Figure 4)

In the extreme south-west of this greater Pennine Zone, there is a limestone upland region which is plateau in character. Travelling eastwards one meets the Millstone Grit country forming elevated moors, and cultivated only on the lower slopes and valleys. In both these regions population is sparse. The east of the region presents the Coal Measures, and here colliery districts and industry have sprung up, giving a more densely populated area. As one continues to journey eastwards the coal disappears beneath newer rocks of the Permo-Triassic Series.(Figure 5)

Such is the general picture which it is our place merely to outline. It is our purpose to add the detail to the picture as we confine our attention to our area proper. The parishes of Dore and Totley may best be described as part of the North Derbyshire or South Yorkshire Coalfields. Two rocks compose the greater part of the area, Millstone Grit and the Lower Coal Measures. It is on this region our attention is now focussed. (Figures 6,7.)

The gritstones form a sharp contrast to the endless green pastures and silvery stone walls of the limestones. The Millstone Grit Series have thick and variable belts of coarse-grained sandstones, which are separated by bands of shale. H. C. Sorby presented his theory on the origin of these sandstones in 1858, after presenting papers to the British Association Meeting in Glasgow. In these papers he described his experiments relating to sandstone and its formation. These experiments were important for he based his theories on their results. Sorby found evidence that the current drifted materials which form the sandstones in

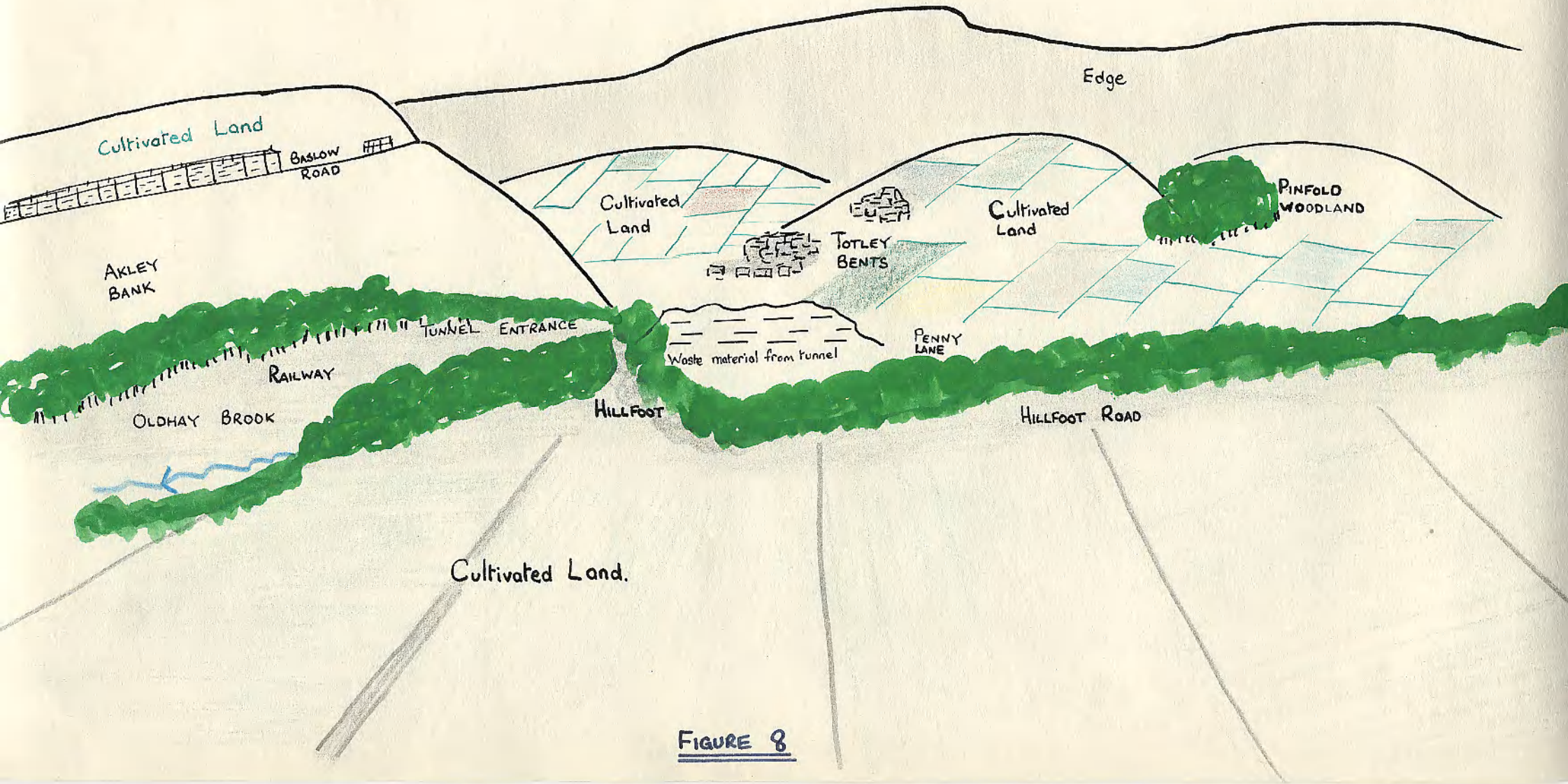

Edge
Cultivated Land
Baslow Road
Cultivated Land
Totley Bents
Cultivated Land
Pinfold Woodland
Akley Bank
Tunnel Entrance
Railway
Waste material from tunnel
Penny Lane
Oldhay Brook
Hillfoot
Hillfoot Road
Cultivated Land.

FIGURE 8

their present position, came from the north-east originally. The region where one would first encounter similar types of sandstones would be Scandinavia. He found great similarity between the crystals of quartz and felspar in the Millstone Grit in this area, and the granite (which gives rise to quartz and felspar) of Norway. In both he found large crystals which were moderately clear and transparent. Sorby mentions that when comparing the British granites to the local series, the former were seen to be usually fine-grained, thus supporting his theory. It would appear that from their character and direction of drift, the origin of the Millstone Grit Series is to be traced to Scandinavia.

The Millstone Grit Series of rocks form the unpopulated higher regions and are covered with peat moors. In the shelter of the upland valleys we sometimes encounter woods of oak, and as we shall see, sometimes silver birch, but the slopes are generally covered with scrub or grassland. The few walls that are standing on the gritstones are made of sandstone, and in places one can determine the former shelters of crofters made from the sandstone.

The outcrop of each grit bed gives a long and lofty ridge with a gentle dip-slope, and a bold, craggy, often precipitous escarpment or edge. Within the confines of our area, we have nothing to compare with Froggat Edge or Stannage Edge further west, but one feels the most striking feature of the whole area is the escarpment of grit forming Blacka Hill and Bole Hill. This escarpment has been formed by the "Blacka Easterly Fault." The long ridge of grit is the dominant feature of the scene, and may best be seen when looking westwards from the footpath from the house called, "The Elms" to the "Oldhay Brook." Its sombre structure is silhouetted against the background sky as day draws to a close. The sandstone hills at the foot of the scarp slope appear as stepping stones beneath its shadow. (Figure 8)

There is very little Millstone Grit within our region, but a large area of it is covered with peat on the south-west of the area. Totley Moss is the moorland where this extensive area of peat is to be found. (Figure 9) As we shall presently determine, this area is the wettest part of our region.We find that the dominant plant of this area is heather.

Where the drainage is defective, and the water is unable to get away, cotton grass takes its place. In the damper places the marsh violet and sundew are found. One finds that the heather and cotton grass here alternate according to the dryness or wetness of the soil. Even after some few days without rain, one has great difficulty in finding a dry path away from the track shown in photograph number one. (Photo 1 and 2) The writer also hastens to add that even along this track it is a veritable swamp, and one has to correlate the practical agility of physical education with field geography if one is to proceed in comfort with dry feet. One also finds the bracken here, but more especially on the slopes where extensive coverings are found. There are no trees in this region, and the only break in the monotonous barren appearance is the influence of man in the form of a ventilation shaft for the railway tunnel below. The soils of this area also seem suited to the bilberry plant and this is in evidence here. Other flowering plants found on these moors include cross-leaved heath, the cowberry and the crowberry. The proximity of the coalfield has debarred the use of peat as a fuel, but one imagines that the former crofters of the area would probably have used this as a fuel. The whole area is rather swampy, and the waters eventually drain into Bar Brook, and thence to the Barbrook Reservoir. Another area of peat covering is to be found at Salter Sitch, near the Brown Edge escarpment, and once again swamp and bog are to be found. Sheep are seen wandering about Totley Moss, and are found all over Totley Moor. The sheep belong to Mr. Rowarth of Owlet Farm on Dore Moor, and are found on the moor in summer and winter. In late spring they are collected for dipping and shearing. To the north-west of the moor, one sees the remains of an old farm, Strawberry Lee, and the walls around it in contrast to other districts are now seen to be falling down and looking quite ancient. One inhabitant of Dore clearly remembers her mother's warning not to wander near these houses when a child, as the people who lived there were considered rather wild characters whose children never went to school.

Blacka Plantation offers us woodland covering on the Millstone Grit, but many of the trees have been comparatively recently planted as much of the area has been devastated by fire. The original

2.

3.

PHOTO. No. 1 (See page 18)

PHOTO. 2. ILLUSTRATES THE TYPE OF VEGETATION TO BE FOUND ON TOTLEY MOSS. THE AIR SHAFT IN THE BACKGROUND SERVES TO REMIND US OF MAN'S INFLUENCE.

PHOTO 3. SHOWS THE VIEW OBTAINED FROM THE TOTLEY MOORS. THIS PHOTOGRAPH ALSO SHOW THE TYPE OF VEGETATION FOUND HERE.

5

PHOTO. 4 THIS SHOW THE VIEW OBTAINED FROM THE "EDGE" TO THE LEFT OF THE PICTURE IS DORE, WHILST THE POSITION OF TOTLEY IS SEEN TO THE RIGHT. IN THE DISTANCE IS SHEFFIELD. NOTICE THE WALL WHICH SERVES TO MARK THE PASTURE FROM THE MOORLAND. THE MIDDLE (RIGHT) SHOWS THE DEBRIS FROM THE CONSTRUCTION OF THE TUNNEL.

PHOTO 5. THIS IS A VIEW OF THE "EDGE" SEEN FROM TOTLEY, ONE CAN HARDLY MISS ITS IMPOSING FEATURES. THE PHOTOGRAPH CLEARLY SHOWS THE CULTIVATED "FOOTHILLS"

coverage consisted mainly of oaks, but after the fire the area was partly replanted with silver birch trees. One gentleman in Dore remembers that in the First World War much of the timber from this area was taken away, but for what purpose remains a mystery. The writer suggests that it may have been used in the mines, or even perhaps as a "war effort" in some way. Within the wood one finds gorse shrubs, and on the edge of the wood one encounters broom.

However hard one may attempt, when strolling across these moorlands, one cannot escape from eventually arriving at the escarpment edge. On arrival, in the afternoon when the sun is behind one, it is not easy to draw oneself away in a hurry. Only the sharp crack heard from Northern Command's army rifle range makes one realise that the descent must be made, and the panoramic view of Dore, Totley, the beginnings of the Sheaf, and in the distance the city of Sheffield, must be left for a return visit. (Photo. 3,4,5)

As one descends, one realises that the "edge" bears no resemblance to the edges we are familiar with, such as Stanage Edge. In our area the edge is not precipitous, and one finds vegetation covering it to the fields below. Bracken makes a marked appearance again, and against this background hawthorns and willows are now found. When one has reached the base of the "edge" one finds heather and bilberry covering the surface with occasional patches of gorse, and isolated bushes or small trees of holly, mountain ash and hawthorn.

Fossils are scarce in this area, and only a few plant remains have been found. Goniatite index fossils have been found at Whirlow Bridge in the shales, but this is not strictly within our area.

To the east of the Millstone Grit Series, and covering the greater part of the area in question are the Lower Coal Measures.

It is once more to H. C. Sorby's work we owe some knowledge of the formation of these rocks. In 1858 Sorby presented his views on the Lower Coal Measures from his experiments in the area of Sheffield. He presented his findings in a Report to the British Association. It is thought that during the period of the formation of the Millstone Grit Series, there was a very uniform, general, current flowing from the north-east. This

FIGURE 9.

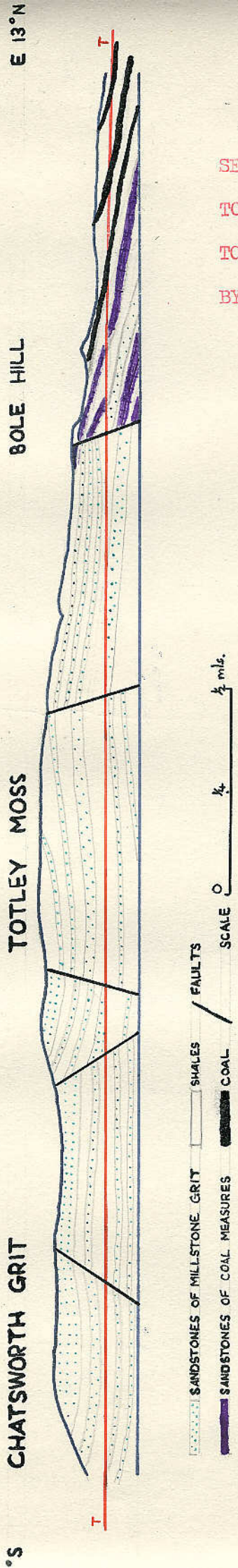


FIGURE 9.

SECTION ALONG DORE AND TOTLEY TUNNEL ENLARGED TO SCALE FROM A SECTION BY C.B. WEDD.

was slightly interfered with by a tide-setting from the north-west. By the action of surface waves and wind-drift, currents were produced by powerful westerly gales. The Lower Coal Measures therefore present us with an example of the action of a simple current, flowing only in one direction.

It is thought that perhaps a few words on the Coal Measures in general would clarify the position occupied by the Lower Coal Measures, in the system, and so a short sketch of these has been made.

The Lower Coal Measures consist of thick masses of dark grey shale and clay, and with many insertions of sandstones and coal seams. They resemble the Millstone Grit Series in general character. The sandstones, however, are usually less thick and massive, and consequently give rise to features like those of the Millstone Grit Series, but they are somewhat toned down. The coals are comparatively few, and nearly all thin and of poor quality, but they are better coals than in the gritstones. Ganister, whilst in the Millstone Grit Series, and even in the Middle Coal Measures, is found oftener in the Lower Coal Measures than elsewhere in Carboniferous rocks.

