

A
GEOGRAPHICAL
SURVEY
OF
HETTON-LE-HOLE

MARY PINCHEN.

CAEDMON HALL.

DIV. H.

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CHAPTER I

POSITION and RELIEF.

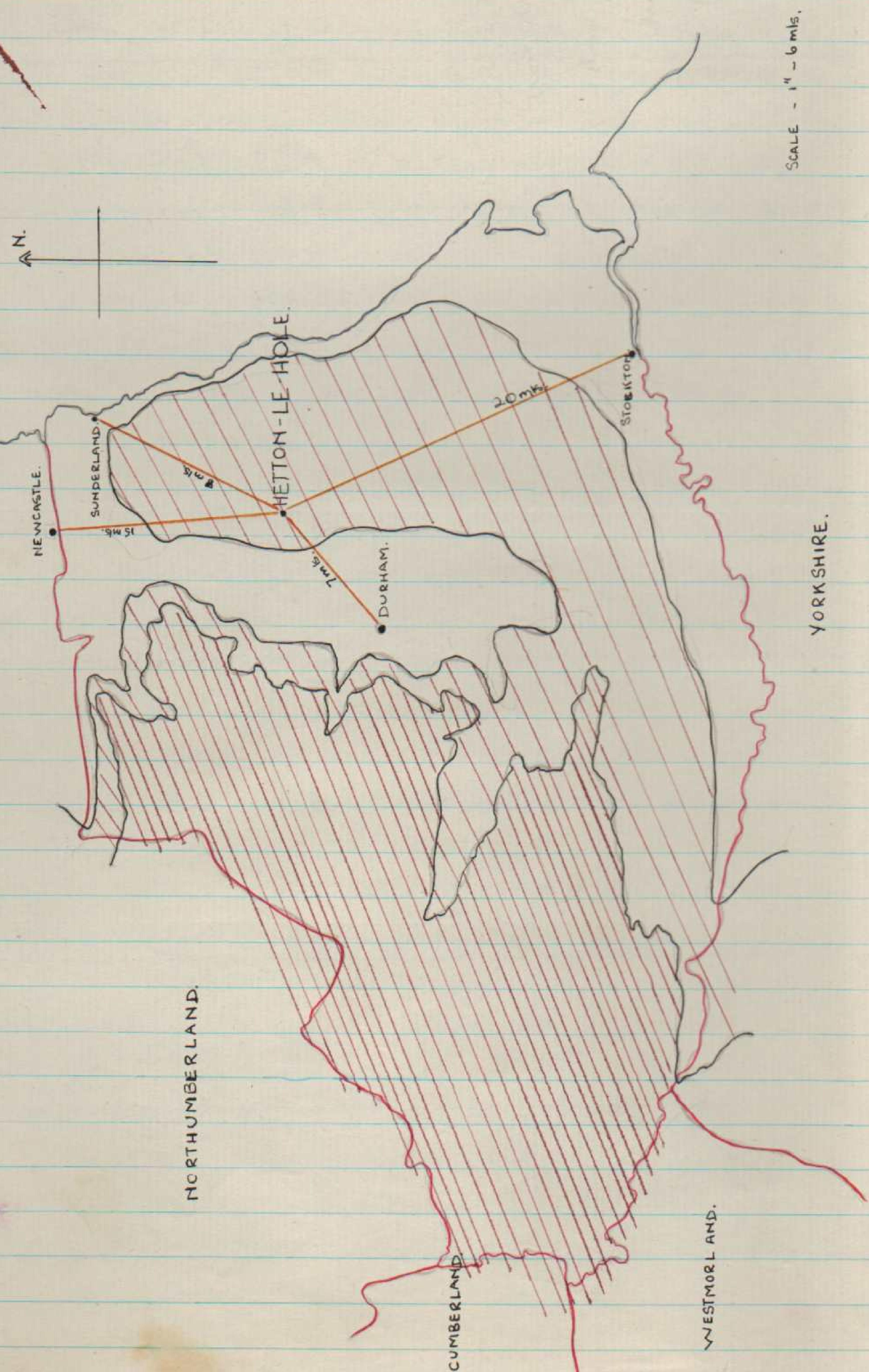
The large, mining village of Hetton-le-Hole is situated on the Northumberland and Durham coalfield, in the north east of the county of Durham, which has, for its boundaries, the River Tyne in the north, the River Tees in the South, the Pennines in the East-West and the North Sea in the East.

Hetton-le-Hole lies in the fairly low hills, which, as can be seen from the one inch map, separate the valley of the river Wear from the coast. It is approximately six miles west of Seaham Harbour which is the nearest part of the coast to it, seven miles south of Sunderland, which is the centre of the industry in the county, and six miles north East of the city of Durham. Its latitude is $52^{\circ}50'N$ and its longitude is $1^{\circ}27'W$.

Hetton-le-Hole is between two hundred and four hundred feet above sea level, and is situated on a ridge of magnesian limestone. The slopes of the hills are fairly gradual, although there are some fairly steep drops into Houghton-le-Spring, and also down into Durham. To the east of Hetton is a narrow, coastal plain, less than ~~300~~ three hundred feet in height. In the north this is approximately two miles wide, but it decreases towards the south, being little more than half a mile wide at Hawthorn, but increasing slightly again towards the south. However, at some places such as Roker, Ryhope and Seaham, this ridge juts out to sea to form cliffs.

The River Wear cuts out a wide valley for itself and there is a line of hills separating

POSITION OF HETTON - LE - HOLE.



3.

it from the coast, and on which the village stands. Away to the West lie the lower slopes of the Pennines with numerous spurs encroaching on the lower land near the Valley floor. The Valley is well-defined. In the north near Sunderland it is nearly eight miles from the lower slopes of the valley to the coast, but this distance decreases rapidly due to the intervention of the limestone ridge on which Hetton stands. At Chester-le-Street the valley is two miles wide, but this decreases travelling southwards. The actual sides of the valley immediately above the river are steep, and at Finchale Priory they rise sheer from the river to a height, in some cases, of eighty feet. As can be seen from the relief map, the valley runs inland westerly from Sunderland, but near Chester-le-Street changes its direction, and is practically North to South. However, further south again it changes direction, and runs approximately ⁱⁿ West to East direction.

From the six inch map it can be seen that the village of Hetton-le-Hole is situated at the junction of two small valleys, the streams of which eventually flow into the river Wear. A spur of land about three hundred feet high an a half a mile wide runs directly West of Hetton-le-Hole, and to the south the land rises to a height of five hundred feet. The land in the West rises to a height of three hundred feet above sea level before dropping sloping away to form the main Valley of the Wear.

The best route to

5.