The distinctive characters of the Lower Coal Measures show that during their period of formation, there were more frequent changes in the rate of subsidence than in Millstone Grit times, and pauses occurred oftener and lasted longer, and were less local in their extent.

The distinctive feature of the Middle Coal Measures is the number, thickness and excellent quality of their coals. The sandstones are finely grained, and not so thick as the other two groups: they are less persistent, and are hardly traced more than a few miles. During the decomposition of this group the pauses in the subsidence were frequent and lasted some time. The conditions were very favourable to vegetable growth. The supply of sand seemed scanty and the distribution by currents was very "capricious." H. C. Sorby found that the dip of the planes of current bedding in the sandstones of the Middle Coal Measures indicates constant changes in the direction of the currents, while we have seen that in the case of the Millstone Grit Series and Lower Coal Measures, there seemed to be a steady set of currents from one direction.

The Upper Coal Measures consist mainly of shales and sandstones of a deep red colour. They also contain thin limestones. There is not a complete absence of coals, but the seams are not as numerous or as valuable as the Middle Coal Measures. It is thought likely that these rocks were deposited in a similar manner to the rocks which followed the Coal Measures - the Permian Series. The latter consist largely of rocks deposited in inland seas, and it is thought likely to suppose that these conditions began before the Permian rocks were deposited.

Clearly then the Middle Coal Measure are the most important series from the economic point of view, but within the Lower Coal Measures one notes the stress on the ganister seams. We presently hope to show that our own area has proved the importance of the Lower Coal Measures from an economic standpoint. For the present, however, we must return to our area proper.

In contrast to the moors of the Millstone Grit series, one finds that the hills in the Coal Measures are usually cultivated to their summits. There are more trees visible and the hill slopes, though not as steep, are often covered with oak, silver birch, beech, sycamore, and in places a few conifer trees. Cultivated land is much more in evidence, and the fields are separated by sandstone walls and occasionally hedgerows.The conifer trees are not indigenous to the region and consist largely of Scots Pine and larch which have been planted. One finds the ground under the trees is well covered with vegetation, and often bluebells, primroses, broom and gorse compose this rich carpet beneath the green canopy of trees.

The sandstones stand out in bold features above the shales and clays, and though not as high as the features of the Millstone Grit further west, they are equally as conspicuous, and form the dominant physical features of the Coal Measures. The sandstones are known locally as the Wingfield Flagstones in Derbyshire, but in Yorkshire they become known as the Brincliffe Edge Rock. The sandstone escarpments are much in evidence within this area.

When walking along Newfield Lane, from Dore towards the

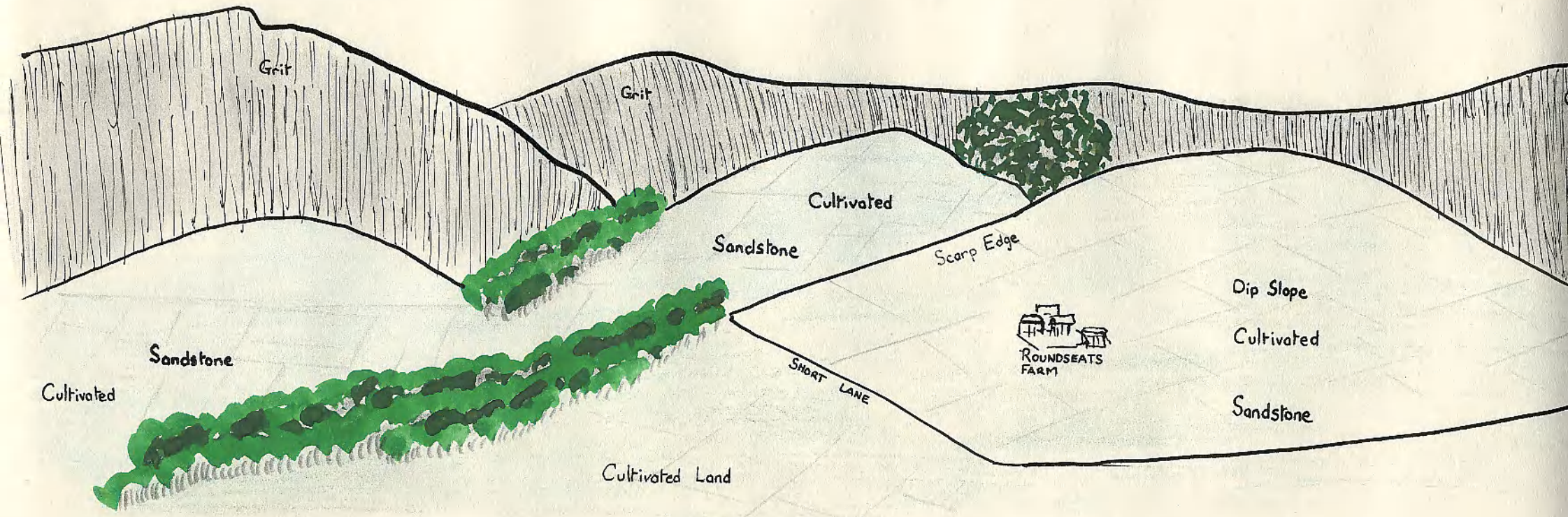

Grit
Grit
Cultivated
Sandstone
Scarp Edge
Dip Slope
Cultivated
Sandstone
ROUNDSEATS FARM
SHORT LANE
Sandstone
Cultivated
Cultivated Land

FIGURE 10

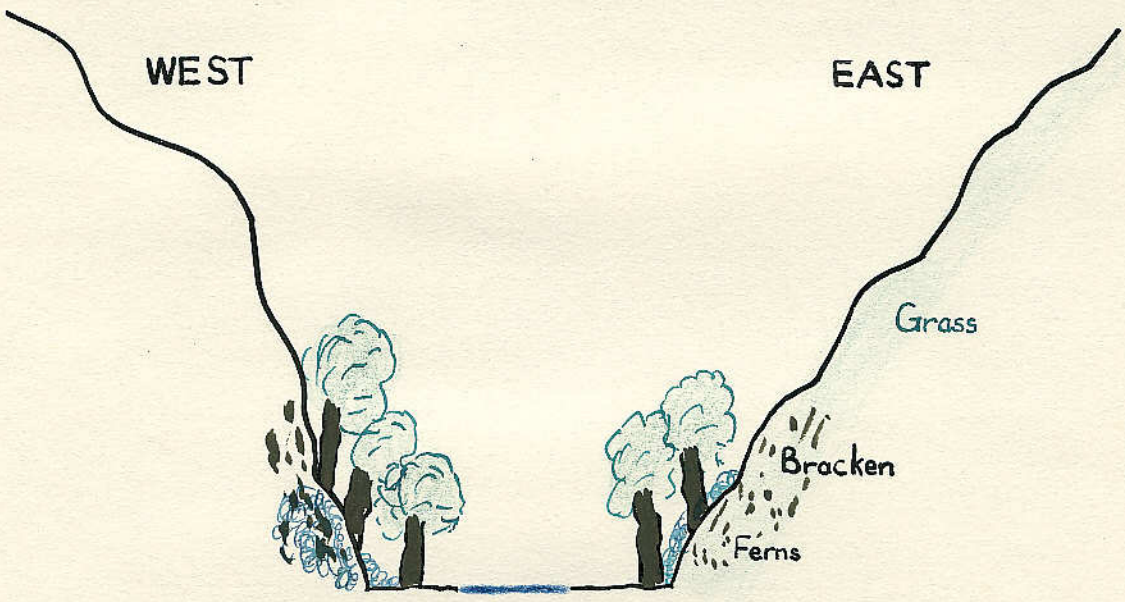


FIGURE 11

Fairthorn Home, the edge of the sandstone ridge is clearly seen. The escarpment edge is wooded (Wag Wood), and one may distinguish evidences of river action in the Redcar Brook. The gentle dip-slope of this escarpment descends to the village of Dore, but it is with some difficulty that one discovers this, for a new housing estate now dominates its natural features. The work of the Redcar Brook seems to account for the undercutting action of this scarp ~~slope~~ edge, and here the waters are fast flowing. From this lane as one looks across the valley, one may easily discern another gently rising slope of a further escarpment we shall describe presently. This area has the appearance of a ridge of land gently rising from the confluence of two streams (Blacka Dike, & Redcar Brook), to give the land a "dome" shape. The eastern slopes of this escarpment are devoted to cultivation in sharp contrast to its counter-part, from where one stands, which supports the population in another sphere of life. (Figure 10)

The other escarpment mentioned above is seen when one descends to investigate Blacka Dike, after walking away from Roundseats Farm, along Short Lane. Bracken covers the scarp edge, and there is some tree covering, but the latter is in the main confined to the foot of the slope, close to the fast flowing stream.Looking towards the source of the Blacka Dike, on the opposite bank we find a very sharp edge of sandstone, exposed by the action of the water. The edge rises quite steeply so that the effect gives the valley at this point a U-shaped outline. Clearly these formations have been the result of the Blacka Dike's cutting action. (Figure 11)

As we proceed in a south-easterly direction, we see the "foothills" of the gritstone scarp, the sandstone ridges at the foot of Bole Hill. These are seen as one journeys down the course of the Blacka Dike. They are best observed as one descends from the village of Dore, and we have already drawn a sketch of this view. (See Fig. 8) They are cultivated, and contrast with the moorland at the back of the picture which can be seen sharply rising above them. One feels they are but the prologue to the play, or the preface to the book.

One further scarp is worthy of note. Looking across to Totley from "The Elms," one clearly sees a scarp edge which extends from Akley Bank to beyond the War Memorial on the Baslow Road. Here the road seems to divide two ridges, but nevertheless it is easy to distinguish the steep, scarp edge at Akley Bank and again at Penny Lane. The former has a certain amount of woodland covering its lower slopes, whilst the latter is given over to pasture. Once again we see that the river flows at the foot of this slope, and one imagines the Oldhay Brook to be responsible for its formation. The dip slope of this escarpment reaches Gillfield Wood, near the parish boundary of Totley.

Of the coal seams, two are of interest within this area; they are the Fore Yards Coal and the Alton Coal. The latter is the Hard Mine or Ganister Coal of Yorkshire and is known by the miners as the Halifax Seam. Its seam may be traced from Totley Mooredge Ganister Mine to Millhouses by a series of Bell Pits, and open cast workings. One sees evidence of a drift mine when walking along Short Lane to Blacka Dike at the point we have already described as having a pronounced scarp edge. On the edge of this sandstone escarpment there is an old coal and ganister mine. We shall present a further discussion on this topic later, suffice therefore to say that one may wander over the derelict mine , and there is much evidence of former workings. The mine also serves to show the exposed sandstone, and one sees the features of the strata quite clearly. Both ganister and coal were formerly mined here, and in the past it has been said that these two products were carried by pack horses over the bridle paths into Derbyshire, and in return lime was brought back for the land. The seams stretched under the land one now sees as cultivated farmland belonging to Roundseats Farm, that is to say beneath the dip slope of the escarpment.

There is a general absence of glacial deposits in the area and this raises the question of whether the area has been glaciated. Opinions on this topic differ greatly.It has been suggested that there has been severe and prolonged erosion in the area, and that the drift which once existed has been swept away. It is further believed that from

the direction the ice sheets took, that glacial deposits were originally scanty.

In 1883 Mr. Westley described to the British Association a patch of Till in the Crookes Parish of Sheffield. It was a clay from two to twelve feet thick, and was richly studded with erratics which on analysis by Professor Bonney gave a result of 75% from the north-west. The question is therefore raised in which direction did the ice pass over the Pennines to bring erratics from the north-west? The general inferences are that as ice is known to have passed the Buxton area, by some similar direction it may have reached Sheffield. If this hypothesis be true, surely one may presume that it reached our own area.

The Rev. L. W. Carter in 1905 says it has been suggested (but he does not say by whom) that there was glaciation of the Sheaf Valley although Carter can find no drift in the valley. Carter supports Professor Carvell Lewis's view in his book, "Glacial Geology of Great Britain," and states that a series of older glaciers,which were more extensive than those so plainly indicated by moraines, affected the area, and the relics of these glaciers have been largely removed, and the area has been reduced to the appearance of a non-glaciated district. We shall presently hear of Carter's "Lake Don" and so brief mention is only made at this point, but Carter seems to furnish much evidence in support of glacial action in the district, and though his work seems to be based on the views of Professor Lewis and Professor Kendal, he does go into great detail to prove his case.

In 1953 Mr. A. C. Dalton states that the area of Sheffield has been very much dissected by river erosion, and that it is therefore difficult to assess to what extent glacial action has affected the valleys. He continues, "the effect too of post-glacial fluvial conditions is problematic, though we may assume that these account for much of the scarcity of glacial evidences, which we might reasonably expect to have existed."

One feels it is significant that the geological survey maps of the district also reflect these differing opinions. On commencing

my study of the area I used the 1913 edition geological survey one inch to one mile, and six inch to one mile maps. On these two maps there was perfect agreement, as one would expect. Within our area one found definite evidences of glaciation in the Boulder Clay and Grit Rubble in the valley of the Redcar Brook, about one mile N.N.W. of Dore. In the "Geological Memoir" accompanying the map W. Gibson and C. B. Wedd describe the area, ".....appears to be entirely bare of glacial deposits, but west of Dore a single patch of boulder clay occurs in the bed of the Redcar Brook." Here the Grit Rubble fills the gap breaches of the escarpment of the Chatsworth Grit. The rubble of boulders and smaller materials from the grit, spans the gap, and then spreads over the Boulder Clay found in this moorland valley of the Redcar Brook.

Following the British Association's Meeting in Sheffield in 1956, a new edition of the geological survey map was printed, but as yet the memoirs are still being prepared. This new map reflects the differing opinions I mentioned in the last paragraph. The above mentioned Boulder Clay in the Redcar Brook, now appears as "Head" in the new survey. Recent opinions on the Dore deposits are that they are not glacial, but rather "Head" from local denudation. There seems to be no record of erratics found, and in 1953 Mr. A. C. Dalton could find no Boulder Clay when visiting the area. Mr. A. E. Upton is reported to have found what he considered to be Boulder Clay near the bed of the stream. Obviously there is much varied opinion on the matter, and our geologists seem to have difficulty in finding the correct explanation through lack of substantial evidence.

Be that as it may, the Redcar Brook enjoys the work she is accomplishing at the above mentioned area. Here we see the Redcar Brook cutting its way through the Grit Rubble, and the steep sided banks of the river have conifer and deciduous trees growing on them. The area is now given to pasture and there are a number of fields which are cultivated. In the background the sharply rising moors of gritstone are visible, and these emphasise the contrast in the Grit Rubble or "Head" and the shales of Houndkirk Moors. The area of Boulder Clay or "Head" is seen as undulating land given to pasture. Once again we see the menacing threat of the gritstone behind both these series, showing

quite clearly the edge we know so well.

The recent deposits of alluvium provide the best soils for farming of the area, especially where they are found in the Redcar Brook, the lands of "High Greave Farm." The former economic value of the coal and ganister of the area will be dealt with at some length in a future chapter, and so this is only briefly mentioned. Today there is little use made of the local sandstones beyond the use of the rock as building material. The area has shown that in the past mineral wealth of the area made it important enough to establish and maintain an industrial project, but these local minerals have now been exhausted.

Soils

In contrast with the soils further west on the limestone plateau, the soils in our area are non-calcareous, and are a direct result of the underlying strata.

The soils of the Millstone Grit and the Coal Measures are essentially alike in chemical and physical characters, and may be classified together. On the upland moors of our area we find brown or black peat which is usually wet. We have already described the vegetation of this area which is unproductive except for providing pasture for sheep. The shales at the surface weather to give a kind of false clay which varies in colour from a brownish-yellow to black depending upon the amount of humus in the soil. This soil is very much in evidence in the lower parts of the Redcar Brook and Blacka Dike Valleys, and as we have already mentioned forms some of the best soil for farming in our area. The sandstones weather to give a yellow sand when newly formed, but they are soon mixed with humus which makes them much darker. The soils over the sandstones and shales are poor in soluble mineral salts, especially calcium carbonate, and contain as little as 0.02-0.04% of lime. The soils of the area are not particularly good for farming as we shall explain at a later stage, and fertilizers are used extensively. Indeed in 1888 F. A. Lees described the soils of the Coal Measures as, "cold and backward," and as we shall subsequently discover, he writes for us all in 1957 with regard to soils and farming.

It is felt that before leaving this section of the piece, one must make mention of the inhabitants of the area other than man. The following notes do not claim to be exhaustive, but they will show the general picture of this other world which man has long studied.

Of the insect world, on a hot summer's day White Butterflies are most numerous in our area. The Red Admiral, the Peacock, and Painted Lady are also found, and the Common Blue, Little Blue, and Holly Blue butterflies all add to the colouring of the scene.

As one would expect in this rural area, the animal world is well represented. The farmers are the people who are able to tell us most about these creatures which affect their land and crops. Squirrels are found in the Blacka Plantation, and Wag Wood, but they cause little trouble to the farmer. The moles are at once good and bad for the farmer. They ventilate the soil, and do the soil much good, but they are also responsible for the hills under such crops as turnips, and so they disturb the crop. The cats take care of the shrew, and they may also claim field mice and the dormouse as their victims. There are one or two hares in the district, but rabbits have been virtually exterminated by myxomatosis. The stoat and weasel are found in our area, and a hedge hog which had been run over by some vehicle has been seen quite recently in one of the country lanes. Foxes are the main worry of the farmers in our area, and unless every fowl is securely bedded for the night, the farmer will rise next morning with one less member of his flock. Recently the Barlow Hunt traced a fox to its burrow which contained seven cubs on the moors above the Hathersage Road. All farmers of the district encounter the same trouble from this animal, and the Barlow Hunt serves a very useful purpose as it starts at different places in our area throughout the year.

Of birds our area provides examples of the common residents and also some summer visitors -the cuckoo, swift, martin, swallow, warblers, and on the moors grouse, partridges, the plover, pheasants, and occasionally the curlew.

Drainage Pattern.

Figure number seven clearly show the simplicity of the drainage pattern. One feels it is significant that the River Sheaf rises at about 1,000 feet on Totley Moor, for our area is drained by the Sheaf, which in turn delivers her passengers to her sister the River Don. There is, however, one slight deviation from the above statement, for the area of Totley Moss subscribes to the Derwent Drainage System. The Derwent has to thank our friend Bar Brook for the waters from Totley Moss, but one is not too disturbed that these waters do not flow into the Sheaf, for we see that our friends in Chesterfield take their share of the proceeds before the water has time to see the River Derwent.

The present pattern of the drainage of the area is explained in a study of the past, and it is to this aspect we now turn our attention. Our chief concern is the Sheaf River System. Before we may consider our local area we must mention one important topic, Pennine drainage, for it is into this pattern our area must fall.

Since the end of the last century the hypothesis that the drainage of Yorkshire was started on a chalk cover is widely accepted. Current views on the Yorkshire drainage evolution are based on those of Davis (1895) who considered Eastern England as a whole, and suggested that the drainage of this area is now in its second cycle of erosion, the peneplain that was formed during the first cycle now being represented by the escarpments of Oolite and chalk. This view as applied to Yorkshire has been amplified and modified principally by Reed (1901) and Versey (1937, 1942). Each consider it probable that the consequent drainage flowed eastwards on an eastwards-titled cover of chalk. It is further thought that warpings formed during the first cycle gave rise to a new system of consequent drainage which largely replaced that developed on the chalk. The hypothesis that the original consequents of Yorkshire flowed eastwards is supported, in addition to those already mentioned, by Ramsay, Kendal, Cowper, and has recently received additional support from Professor Linton in 1951.

J.B. Sissons presents a new contrasted view on the present drainage system of S.W.Yorkshire. Through detailed field work and cartographical analysis, Sissons demonstrates the existence in S.W. Yorkshire of a series of erosion surfaces at various heights between 200 and 1,800 feet. Sissons produces evidence that the surfaces above 450 feet were cut by the sea. The surfaces appear to have been formed during periods of approximately stationary sea-levels. The surfaces were formed at about 1,800 feet, 1,350-1,300 feet,1,070 feet, 710 feet, 530 feet, and 500 feet. Sissons considers it probable that the initial surface attacked by the sea was a submerged peneplain tilted to the east in S.W. Yorkshire. This seems to have been destroyed, "during the period of intermittent emergence associated with the formation of the erosion surfaces." Sissons considers that the present drainage system can only be satisfactorily explained as having evolved from consequent streams started and extended across the marine erosion surfaces as they were successively exposed by the falling sea-level.

The above mentioned theories, whilst covering a large area, are all intimately bound to our own area, and are of great importance when considering the drainage evolution of our area,for Dore and Totley, the River Sheaf and its tributaries, all comprise the regions mentioned in the theories. Having presented the frame and sketched the outline of my picture, I must now complete my piece with some small measure of detail.

We must once again turn back the hands of time one hundred years. In 1847 H. C. Sorby presented a series of papers at the monthly meetings of "The Sheffield Literary and Philosophical Society." Sorby was quite definite in the conclusions he had drawn from his work on the rivers, "In the neighbourhood of Sheffield." This last quoted phrase seems rather vague, but our fears are without cause, for his studies included the River Sheaf.

Sorby maintained that the Vale of the River Sheaf had been slowly cut down by the action of streams. His evidence was accompanied drawings "of a large size." Indeed the quality of his work is reflected

by the fact that he made a special model to illustrate what one might term, "the prelude," as he gave a general account of river formation and deposition.

The most important evidences of river action mentioned were the old escarpments of a very striking character, which seemed to show that the river must, at some period, have occupied a much higher level than at present. Sorby was unable to place any time limit as to how long the actions had been going on; nor was he prepared to say that they had only been in progress a short time. There was some question as to how the alluvial deposits were formed. Sorby thought they had been formed by the long continued action of the river as it is now, and not by the filling up of lakes or by sudden rush of water. This view may be compared with the view the Rev. W.L. Carter was to expound later, and which we shall presently disclose.

Sorby provides evidence for both his last stated opinions. The very nature of the deposit and its arrangement was shown to be precisely such as would be caused by the similar action of those going on at that moment. The alluvial deposit is one continuous form, and never in detached portions one would expect from a lake. In addition to this a large-scale map show that the alluvium fills the bottoms of the larger valleys, and branches up some of the smaller lateral ones into brook valleys and in some instances smaller streams, just as one would expect by continued river action as at present. We have seen that in our area alluvial deposits exist along the main valley of the Totley, Oldhay, and Redcar Brooks, and along the Blacka Dike.Mention has already been made of Sorby's next evidence, namely that the existence of old escarpments clearly shows that the river had at one time or another run over the whole surface of the valley.

These conclusions were each explained at length and stated to be, "not rough nor hasty, but derived from the most extensive and careful observations."

Sorby concluded the series by producing a great variety of facts and many diagrams to support his view that the River Sheaf

had never been much larger or more rapid than it is now, and that the alluvial deposits found must have been the work of about a million and a half years ago.

Half a century passed after Sorby's above mentioned work, before attention was once more directed towards the River Sheaf. It was Bernard Hobson in 1910 who focussed new attention on the river as he wrote for the British Association's Handbook on Sheffield. He pointed to the remarkable right-angled band at the confluence of the Sheaf and the Don as the latter flows away to the north-east. It is wondered whether or not it would be true to regard the Sheaf as the true headstream of the Don, and the Don above Sheffield as the over developed tributary with unilateral development of its own tributaries.

The Rev. W. L. Carter submits two principles of physical geology to support his case in accounting for the course of the Sheaf and Don, river vapture, and glacial diversion. Carter subscribes to to the theory of the original chalk cover over the whole of the area. He believed that this chalk surface would be easily disintegrated by the agents of denudation, and the underlying Carboniferous land surface would be revealed before the major lines of drainage would have time to establish themselves. The drainage was thought to be first started by runlets wandering about on the soft surface of the chalk, quickly wearing it away. As the Teriary uplift continued the old river of the Carboniferous Age, even if filled with chalk, would soon be given its former features, the softer chalk being worn away before the older hard rocks. Thus the new valley would follow the line of the old river.

Carter considers this theory to explain, "the predominance of the Sheaf as the capturing river of the (Don) system." He shows that the Valley of the Sheaf has signs of an ancient geological feature. If, as it is thought, the Sheaf Valley did have a covering of chalk, it would account for two facts. Firstly it would explain the commanding position it enjoyed in its struggle to be master from the very first, and secondly it would suggest the reason why it follows the faulted syncline of the Middle Coal Measures, and flows north-east, whilst most of the other consequent rivers of the area flow eastwards to the Rother.

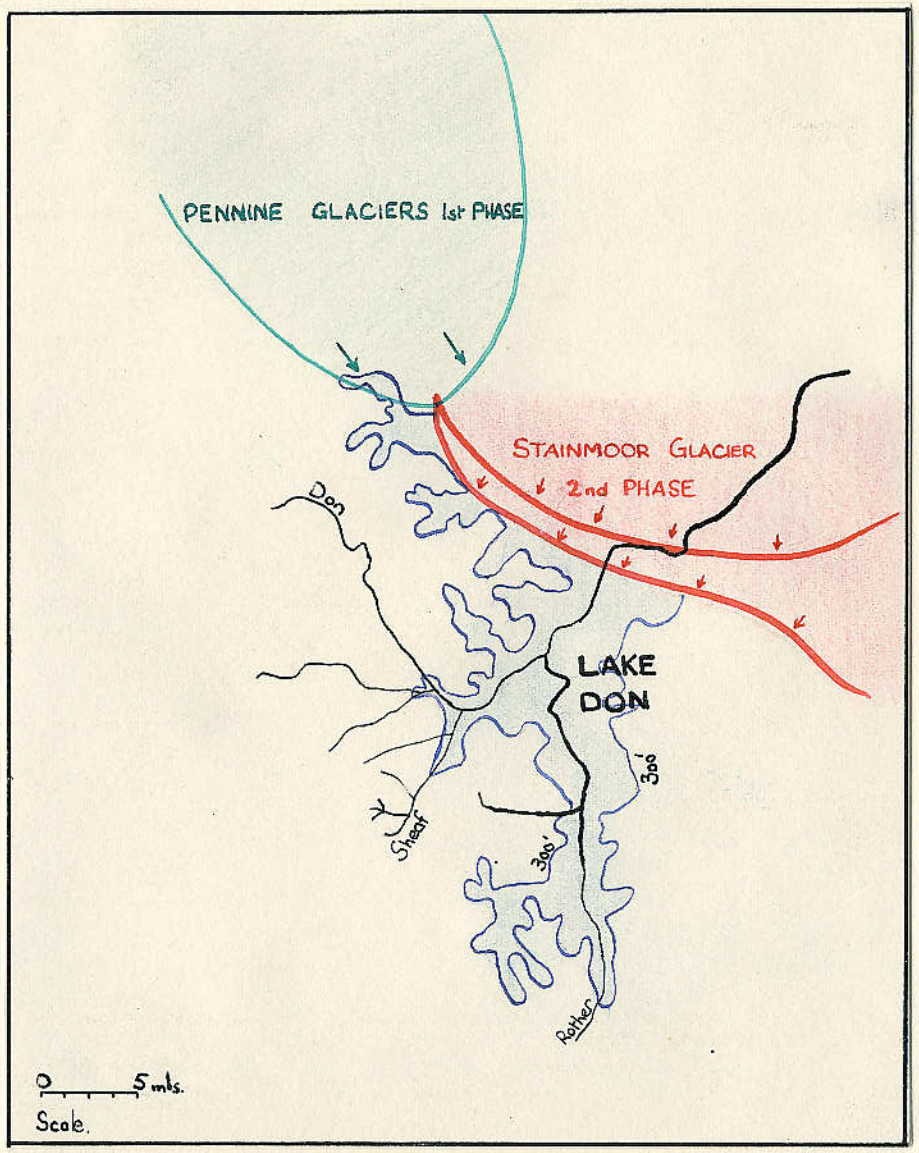


FIGURE 12. CARTER'S LAKE DON

Carter submits the following theory of glacial diversion to support his views about the Sheaf.

The normal drainage was obstructed by an advancing ice-front, and a lake is thus formed, the overflow from which cuts a new channel across the lowest part of the enclosing watershed. This channel, if only occupied for a comparatively short period, may be deserted on the retreat of the ice barrier, and the stream will then return to its old channel, unless that is obstructed by moraines, when the overflow from the diminished lake will cut a new channel across, or at the side of the moraine.

Carter tells us, "it is to the extension of the Wensleydale Glacier, reinforced it may be by the Nidderdale, Wharfedale, and Airedale Glaciers, that I would attribute the first phase of glaciation in the Dearne and Don Systems, followed by a glaciation by the Stainmoor ice, and associated with a complicated series of glacier lakes." Carter goes into considerable detail of the Don and Dearne Valleys to trace the passage of the above mentioned glaciers which are thought to have blocked the Don at Conisborough, thus enclosing the waters of the Don and Rother into a glacial lake, Lake Don, to reach the present 300 foot contour line. (Figure 12)

Mr. A. C. Dalton has completed field work on the above outlined theory, but he says he can find very few traces of the evidence of this lake. Indeed nobody seems to have been able to find any traces of evidence which Carter outlines in his work. Carter himself stated, "few lake deposits can be expected," and one feels much more field work in this direction is necessary before any final conclusion are drawn.

Hunter presents us with two contrasted views of the River Sheaf in 1869; "it steals silently along its low channel, approaching the town to which it has given name.....It can, however, assume a different character when swollen by rains, or by a sudden melting of the snow on the moors to the west of the town (a much more frequent occasion of floods in the Sheffield rivers), it has been known not only to fill its deep channel, but to overflow its banks, and lay waste the works of man." We are given a further instance of the river's power when in 1768 it carried down the houses which formed the north side

1.

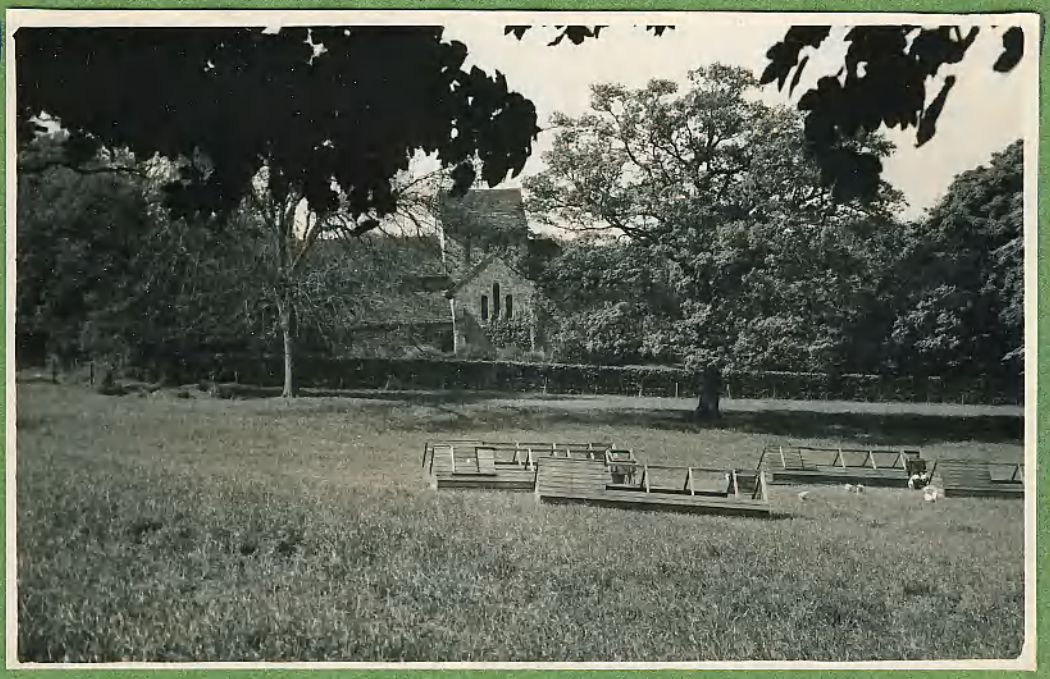
6

7

SITE OF DORE

8.

9.



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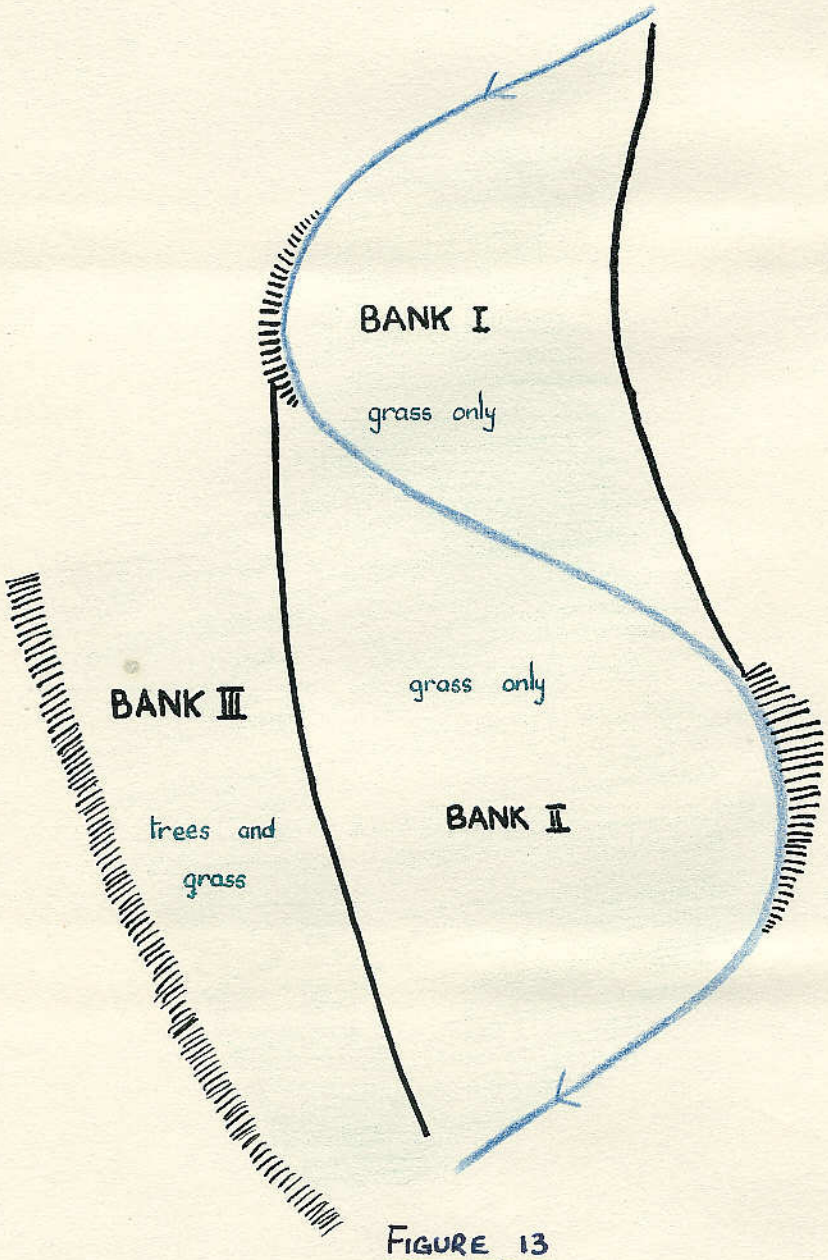


FIGURE 13

of Talbort Hospital, taking five of the pensioners' lives.

Nevertheless, it is to the Sheaf we owe the drainage of the majority of our area. The Sheaf rises on the high parts of the moorland, and along with many other streams, is approximately in the 35-40 inch rain distribution mark, and thus many swift flowing streams are seen in our area. The Blacka Dike thunders past the eastern part of the Blacka Plantation, and provides us with an example of a river in its youth, having steep V-shaped sides to its name.On joining the Redcar Brook at "Avenue Farm," we perceive a change in its nature. Here we see that the Dike meanders a great deal. The action of the stream in cutting a course for itself is clearly seen in a series of raised banks.(Figure 13) With the meanders we see the surface of the sandstone is exposed on two very sharp curves in the river. Man's influence on this stream is also clearly evident. Along its course one frequently finds weirs, and not content with this measure, man has also diverted the river for his own use. Between Hallfield and Avenue Farms, one encounters the structure of an old dam, with its sluice gate, and redirected water channel away from the river. More will be said about this subject later. The dam is no longer used and the river has been allowed to return to its natural course.

It is at "Avenue Farm" that the waters of the Redcar Brook swell the ranks of the Blacka Dike. The former stream rises outside our area on Houndkirk Moor, but we have seen its might as it passed the "Head" west of Owlet House, on the Hathersage Road. The Brook meanders far less than the Blacka Dike as it passes through Wag Wood and then at the foot of the Fairthorn Home (Photo. 6) and finally into the Blacka Dike.As the stream continues to flow to Totley it changes its name and becomes the Oldhay Brook,a name retained until the river becomes the Sheaf north of Dore and Totley Railway Station. However, we must retrace our steps a little and consider the stream which rises to the west of Wimble Holme Hill at about 1,225 feet. These waters pass the former lands of Strawberry Lee Farm, and one notices the example of a river in its youth. A further marked example of a youthful stream is found to the west of the rifle range, at about 1,100 feet. (Photo. 7)

This water flows through Needham's Dike before reaching the Oldhay Brook.

Totley Brook originates on Brown Edge passing very near the Mooredge Works, and forming the parish and county boundary as it continues to meander through Gillfield Wood, across cultivated land and through Clay Wood at Totley Rise before it finally joins the waters of the Oldhay Brook at the site of the Old Totley Rolling Mill. Many streams join Totley Brook, but these again do not focus our attention, as they are outside our area proper. They do, however, contribute to the complete picture of the drainage of the area by adding their waters to the River Sheaf.

As we have already indicated the waters of Totley Moss are eventually collected by the River Derwent. As these waters move away from Totley Moss to Barbrook Bridge the area is swampy and marshy, and generally ill-drained. The waters do eventually reach the Barbrook Reservoir which eventually serves a wide area in the Chesterfield district giving it a water supply. Another area of marshy country is found as one approaches Brown Edge from the west. Further south the bog continues to Salter Sitch.

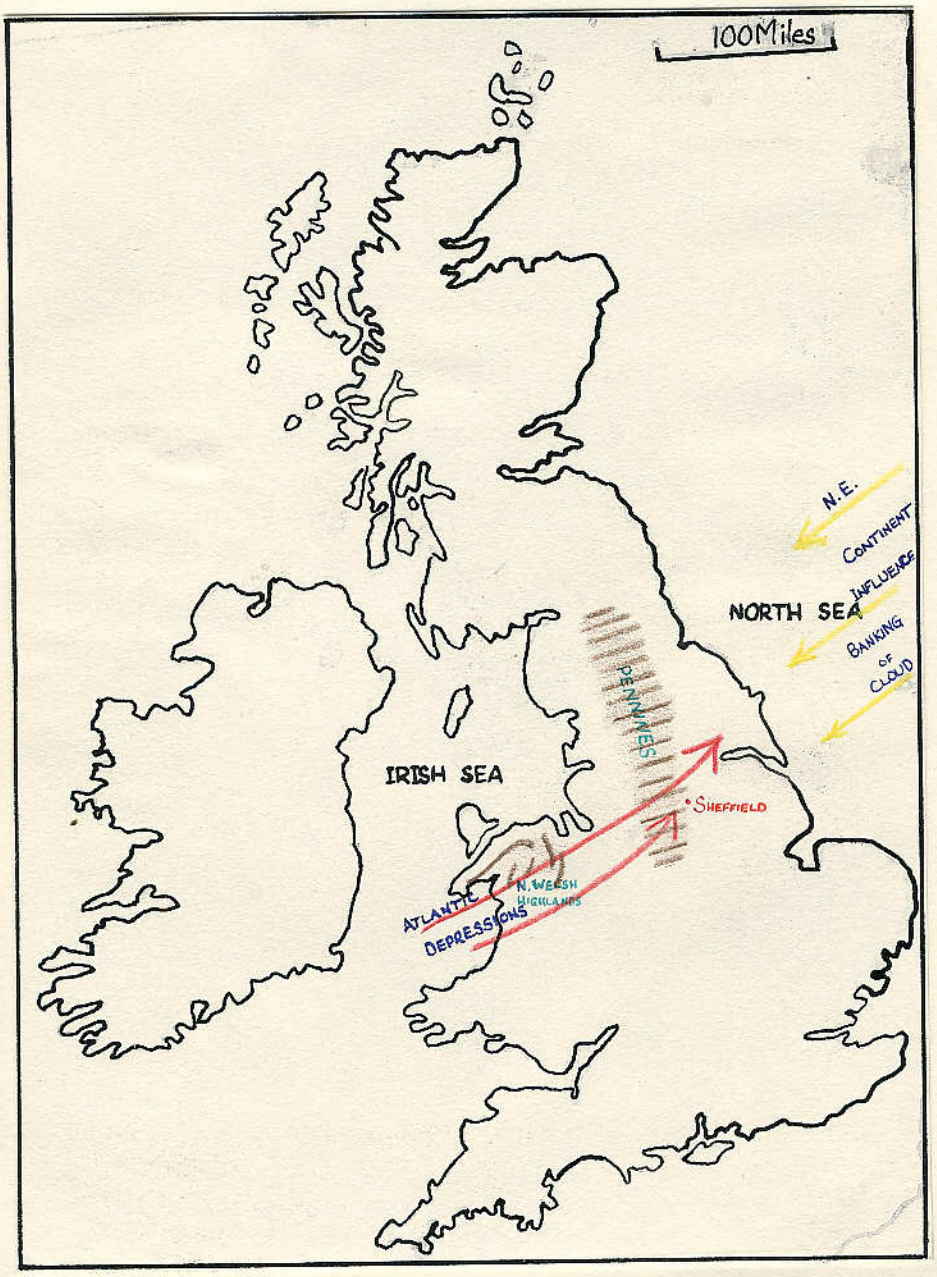
The waters of the area just mentioned at Salter Sitch Bridge eventually reach the River Rother after passing through Millthorpe Brook, Dunston Brook and Barlow Brook. The area of our terrain delivers these waters to the Rother and although this area is only small and comparatively unimportant, one feels it is worthy of mention.

Within our area it is therfore possible to trace the waterparting between the Derwent and Don River Systems. This has been indicated on figure number seven.

Climate.

Before considering the climate of the region in detail, several general comments are felt necessary. Three main factors seem to influence the climate of the Sheffield Region.

Firstly we must consider the inland central position which we have already indicated in Hunter's positioning of the city. We must therefore expect "continental" rather than maritime conditions especially in seasonal and daily temperature ranges. Secondly we must



SHEFFIELD'S POSITION

FIGURE 14

remember that this area is between two types of relief. To the west we find the Pennine Chain, and to the east the lower region. Our region consequently lies at the junction of these two types of relief, forming a "foothill" zone. Thirdly we must recall that Sheffield lies in the track of the Atlantic depressions, whose centres follow a North-Midland route across Britain from the Irish Sea. (Figure 14) These depressions give high precipitation and a frequency of polar maritime air streams, and on occasions, snowfall. We can, however, also be affected by anti-cyclonic air masses over Eastern England. Under these conditions it is not uncommon for stagnent air to bank against the foothills of the Pennines.

These are therefore the basic factors when considering the area in general. Within our area proper there are no weather stations or records of climateology, and the nearest station offering such information is in Weston Park Sheffield. This official weather recording station for Sheffield was opened in 1883 by Mr. E. Howarth, the curator of Weston Park Museum, and was run on a commercial basis to supplement his salary. He gave the press and individuals information about the weather for a certain fee. In January 1937, the station was taken over by Sheffield Corporation Museum Department, and has since been maintained as a public service by the staff of the City Museum. Thus the station is 74 years old and for the purposes of this study much of its information will be used. The site has little changed since 1883, and its exact position is as follows:-

Site Weston Park, Sheffield 10, Yorkshire

Latitude 52^{0} 23' N.

Longitude 1° 29' W.

National Grid Ref. 43/339 873

Height rain guage above M.S.L. 429'

Principal time observation 0900 G.M.T.

One must emphasise the local differences within the city boundary, and the figures to be used are to be taken only as some known

FIGURE 15. MONTHLY RAINFALL

STATION	J	F	M	A	M	J	J	A	S	O	N	D	total
BARBROOK	3.74	2.96	2.47	2.34	2.37	2.43	3.2	3.22	2.85	3.55	3.72	3.42	35.57
WESTON PARK	3.14	2.55	2.21	2.06	2.3	1.91	2.6	2.76	2.09	3.02	3.17	3.17	30.98
REDMIRES	3.8	3.37	3.17	2.69	2.74	2.55	3.23	3.8	2.76	4.02	3.59	4.75	40.5

figure to be used in comparing and contrasting other sources of information. In making a survey of the thesis area, whilst there was material for the surrounding districts, there was a complete absence of material for the parishes of Dore and Totley.

Within our area rainfall seems to be the most variable factor. There is a close relationship between altitude and rainfall distribution. A rough indication of rainfall distribution is obtained by considering the 1000foot contour line as marking the boundary of the 40 inch mean annual rainfall line. Mr. Barwick of Sheffield's Weston Park Station estimated the following annual average distribution of rainfall : Dore and Totley Station about 34 inches, Dore Village about 36 inches and Totley Moors 41 inches.

Nearly all the reservoirs supplying Sheffield are within the 40 inch distribution mark, and whilst there are no reservoirs in our area, one notes the many streams (we have already mention by name) rising within the 40 inch mark. These fast flowing streams rising above 1000 feet account for the many wheels and water mills within our area, giving rise to the industries we shall presently study.

The nearest source of information to our area concerning the rainfall distribution on the moors is the Barbrook Reservoir. The rain guage for this reservoir is about one mile to the south-east of the highest part of Totley Moor, at about 1,280 feet, and this guage is 1073 feet above M.S.L. The writer has been able to work out the mean monthly rainfall and the mean annual rainfall from records over the period 1906-1956. (Figure 15) These figures may be compared with similar statistics from the Weston Park Station for a half century, 1901-1950, and although the years are not exactly the same, one feels that they are of value when using them for a comparison. It will be noticed that Barbrook has a greater mean annual rainfall, being further west than Weston Park, and considerably higher. On examination of the mean monthly totals one will see a corresponding increase in the Barbrook figures.The difference between these two stations is again underlined if one compares the figures for the wettest and driest month for the same period. When compiling these statistics at the Chesterfield offices

FIGURE 16. WETTEST MONTH (SAME YEARS AS FIG. 15)

STATION	J	F	M	A	M	J	J	A	S	O	N	D
BARBROOK	11.73	7.44	7.56	4.94	5.78	4.91	6.01	7.44	7.6	7.18	8.78	8.19
WESTON PARK	6.61	6.03	5.57	3.81	7.15	4.41	5.89	7.79	7.06	7.2	6.81	7.81

one noticed that outstandingly high monthly totals were indicated in a different coloured ink. (Figure 16) Redmires Dam is situated at about 1,040 feet and records have been kept since 1881 at this station. The mean annual total rainfall for this station is seen to be 40.5 inches, and the mean monthly totals are seen to be on the whole greater than those at Barbrook. (Figure 15)

It therefore seems that from these statistics of stations near our area, we are correct in giving the moors in our region an average yearly distribution of 40 inches of rain. Barbrook has about 35.5 inches, and Totley Moss is extremely close and slightly higher, so it follows that our estimation is roughly correct. The evidence of the Redmires figures seems to confirm our work.

In my search for material for this section of my piece, I have used certain other less reliable sources of information. Records have been kept for two rainfall guages, one at White Edge Moor, (about half a mile south-west of Totley Moss, at approximately 1,260 feet.) and at Lower Burbage Moor (about one mile north-west of our moors, at about 1,260 feet). Records for these two guages date from 1926-1956 and the mean annual rainfall is 36.4 inches, and 37.5 inches at these respective stations. These records add evidence supporting our above estimation for the Totley Moor area. The figures are taken for a considerable period, and are therefore to be relied upon.

Records have been kept at Abbeydale Grammar School by a former VI Form pupil, and the geography staff kindly allowed me to borrow the available material. Unfortunately one cannot use these statistics to any great advantage as they are for such a short period, in some cases incomplete. However, I have tried to gain some impression from them; the rainfall and temperature recordings are the most fully entered.

Once more the statistics are not for my area proper, but they can perhaps be of use for comparisons. The site of the school is to the north-east of my area, latitude 53°21'N. longitude 1°30' W.,

N.B. (THROUGH MISCALCULATION, THERE IS NO FIGURE NUMBER 17)

FIGURE 18. RAINFALL FOR 1955

STATION	J	F	M	A	M	J	J	A	S	O	N	D	total
ABBEYDALE	4.12	2.44	4.01	1.62	3.65	3.54	1.2	1.32	0.65	2.11	2.96	3.44	28.29
WHITE EDGE	3.6	3.14	3.93	1.08	3.79	3.99	1.82	0.79	1.57	2.88	2.69	4.3	33.58
LOWER BURBAGE	3.7	3.23	3.63	1.18	3.57	3.68	1.71	0.91	1.5	2.83	2.56	4.2	32.7

FIGURE 19. WESTON PARK AVERAGE NUMBER OF DAYS WITH SNOW OR SLEET

BASED ON RECORDS 1921-1950

	J	F	M	A	M	N	D
Days	7	7	3	2	1	1	4

and is 375 feet above M.S.L. The figures the writer is quoting cover the year 1955, and he is attempting to compare them with figures for the same period at the two previously mentioned stations, White Edge Moor, and Lower Burbage. (Figure 18)

From these, and the other figures we have considered, it is evident that as one moves further east away from the moorlands, there is a definite decrease in rainfall distribution. As we have already mentioned as one moves eastwards across the greater area in which our region forms a part we find this same decrease in rainfall distribution. If we were to consider further sets of rainfall distribution figures for regions further west of our area we should see a similar increase, for example Kinder Scout has about 60 inches of rain a year.

In spite of the absence of recording actually in our area one concludes that rainfall distribution is closely related to relief.

Snow is a frequent enemy to the people who travel via the Hathersage Road into Sheffield for their livelihood. Although we must revert to the figures given by Weston Park for the incidence of snow, one must point out that in our area to the west of the city,the snow often stays for a greater period. The snow usually drifts on the moors, and a recent measure to try to prevent this has been to construct wooden fences or stakes alongside the road, in the hope that this will arrest the drifting and subsequent blocking of this highway. Nevertheless, the Hathersage Road is closed nearly every winter, and even this year's mild winter affected transport. It is indeed a rare year for one not to see pictures of Sheffield Corporation Buses stranded on the road in the "Sheffield Telegraph" or "Star." (Figure 19)

We have already mentioned how the waters gave man power to drive his machinery, but those days have now passed for this area, but the waters are still useful to man.

For many years there has been a supply tank at The Fox House Inn. It is fed from local springs, and a new tank has been in service here about three or four years. Totley Moss forms part of the

FIGURE NUMBER 20. WESTON PARK (1921-50)

AVERAGE NUMBER OF DAYS WITH THUNDERSTORMS OF ELECTRICAL PHENOMENA

AP	MY	J	JY	A	S
1	2	2	3	2	1

North East Derbyshire Water Board's catchment area, and one is not officially allowed on this area without their permit. The waters are collected in the Barbrook Reservoir, and they ultimately supply the Dronfield, Holmesfield, Kilnhurst, Ridgeway, Beighton, Killamarsh and Barlow areas.

Rainfall has an effect on the vegetation and leaches the soil. One has seen how Totley Moss has a covering of peat, and as we have already noted this part of our area receives the heaviest rainfall. It has been suggested by W.G.Smith and W.M.Rankin that the area where the heather is dominant have, on the whole, a lower mean annual rainfall than area where cotton grass is dominant. Our area certainly supports this theory, for although heather is to be found on the moors, it is more abundant in the drier valley sides, for example on the sides of Strawberry Lee, and at the foot of Blacka Edge.The water is high in acid content which makes it very soft, and especially good for the complexion, a fact the "fair sex" of the area no doubt appreciate. The effect of rainfall on the farming and the nursery cultivation of the area is specifically dealt with under those chapters.

The Air Ministry's Records for the north of England have shown a slight general increase in rainfall and temperature, but the last four years have shown quite a steady state of these rises. This increase is reflected in our local rainfall statistics; it is not large but gradual and significant.

Thunderstorms tend to develop along two main tracks in Sheffield. The first originates in the area of Bradfield and passes via Loxley, Malin Bridge to the city centre, and passes away to Rotherham. These storms do not approach our area. However, the second direction of storms in the main do affect our area. Commencing at Burbage Moors, the storms travel to Ecclesall and there they turn up the Sheaf Valley, along past Abbeydale, Millhouses to Totley, and thence to Holmesfield, and Chesterfield. There are no records of storms within our area, but perhaps the frequency of those recorded at Weston Park will serve as a general guide to the region.

Unfortunately, there are no records of temperature available for our area proper, and so once more we must rely on Sheffield's

Station, and the figures from Abbeydale Grammar School.

There has been a rise of $1\frac{1}{2}^{o}$F. in average temperatures since the nineteenth century as recorded at Weston Park. This figure gives an indication of the amount involved when we earlier mentioned the general increase recorded by the Air Ministry.

Temperature is influenced here by the distance from the sea. We have heard how Hunter pointed to Sheffield's central position, and we are in fact about 100 miles from the Irish and North Seas. This has some effect, and is most marked in February when we normally experience "Continental" type of temperatures, with a mean monthly temperature (1921-1950) of 39.2^{o}F. The lowest temperatures are to be found in February, the lowest recorded 6°F. Febrauary 1895; the distance from the sea also affect the summer temperatures and the highest temperatures are found at the end of July and in August. The highest temperature recorded was 92°F. in August 1911. The mean monthly seasonal range (1921-1950), from 39.2^{o}F. in Febraury to 61.5^{o}F. in July, gives a range of 22.3^{o}F. This may be compared with 20.4^{o}F. for Liverpool for the same period. Clearly one sees that the range is greater, and this confirms our belief in a "continental" type of climate rather than maritime where the range is less, at Liverpool.

As one moves westward from the city, one sees that temperatures fall with altitude. There is a general absence of long established records to the west of the city and one must see the figures at the Buxton Station to illustrate the truth of the above statement, there being no figures available for our area. (Figure 21) This station is 1,007 feet above M.S.L., and the mean monthly temperature for February is 36.2^{o}F. Sheffield's weather station is 450 feet above M.S.L., and so with a difference of only 557 feet, one might expect the mean variation of temperature to be very slight, perhaps only 1-2°F. In fact, there is a mean difference of about 3°F. Mr. Barwick of the Sheffield Station considers that for every 1,000 feet, the temperature falls about 3°F. On the above theory therefore, one would expect a mean difference in temperatures on the moors of Totley, and the lower parts of our area, in the vicinity of Dore and Totley Station for instance. In the absence of

FIGURE 22

SORBY'S WORK

LOCALITY	ELEVATION	SUMMER	WINTER	DIFF.	MEAN. TEMP.
Spring-Lower Heely	250	51	47	4	49
Well-Upper Heely	350	50	47	3	$48\frac{1}{2}$
Spring-Fox House	1050	46	$45\frac{1}{2}$	$\frac{1}{2}$	$45\frac{3}{4}$
Well- Ringinglow	1075	47	44	3	$45\frac{1}{2}$
Spring-Brubage Bridge	1275	$47\frac{1}{2}$	43	$4\frac{1}{4}$	$45\frac{1}{8}$

AND MANY MORE, BUT THESE OUTSIDE OUR AREA.

records perhaps the only evidence one could produce in support, would be the fact that the snow remains longer on the moors than in the valleys.

In 1859, H.C. Sorby presented a paper,"On the temperature of the springs in the neighbourhood of Sheffield." Although only one of these springs is within the confines of our locality, one feels they are significant considering the general absence of detailed records.

Sorby's object was to show the mean annual temperature at various elevations from the temperatures of springs. Sorby proves that the temperatures from 50-100 feet are the same at all seasons, and correspond very closely to the mean annual temperature. He continues by proving the temperature of water from a spring near the surface would vary considerably, but the temperature of the water from a spring at a moderate depth would vary little. It is therfore considered that the springs give a good approximation to the mean annual temperature of the localities where they occur. Sorby adds that if there is a considerable difference between the winter and summer temperatures one cannot rely on the mean. A difference of 5°F. is considered too great, and he therefore discards any differences over this figure. (Figure 22)

From these results we are able to make certain conclusions. The difference between the highest and lowest temperature is very small, as little as $\frac{1}{2}^{o}$F., and in spite of the fact that the observations were made after a very hot summer and very cold winter, that is, autumn and spring 1854. We would expect that the mean annual temperature of the springs would vary as the ground is exposed to the sun, or shaded from it by steep hills, but the tables show us this is not the case. We must therefore accept these results as being as accurate as possible.

The springs in the lower parts of the valleys west of Sheffield, at an elevation of 250-350 feet, have a mean annual temperature of $48\frac{1}{2}^{o}$F or 49°F. according to these figures. Lack of accurate, long established records do not allow us to confirm Sorby's work, but Sorby quotes the mean annual temperatures of York, Manchester, and Derby as $48\frac{3}{4}^{o}$F., and so we see that the temperature of the springs rising at low

FIGURE 23. TEMPERATURES AT ABBEYDALE 1955.

J	F	M	A	M	J	J	A	S	O	N	D
36	34.5	39.2	48.1	48	59.8	63.9	63.7	57.8	48.5	44.6	41.7

FIGURE 24. AVERAGE MONTHLY TOTAL HOURS OF BRIGHT SUNSHINE

SHEFFIELD 1901-50 Buxton 1921-50

	J	F	M	A	M	J	J	A	S	O	N	D
SHEFFIELD	39	55	93	132	161	183	170	156	119	83	47	32
BUXTON	22	42	89	120	161	176	154	145	111	76	36	14

levels corresponds very closely with the mean annual temperature of the air at a similar level.

From the valleys to the upper parts of the higher hills at an elevation of 1,000 feet and more, the mean temperature of the springs varies from $45\frac{1}{8}^{\circ}$F. to $45\frac{3}{4}^{\circ}$F., the average being about $45\frac{1}{2}^{\circ}$F. We can therfore conclude that the mean annual temperature on the higher hills is 3°F. or $3\frac{1}{2}^{\circ}$F. less than in the valleys. In the light of what we have already discovered, one feels that the work Sorby did appears quite accurate and well grounded, for records over a long period give the same results. Sorby's final conclusion is that rising from the valley to the tops of the hills, there is a diminuation of about $\frac{1}{2}^{\circ}$F. in the mean annual temperature for every 100 feet of elevation.

The figures from Abbeydale Grammar School cannot claim to be a true picture of temperatures as they are records for one single year, 1955, but the writer has included them, for they are the only set of figures available for anywhere approaching our district. One can say very little beyond the fact that there is an annual range of 29.47°F., the monthly average temperatures show February to be the coldest month, 34.51°F., and July to be the warmest, 63.98°F., which is in keeping with the figures we have already mentioned at Weston Park. (Figure 23)

Severe air frosts have been known in every month from November to April. June to September are free from frost. Ground frost has occurred in all months except July and August. In the months from December to March inclusive, records show an average frequency of 48 out of a mean total of 65 days with frost. This is an especially important consideration to the the nursery plantations within the area. Several disastrous frosts have occurred from time to time, and the most dangerous period for the nursery men is from the end of April to mid-May. However, we shall deal with this aspect at greater length presently.

The cyclonic type of weather appears to account for the rather low amount of bright sunshine in the upland regions to the west of Sheffield. Low clouds, continuous grey skies, and occasionally, hill fogs make these areas rather low in bright sunshine amounts. Once more we have to rely on the figures of sunshine for Weston Park. (Figure 24)

When we compare these figures with Buxton for instance, one sees that this station further west, has less sunshine. The difference with our area will be negligible,one imagines, as one travels from the eastern boundary to the western moors of our area. For the past thirty-two years it has never been necessary to introduce artificial sunlight into the nursery gardens to foster growth, so whilst the majority of folk in Dore and Totley probable consider they do not receive their due of sunshine, the gardeners of the area are not too disturbed. Whilst the amount of sunshine is sufficient for the farmers of the area, it is insufficient for any cultivation of fruit in the area. The area is too "rough" to support any production of fruit, and the nursery men do not favour the idea.

Although Dore and Totley do not experience "smog" as we now know it, low cloud and fog in the valleys reduce visibility, especially in October and November, and again in January and February. Situated close to the area of Sheffield's industry, although one would not consider Dore and Totley at first glance, they must be affected in some small measure by atmospheric pollution from the works on the River Sheaf. Research is being carried on by the city health department into this problem, paying especial attention to the effects of the atmosphere in causing lung cancer, and bronchitis. The time when our area suffers is when the wind is from the east, or north-east. The wind pushes the fog and polluted air back against the foothills. Of course the problem is not so serious as in the eastern districts of the city, in Attercliffe or Brightside, but is is a problem which has increased public interest over the last few years. The main problem is the industrial pollution, and not domestic. In 1954 research provided certain alarming results. (Figure 25)

Although our area is not included on this report, one feels that if Fulwood receives 12.73 tons of solid deposit per month, per square mile, perhaps Dore and Totley may also receive its share, especially when the wind comes from the east. One must also remember that these figures do not include sulphur trioxide and other gasses in the air. Totley is perhaps the area where we are most likely to receive

FIGURE 26. PERCENTAGE OF OBSERVATIONS FROM EACH DIRECTION (WESTON PARK)

	N	NE	E	SE	S	SW	W	NW	CAIM
	9	9	3	7	14	17	18	11	12
FIGURE 27.	6	16	3	5	18	23	8	13	2

FIGURE 27A FROM THE ABOVE FIGURES THE POSITION AND FREQUENCY

POSITION	WESTON PARK	ABBEYDALE
1	W.	S.W.
2	S.W.	S.
3	S.	N.E.
4	CAIM	N.W.
5.	N.W.	W.
6	N N.E.	N.
7	S.E.	S.E.
8	E.	E.

most pollution in our region, if one may term it such when recalling Attercliffe to mind, for the Mooredge Works and the railway also add their small share of undesirable contents into the atmosphere. In the case of the former concern, damages had to be paid to a farmer of the area who found his crops being affected with the contents from this firm's plant. We do not claim any grave problem comparable to that of Park Gate,Rotherham, but our citizens are aware of this danger to our well being. Perhaps the Government's Clean Air Bill will help us in this drive; only the future can tell.

Our final consideration of the climate concerns wind frequencies. Apart from the slender evidence of the records at Abbeydale, for part of 1954-55, one must finally resort to the records of our Weston Park Station. (Figure 26) These figures cover the period 1945-54, and are based on observations at 9 a.m. and 9 p.m. G.M.T. An attempt has been made to make a similar comparison with the direction of daily winds observed at 8.30 a.m. at Abbeydale.(Figure 27) These records cover the period October 1st. 1954, until July 22nd. 1955. Whilst it is appreciated that little can be interpretted by these results, one does note that the prevailing wind is from the south-west. In the Weston Park records west and south-west winds are very closely bound to each other, and one sees a relationship between the Weston Park and Abbeydale School first three places.(Figure 27A-) An attempt has also been made in placing the prevailing winds in order for every month, on a daily basis. These records are for so short a period one cannot deduce solid conclusions, and we must rely on the records of Sheffield for an accurate guide.

The average wind speed at Weston Park is 8 m.p.h.Most years gusts of gale force (42 m.p.h.) are experienced, especially in winter, and on rare occasions the exposed parts of the city have had gusts of about 80 m.p.h.

Within our area one records that the moors to the west of Totley always seem to be windy, and one is pleased to descend into the more sheltered valleys. Alice Garnett suggests that there is much

evidence that the high wind speeds may be a factor in determining the limit of vegetation. One certainly finds that on Totley Moor there is a general absence of tree coverage. The Blacka Plantation is the first extensive covering of trees we meet, and the plantation is afforded protection against these high speed winds, as it lies on the sheltered side of the Blacka Fault. We thank the high speed winds in creating good conditions for our photography, but at times one certainly has a struggle to prevent any movement as one releases the shutter. The moors make one long for shelter, particularly in winter.

In conclusion, it is felt that Hunter's remark in 1869 about the general conditons of the city apply equally well to our area in 1957: "The air is unquestionably salubrious."

CHAPTER TWO

EVOLUTION OF SETTLEMENT.

Whilst the area surrounding Sheffield is comparatively rich in prehistoric evidences, our own area appears to be barren in this respect. It is thought, however, that, whilst no direct evidence has been found within our confines, a general picture of these early days is worth while, for one feels there must have been some similar peoples and their dwellings in our own area.

There are very few remains to be found of the Paleaolithic Age, and none within our own area.

A specimen of the work of the Early Old Stone Age Man was found in 1953 by Mr. R.W.P. Cockerton of Bakewell. This gentleman found a thin twisted, egg-shaped, flint, attributed to the Acheulean culture, at Hopton, North Derbyshire. However, this is well out of our region, and from the general absence of remains we cannot infer anything about our own area. The same must be said for the Middle and Later Early Stone Age. In these two periods our nearest evidence of settlement by man is afforded at Cresswell in Derbyshire at the famous Crags in the Pin Hole, and Robin Hood Caves. A.L. Armstrong carried out extensive excavations here between 1922 and 1935, and discovered three zones of Mousterian occupation. From these Armstrong was able to determine much of the conditions and life at this time, and one regards these as important indications of the possibility of life and the conditions to be found within our own area. "Forest and steppe conditions prevailed, with an abundance of horse and bison which, with woolly rhinoceros and mammoth, were hunted for food. Cave-bear and hyaena were common, and cave lion present." The three zones also indicate the changes which occurred at this time,".....evidence of a climatic change appeared, steppe fauna gradually gave place to tundra fauna, reindeer increased, traces of man and the larger mammals became less frequent, then ceased and a sub-arctic fauna predominated."

The evidence provided by these discoveries shows Mousterian man to have used hand-axes, scrapes, hearths, and cooking stones. Charred

bones testified the use of fire and cooked food. The variety of the food is indicated by the bones found: bones of small mammals, birds, fish scales, and fragments of egg-shell, all these show us how man lived.

The distribution of Mesolithic remains offers no more freedom in our tack of reconstruction, and one may well ponder whether there are any remains yet to be found in our area.

Man of the Middle Stone Age is known to have settled in the lower spurs and foothills of the Pennines from Hope northwards. Sites have also been found at Wincobank Hill, Wharncliffe Edge, and one above Bradfield. All these sites are on clay soil, at one time ploughed land, so it may well be that the foothills of our region contain remains,and perhaps some of the farmers have found such evidences, and yet been ignorant of their worth. Moorland sites have also been found, especially where the surface has been exposed by the action of the wind, and the peat has been removed. Although only conjecture, one may well wonder whether the higher parts of our area, Totley Moss and Moor have some evidences to offer us beneath the covering of peat.

Of the three groups to colonise the land in Neolithic times,Peterborough,Windmill Hill,Westerners, the Westerners are the people who probably first settled nearest our own area. These people came not as invaders, but as peaceful entrants in small groups or in families. They brought domesticated animals, stone axes, pottery and arrow-heads, and would be clad in clothing. The Westerners penetrated to the Pennines from the coasts of west Wales, and the first groups settled in an area east and south-east of Buxton. By the middle of the New Stone Age, these people had lived in thriving pastoral groups, and were widely scattered over the present Peak District area. The settlements would probably be sheltered in the foothills near a water supply, the dwellings they made being of wood.

The Peterborough settlers were nomadic in nature, and they seemed unable to settle, becoming,"itinerant traders." These people moved westwards and eventually reached the Peak. Clearly there was a wide belt of settlement extending from the Lincoln Ridge in the east, to the area of limestone in Derbyshire to the west. The population

seems to have been scattered in the east, but concentrated in the west. These people established trading links between the scattered settlements and for the first time the isolation of the scattered settlements was broken. It is considered highly probable that these people travelled over our area from east to west originally, and later through trade from west to east. Once more we must record that no direct evidence of these people has been found in our area, the nearest being at Arbor Low.

The country was invaded by a people who knew the use of bronze, and they were known as the "Beakers." These people had an effect on the life and culture of our region, although once again there is no evidence to substantiate this: we must base our inferences on the evidence afforded by the immediate surroundings. Many of these people spread into the heart of the country by the River Trent, but those who reached the Peak are thought to have come from our present East Yorkshire district. It is known that settlements were established on the moors east of Baslow, and in the sheltered hollows west of Sheffield where good pastures were available for their sheep. It seems highly probable that some of these people would have settled within our region and established their activities here. They developed a light plough or "ard" which was pulled by humans at first, but later by oxen. The Beaker Period is a transitional period coming between the Neolithic and Bronze Ages. After the Beaker peoples a very similar race came from the east and settled here.

In the early days of the Bronze Age many of these people settled in the Peak District, and by the end of the early part of the Age they had spread to the upper reaches of the River Don and its tributaries. It is now unlikely, therefore, that some of these people settled at the head of some of the rivers in our region. This Early Bronze Age seems to have been a period of peaceful progress and the people lived mainly from pastoral activities with perhaps some small cultivation of barley.

During the Middle Bronze Age, the land was invaded by people from Central Europe, the Urn Peoples. These men knew the use of iron and were well armed and were led into battle by warrior

chiefs. In 1887 two urns were found at Bole Hill, Crookes, and a large urn belonging to these peoples has been found at Dronfield Woodhouse which is quite close to our area. The Urn People created a demand for more land with the increase of their population, and consequently new settlements sprung up around our area. Forest covering was cleared, and the people are known to have settled extensively between the Don Valley and Derwent Dale, and between Rowsley and Chesterfield. Evidence of a small stone circle is to be found in Bar Brook, which we have already noted is quite near our own area, so one feels that although no positive evidence has been found of settlement, these people may have moved across our area. The Late Bronze Age affords us no marked changes in settlement or culture.

The Early Iron Age began about 500 years B.C., and though settlement is marked in East Yorkshire, with the "Hallstatt" communities, and later with the more advanced culture of the continent La Tene, there is no evidence of such settlement in the southern Pennines. The settlement of these early days must therefore have been very similar to that of the Late Bronze Age Period.

The most important feature of the Iron Age is the establishment of hill forts. These were first mere cattle enclosures, but later they were fortified. The hill forts were situated on the gritstone and sandstone moors between Huddersfield and central Derbyshire. Forts close to our area include Higger Tor, Win Hill, Lose Hill, the names of the last two suggest fighting. Although there is no evidence to support the view, one wonders whether such a fort was established on the Totley Moors, and was subsequently claimed and named by the Saxons. Certainly the heights of our moorland area would have made an admirable place for the establishment of a fort. Two other hill forts in the surrounding area were Mam Tor, and Wincobank Hill.

After the Romans had invaded our shores the hill forts became the strongholds of raiding tribes as they attacked the invaders. The Romans established a fort at Templeborough to support their early frontier position and driving the Brigantes further north. Roman roads were made connecting this new fortress with Mam Tor and other Roman

settlements.The road from Templeborough went via Mam Tor to Melandra Castle and to Aquae. There are no remains of Roman settlement within our area proper, and with the establishment of these roads it seems unlikely that the Romans frequented our moors. The nearest Roman towns of any size were Lincoln and York. One must assume that the Roman occupation had little or no effect on our area, and so when they departed from the northern part of the country about the third or fourth centuries B.C., little change was seen.

The period between the departure of the Romans and the Norman Conquest show signs of a great change in the appearance of the country side in our area. The rural settlement at the time of the Norman Invasion was very similar to that of today. There was a change in the distribution and the intensity of settlement. In this period the extensive wooded areas were cleared for cultivation, and the heavy clay soils were first tilled. These new signs were the result of the Anglo-Saxons and then later, in some parts, of the Scandinavians.

After the Romans left,the area was largely peopled by "Romano-British" communities. We are not certain of the details,and little evidence remains, but I. S. Maxwell believes, "that a British population may have remained free from Anglian domination for some time in the Peak District." B.H. St. John O'neil states that although the Angles penetrated along the Trent Valley, it was some time before they actually moved towards the foothills of the Pennines, and later to the heart of the Peak District.

Place-names give us a guide as to the origin of settlement in our area, and it has been noticed that places denoting the earliest Anglo-Saxon settlement with the suffix of "ing" are absent from our area and its immediate surroundings. Settlement is therfore thought to have been started at a comparatively late stage by the Anglo-Saxons who penetrated north by means of the Humber, Trent and Don River Systems. a study of place-names having Anglo-Saxon origin shows that a large number of these settlements are near the streams of the area. This shows the importance of the river systems in the establishment of settlement.

The Anglo-Saxons brought large parts of the land under cultivation, clearing the woodland for their open fields. They built

nucleated villages and although there is no evidence of this recorded in documents, we are able to deduce it from the name "Totley."

Totley seems to have changed its spelling along the following lines; from "Totinglei, Totenley, Totingley" and finally arriving at its present spelling. We must regard the first spelling as the key to the past, in the matter of original settlement. One is able to break the spelling down into three distinct groups: "TOT, ING, LEI." The meaning of each of these words is perhaps best seen in note form.

TOT Something small, compare our present word for a small drink, a dram or tot of liquor.

ING This means "son of" or "descendant" and was often used to denote the personal possession of land by one man

LEI Pasture land, open forest glades or clearings.

There have been other attempts at translating the meaning of "Totley," for example, it is pointed out that "Tothill" means a small hill, and "Toothill" means a lookout, that is a small hill used to watch for the enemy. Evidences of these are found in many parts of the country: Toternhoe in Bedfordshire means the "lookout on the hill," Totnes in Devonshire means, "the toft on the ness" or the headland.

We conclude that the name Totley indicates that this settlement probably originated as a settlement on a hill. When the tree coverage was removed the open fields or pasture land was developed, probably by some person owning the land. The settlement was probably an important watch post, and when one considers the view from Totley Moor, (~~Figure~~ Photo. 3) one immediately sees why these early settlers decided on this site.

The word "Dore" is considered by Dr. Pegge, an authority on historical names, as being a survival of the Celtic language. These words have been largely retained in Wales, and they usually refer to natural features. "Dore" is widely thought to be associated with the Welsh "dwr" (dur), meaning water. This word is evidenced in almost its original form in the name of the River Dour in Fife, Aberdeen and Kent. There are other examples of this derivation, Dorchest, the city on the water or "dur", then in the south-west the dwellers by the water were

known as the people from Dorset. The association of waters with our parish name seems most fitting as we have already considered the numerous streams rising and flowing in the area. Professor Earl of Oxford University, and I. S. Maxfield, suggest that the name of Dore was given to our area signifying a "door" or "pass," for it is approximately situated on the boundary of the former Kingdoms of Mercia and Northumbria.

It is "Ethelwerd's Chronicle" which gives us the first mention of Dore historically. In 827 the Kings of the two separate Kingdoms in England are recorded as meeting at Dore. Ecgbert, King of Mercia met Eanred, King of Northumbria and received the submission of the Northumbrian King. The exact spot where the two kings met is now occupied by a large house, but is is recorded in the Dore Inclosure Award that the spot was marked by an allotment called, "King's Croft." The Saxon Chronicles tell us that Ecgbert was made,"Over Lord of the whole English-speaking race from the Channel to the Firth of Forth." Ecgbert succeeded in uniting the whole of the separate Saxon states into the Kingdom of "Angleland."

The school children of Dore have been known to present a pageant commemorating the event. In 1909 about 200 school children from the Dore and Totley Schools took part in such an activity, using a field between the two villages, not far from Avenue Farm.

In 1957 it seems most likely that our educational system will once more provide a remembrance of this event, for it seems highly probable that the new secondary school at Dore will be opened, and thus officially function as,"King Ecgbert Secondary School." This historical event has already been marked by the name given to a road leading from Furniss Avenue, "King Ecgbert Road." Another road named, "Mercia Drive," is also found in the vicinity of Furniss Avenue. Clearly this most important beginning to the Kingdom of Angleland has not passed unmarked by the past and present citizens of Dore.

The Scandinavians did not affect settlement of our area, for when they arrived much of the land was settled, and as we have seen both villages were starting out on life's road. Scandinavian

settlement seems to have been restricted to the east of the larger area immediately surrounding our area proper.

It is to the Domesday Book that we owe our further knowledge of our modern parishes which have grown out of the Domesday "vills."

The Domesday Book describes the Manor of Dore as belonging to Roger de Busli; "In Dore, Edwin, II, 11 bovates of land hidable. There is land for ½ plough." De Busli was one of the powerful landowners who held lands in Hallamshire and Sheffield and many more manors outside our area. We also hear,"In the same place Lewin, 11 bovates of land hidable. There is land for 1 plough. Formerly XX shillings; now LXIV pence."

Totley is said to have been in the possession of one of the King's Thanes. "In Totinglei, Tolf had IV bovates of land hidable. Land for one plough. It is waste. Wood, pasturable, 1 mile in length, and ½ mile in breadth T.R.E. val X shillings; now X11 pence."

We are able to glimpse these two rural manors with their agricultural occupations from the following words, "wood, pasturable, plough." The word "bovate" means "an area of land that can be ploughed by a single ox." The word "hidable" means taxable, and so we are able to picture the villages under the system of agricultural land which is taxed by the owners of the manors.

By 1175 we see the close connection of Dore and Totley with the Monks at Beauchief. We hear that the people of Dore paid the tithe to the Monks. The Abbey was founded about 1183 by Robert Fitz-Ranulph, Lord of Alfreton, and this Abbey influenced some of the activities of Totley, especially with regard to the use of the River Sheaf and its banks, when the first mills were constructed there.

Throughout the Middle Ages both villages slowly developed, but like the Sheffield area in general there is very little recorded which tells us about the size of the manors. N.B. Lewis describes Sheffield as "a backwater" during the Middle Ages, and this seems to be a fitting description of our own area during these days. Nothing of great significance happened in our area in medieval times, but the area must have sent men for contingents to fight in national and civil wars. We are able to trace the owners of land in the two parishes

DORE

1189-1216

Wapentake of Scaresdale-"Ryeus de Draycot and Matilda de Wellwyke, his wife, held the vill of Dore by sergeanty of the King in chief."

1246

Case between "Hugh de Holbek and Richard Draycote, Tenant in fee of a third part of a moiety of the manner of Dore."

1270

Sir Matt de Hathersage in charge of manor, and by daughter passed to Nigel de Longford by marriage.

1302

"Ralf de Welwyk and Rich Draycot ½ Dore"

1347

"John de Westwyk, Thos. Draycot ½ Dore."

1422-61

Longford's sold Dore manor to family of Kelkes who kept it for three generations.

1551 Kelkes sold manor to Robert Swift of Rotherham

1564 Passes from Swift to Sir Francis Leake of Sutton, sold to Pegge of Beauchief

1705 Sold by Pegge to Wm. Cavendish, first Duke of Devonshire.

1809 Dore Inclosure Act

1822 Award executed

Wm. Spencer George Cavendish, 9th, Earl and 6th. Duke of Devonshire held land.

from about this time, and perhaps the best way to show them up to the Nineteenth Century would be in the following manner:-

TOTLEY

1189-1216

"Egid de Meynil held Totingly of Wm. de Meynil, his brother for a one third part of one fee....."

1237-

"The List of Knight's Fees." "John de Longford and Walter de Gousel held Kinewaldemersh (Killamarsh) and Totley for 1 fee."

1272-1307

Still in hands of Longford family as part of manor of Killamarsh.

CLOSE CONNECTION

1461-1483

Edward IV Sir Walter Blount sold manor to

George Talbot VIth. Earl of Shrewsbury, by marriage passed to

Earl of Pambroke.

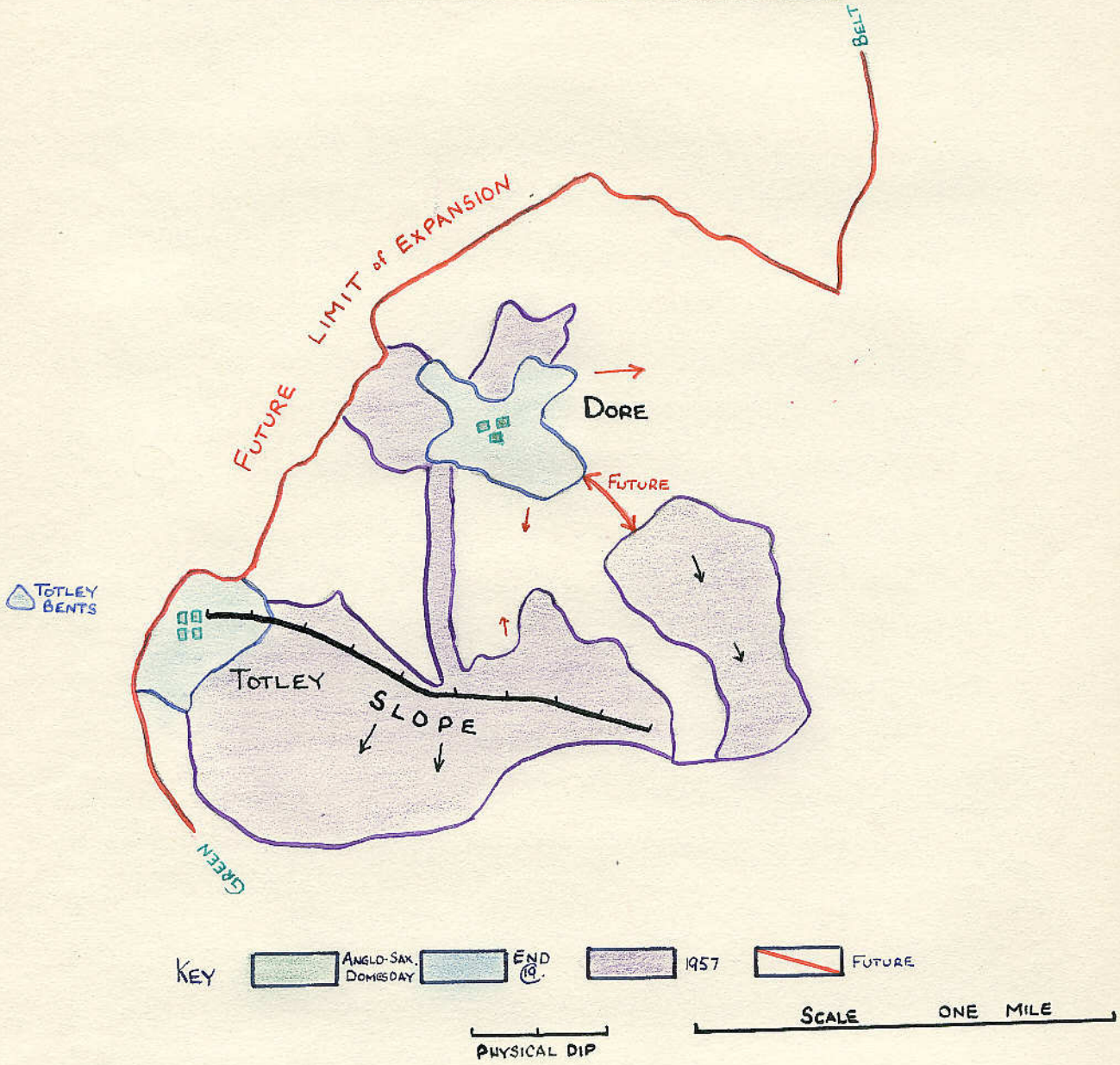
1630

Purchased by Stephen Bright of Carbrook.

Early Nineteenth Century

Manor in possession of Henry, Lord Middleton of Wollaton.

FIGURE NUMBER 29 EVOLUTION OF SETTLEMENT.



There is very little written material as to the direction of the growth of these two villages, but one feels that the following pattern seems likely.

Figure number 29 shows that Dore originated on the crest of a sandstone hill, but settlement has been away from the side descending to the Oldhay Stream, and only in comparatively recent years has this ground been used for settlement. Dore has spread northwards away from the stream, and in the direction of the moors. One feels that the pattern of evolution at Dore has been concentric and more concentrated on the hill summit. (Photo. 8 PAGE 18)

Totley's development seem to have been governed by the escarpments of sandstone, but unlike Dore, settlement has spread down the dip slopes, and in later years into the valley of the Oldhay Stream.

It must be noted before we proceed further that for many centuries Dore and Totley have been(for military, civil and ecclesiastical matters) classified as one.We have already seen signs of the close relationship of one family, the Longford's, with both villages, and we are also afforded the following example:- "The Muster Roll of 21st. Edward III 1348 A.D. for Kinwaldemers Dor and Totley : Nick de Beck and Ralp de Welwyk are with the King's army. Free tenants (in goods) ; Wm. de Rombay 20s, Wm. Ward 20s., 1 bowman, Wm. Dankyman."

Vernon Brelsford gives us some statistics about the growth of population.

DORE	TOTLEY
1783 35 houses	1783 21 houses
1801 83 houses 375 inhabitants	1801 48 houses 206 inhabitants
1901 265 " 1,300 "	1901 205 " 1000 "
1950 Estimated population3,863	1950 Estimated population 4,000

Clearly the growth of both villages has been an even process, and the distribution of houses in Totley today would seem to confirm the 200 difference in the population figures quoted above. The increase in population shows a marked rise since the beginning of the present century.

Ecclesiastical Note.

It is felt fitting that today much of the older parts of Dore and Totley are clustered round the parish churches. Both parishes have an important ecclesiastical history, and it is our place here to sketch the main points.

Both hamlets were once part of the parish of Dronfield. This fact is marked today, for any inhabitant of Dore will tell you that Dronfield is the sister church to Dore. The Abbots of Beauchief Abbey were given the care of this parish in the Fourteenth Century by Henry de Breylesford. In 1650 a commission reported that Dore, Totley and Beauchief should combine for ecclesiastical purposes. "Beachiffe, an Abbey place without cure of soils. We think these places (Dore, Totley and Beauchief) fit to be united and made a parish, and the minister to officiate in Beachiffe and Dore."

The present Dore Church did not exist in 1819. In that year we hear about the condition of the "Old Chapel" which stood there. "The chapel at Dore is a very ancient and low mean building with a rotten roof, and requires a raising of the side walls to support a necessary new roof, with new windows and an addition to be made for the Communion Table."

The present church dates from 1828, the chapel being pulled down, and the new church became a separate parish church in 1844. Today Dore Church continues its long established tradition, and the work of the church is very much alive in Dore. (Phot. 9) PAGE 18

Totley cannot hold any claims to the antiquity of its first church in the same way as Dore. In 1876 St. John's Church was erected at Abbeydale Road South. Built at a cost of £5,000 by John Roberts of Abbeydale Park, the building was consecrated in 1877. It was not until 1824 that Totley became a separate ecclesiastical parish. In that year, "All Saints' Church" was built in Totley Hall Lane, on land given by W.A. Milner. The church is now almost obscured by trees, but one feels that our area's strong historical link with the land is seen as this new church stands near fields with poultry belonging to a farm almost opposite the church. (PHOTO 10 PAGE 18)

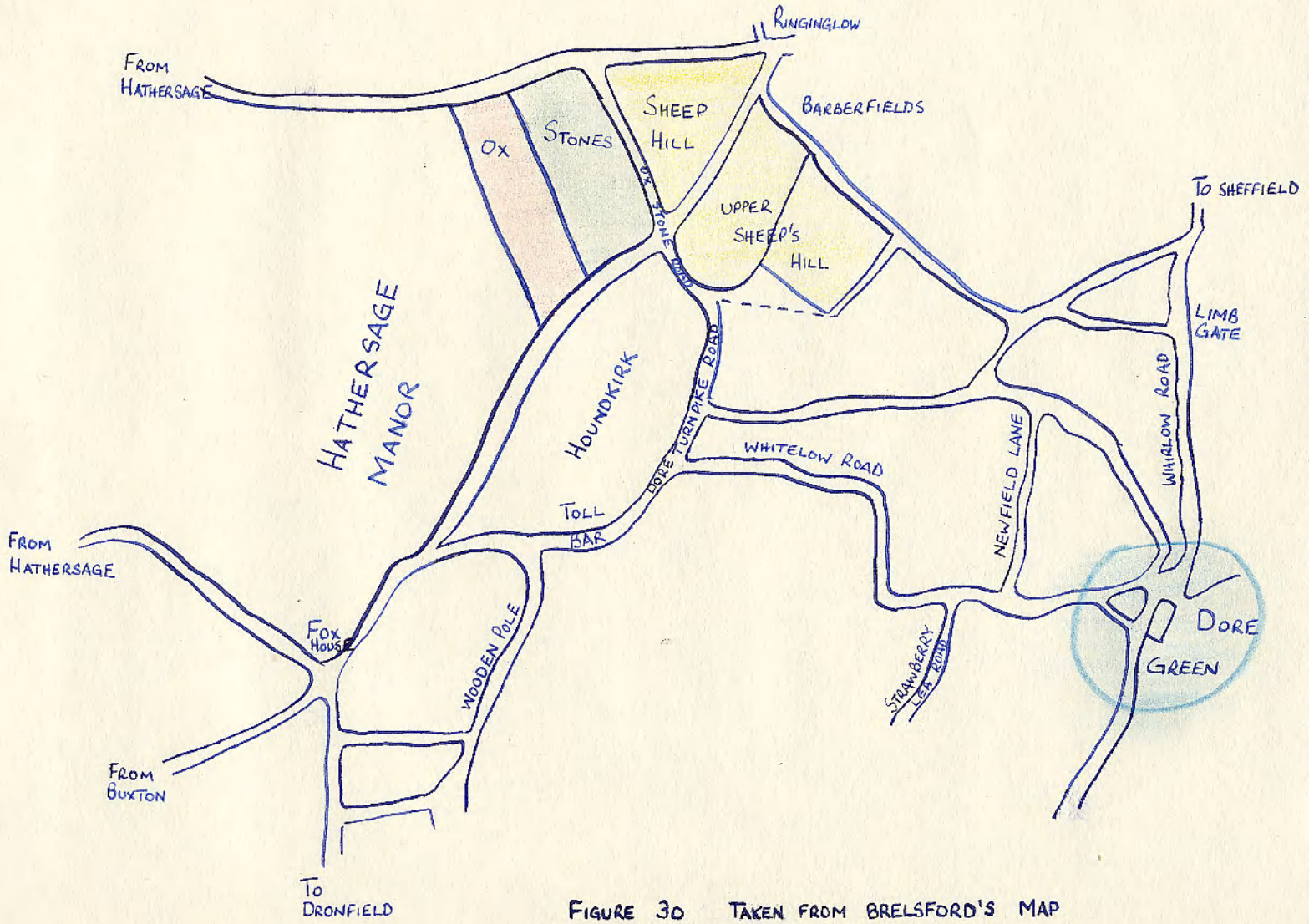


FIGURE 30 TAKEN FROM BRELSFORD'S MAP

DORE INCLOSURE MAP 1822

Not to scale.

We are also given further evidence of the importance of the Church in our area when we see some of the older, "Free Churches" standing today. In Totley the oldest Methodist Church (1848) stands overlooking Penney Lane. Before the Totley bus makes its final climb from the valley at Totley Rise to its terminus, one sees the Methodist Church (1896) at Totley Brook Bridge. Dore provides us with "Mount Zion," a chapel built for the Primitive Methodists in 1860. This stands in the High Street, and the schoolroom now attached to the church is used as a library.

The Dore Inclosure Act was passed in 1809 in the reign of George III, and the Award was made effective on 3rd. July 1822, giving much land for the use of individuals. Out of the 159 areas dealt with by the Derbyshire Inclosure Acts between 1729-1822, Dore's acreage, 5,000 acres, was the greatest. The Act had the title, "An Act for Inclosing Lands in the parish of Dronfield in the County of Derby. Geo. III 1809."

The total acreage of the inclosures was about 3439 acres, and consisted of about 649 allotments of woods, waste, and buildings. The largest single allotment was that between "Ox Stones" and "Burbage" area. (Figure 30)

The Totley Inclosure Act was passed on the 4th. June 1839, and was made effective on the 6th. May 1842. Its full title was, "An Act for Inclosing Lands intthe Manor and Township of Totley, in the Parish of Dronfield, in the County of Derby."

The land in question totalled about 1176 acres, and consisted of 108 allotments. Six families owned over 1000 acres, which did not leave very much for other people out of a total of 1,176 acres.

We see that some of the land so long a part of the feudal manor, was at last given fairly to individual owners. This was important for it meant that there was more freedom given to private landowners, and this brought about changes.

We have considered the human historical aspect of our region and it is felt that this is very important, for it tells us what kind of people lived here, how they lived and worked, and even to the extent of seeing how important the spiritual side of their lives must have been. We have seen that the main work engaging these people was concerned with the land, and that the villages gradually developed a rural-type of settlement whose village life was all important. The division of the land under the Inclosure Awards was the end of the feudal system of land ownership, and marked the beginnings of the farms we evidence today.

Before we leave the historical side of the piece, it is felt that the present evidences of the past would most suitably be included under this section, thus preserving the harmony of the piece.

There is plenty of evidence of the past for the present visitor in both Dore and Totley. New blends with old throughout both parishes, but one feels it is especially noticeable at Dore. The following paragraphs are the result of the writer's own observations in the two villages coupled with information most gratefully received from some of the older members of the community whose warm and encouraging manner will long be remembered and appreciated.

Immediately behind Christ Church,Dore, nestled under the leafy mass of trees in Vicarage Lane, one finds what is thought to be the oldest house in Dore. (Phot. 10)Its present occupants Mr. and Mrs. C. Brooke say that the house dates to the Sixteenth Century, and has been rented by the family for 300 years. The house is known as "Church Lane Farm" and the windows are thought to be the originals, certainly they have every aspect of the Sixteenth Century style. The walls are about two feet thick, and the occupants kindly showed me the stone stairs leading to the bedroom. The house has thick oak beams running across the ceiling and the television seems somewhat discordant with this ancient setting. The house is surrounded with trees which serve two purposes; firstly they shelter the house, and secondly they help to draw the moisture from underneath the floor, for there is no damp course.

The house was originally a thriving farm, indeed we have seen this by its name, Church Lane Farm. Besides the interest as

an historical building, one feels the farm has another important aspect. It shows that the practice of farming has been handed down from one generation to another so that even today the farm still continues with the age old tradition, if on a somewhat smaller scale. The farm now produces a few products, eggs and milk. The latter is for the owners only, but in former years it was produced for local consumption. Today one may see their sole cow, and the few poultry in the heart of this part of the parish. The farm seems to be in its last few years of life, and one wonders what its fate will be. It is felt that such a perfect historical building should be somehow preserved, and we all watch and wait for the future result.

The centre of Dore offers us a host of old buildings, but the details are not quite so well known as our last port of call. (Photo 11) Looking towards the Devonshire Arms from the Post Office, one sees a few small shops and cottages which date from 1771 if the stone is telling us the truth. One also notes the letters W.M.C. above the date, but no explanation of this can be found.

Opposite Dore Church of England School in Savage Lane, there are several cottages bearing the inscription 1782, and above these are the letters R.U.E. Walking past the school in the direction of the 1914-18 War Memorial, one sees the former village green. (Photo. 14) Although this does not compare well with other greens throughout the country with regard to beauty, it is clearly in the centre of the oldest part of the village, and in spite of the notice which now dominates the scene, one may imagine some of the festivities held there in the past. Time has been slow to amend this part of the village. At one corner of the village green there is a large stone with the inscription PEACE 1856. As this is the date of the end of the Crimean War, one assumes it was intended to mark this event.

Townhead Road contains some very old cottages near the centre of the village, and also at the top end of that road. (Photo. 12.13) We see that immediately opposite these cottages are some of the newest houses in Dore, and these serve to accentuate the old. It must be remarked at this stage that nearly all the old houses visited show

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PLAYERS NAVY CUT TOBACCO & CIGARETTES
CHOCOLA E
ST BRUNO
PLANE

13


PRIVATE
NO
PARKING

14

14

LARGER PICTURE

15

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19.

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signs of the present with a television H-pattern decorating the roof.

We leave Dore with the fact that before the Twentieth Century over 90% of the houses were constructed of stone.

In Totley perhaps Totley Hall could take first place in its old buildings. (Photo. 14) Although new buildings have been added to this old hall, the first photograph shows us the ancient part of the Hall. More will be said at a later stage about Totley Hall Training College, suffice therfore to say that it was opened as a Domestic Science College in 1950. The Hall dates to the Seventeenth Century, and was built by George Newbold. A stone over the main door bears this man's initials with the date 1623. The Hall has changed hands many times since that date,but the last occupier of Totley Hall was W.A. Milner.

Walking towards Totley along Totley Hall Lane, one passes a number of old cottages on both sides of the road. Photograph number fifteen shows a stone building with the following inscription, "This building designed as an Infant School for inhabitants of Totley was erected by D' Eves Coke Esq. 1827." The school is now a cottage. On the opposite side of the road there stands an old farm, but although old, it is very much alive. These farms are known as "Totley Hall Farm" and "Hall Lane Farm."

There are two public houses at the top of Totley Hall Lane. The "Fleur de Lys" stands on the same site as the older building, but this is not the case of the "Cross Scythes Hotel." The latter stood where the present garage is situated, and it was here that the horses were changed as they carried passengers on the coach to Manchester and Bakewell; this emphasises the historical value of this road and today we see the importance of the Baslow Road which we shall presently mention.

Descending Hillfoot Road one comes across a number of old houses. (Photo. 16) Most of these houses date from the Eighteenth Century, and one (Photo 18) has the date 1704 over its doorway. There are several old houses here, one witha date of 1781 and "B.E.E." inscribed on a stone and this seems to date the houses in the vicinity. This is clearly an older part of Totley. There are a few old houses stretching

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along the Baslow Road past the 1914-18 War Memorial.

If one turns to the right whilst descending Hillfoot Road, and walks up Butts End, one reaches Cannon Hall. (Photo. 17) This house derives its name from the days of Oliver Cromwell when a shot was fired here. At the corner of Hillfoot Road there is Cross Grove House, marking the site of the old market cross and village stocks.

All the way down Hillfoot Road's steep descent one sees the old part of Totley on the left hand side of the road. At the foot of the hill next to the Crown Inn, there stands and old cottage. (Photo. 19) The house was an old building but the occupant, seen here, could not enlighten us further than that the house had been rented by her great-great grandfather.

The cottage we have just mentioned is on the corner of Penney Lane, and on moving further along this lane, one arrives at the hamlet of Totley Bents. It is here that we find another old farm, "Lower Bents Farm." (Photo. 20) The owners have the deeds of the very first sale of this farm which is dated 1621. The house has low oak beams, and the walls are about two feet thick. The Cricket Inn (Photo. 21) opposite this farm is an old building having stone steps similar to the Church Lane Farm at Dore. Moving away from Totley Bents towards Strawberry Lee Lane, we pass another set of old houses. (Photo. 22) Old farm buildings are to be found here, and one more inn, The Grouse, is found at this hamlet.

If one were to return down Penney Lane to Hillfoot Road, close to the junction of these two lanes one comes across Totley Grove. (Photo. 23) Whilst the exact date of the owner and origin of this house are unknown, it seems likely to date from the Eighteenth Century. In 1889 the Midland Railway Company bought this house from the Waterfall family who owned it at that time. Since then the house has been altered many times, and recently a new set of modernisations have been added by the present owners. One feels that this house is one of the most pleasant in the district, and it has a charm of its own.

Moving to Totley Brook one encounters the stately buildings of Abbeydale Hall. (Photo. 24) In spite of some Civil Defence vans in the grounds, this Hall maintains a cool dignified stance, and one feels many people miss this sight as they pass on Abbeydale Road South, for the trees partly obscure it. The grounds of Abbeydale Park are now part of the Sheffield Amateur Sports Ground, and one finds rugby, tennis, football, cricket, and athletics taking the place of former activities in the park.

Leaving the park one finds a row of stone houses opposite Dore and Totley Station. (Photo. 25) These were opened in 1879 by the Sheffield and Rotherham Victuallers Association. In front of these houses one reads the inscription of a monument to the memory of Alderman Thomas Wiley, and we see that this structure was moved from Grimesthorpe the year the houses were opened.

Although we have not concluded our work on the historical background of our area, it is felt that the above survey contains the main facts of the region's history proper. We conclude this by mentioning the significance of the historical evolution of Dore and Totley.

Our study of the history of the area has shown us that slowly a new pattern of life was evolved on the natural surroundings. This new life was human life, and we have seen how man has made use of his surroundings in our area. Although much of the past is very obscure we are given a clear picture of the type of agricultural settlement which existed from the time of the Norman Conquest.

It is with great clarity of vision we are able to construct the sequence of development from the Seventeenth to the Eighteenth Centuries as most of the buildings standing date from this period. A study of these older settlements shows us the approximate directions in which settlement has spread. The many farms and farmhouses, even in the heart of both villages shows us quite clearly that the beginnings of farmimg were important and a feature down through the centuries, and still function today. The reader will find certain obvious gaps in the history of our area, especially with regard to the

former industries, schools, and communications, but the writer wishes to present these studies at a future point of the piece where it is thought the continuity will be best preserved. One therfore craves the reader's pardon for omitting them at this stage, but with the sure knowledge they will be subsequently presented.
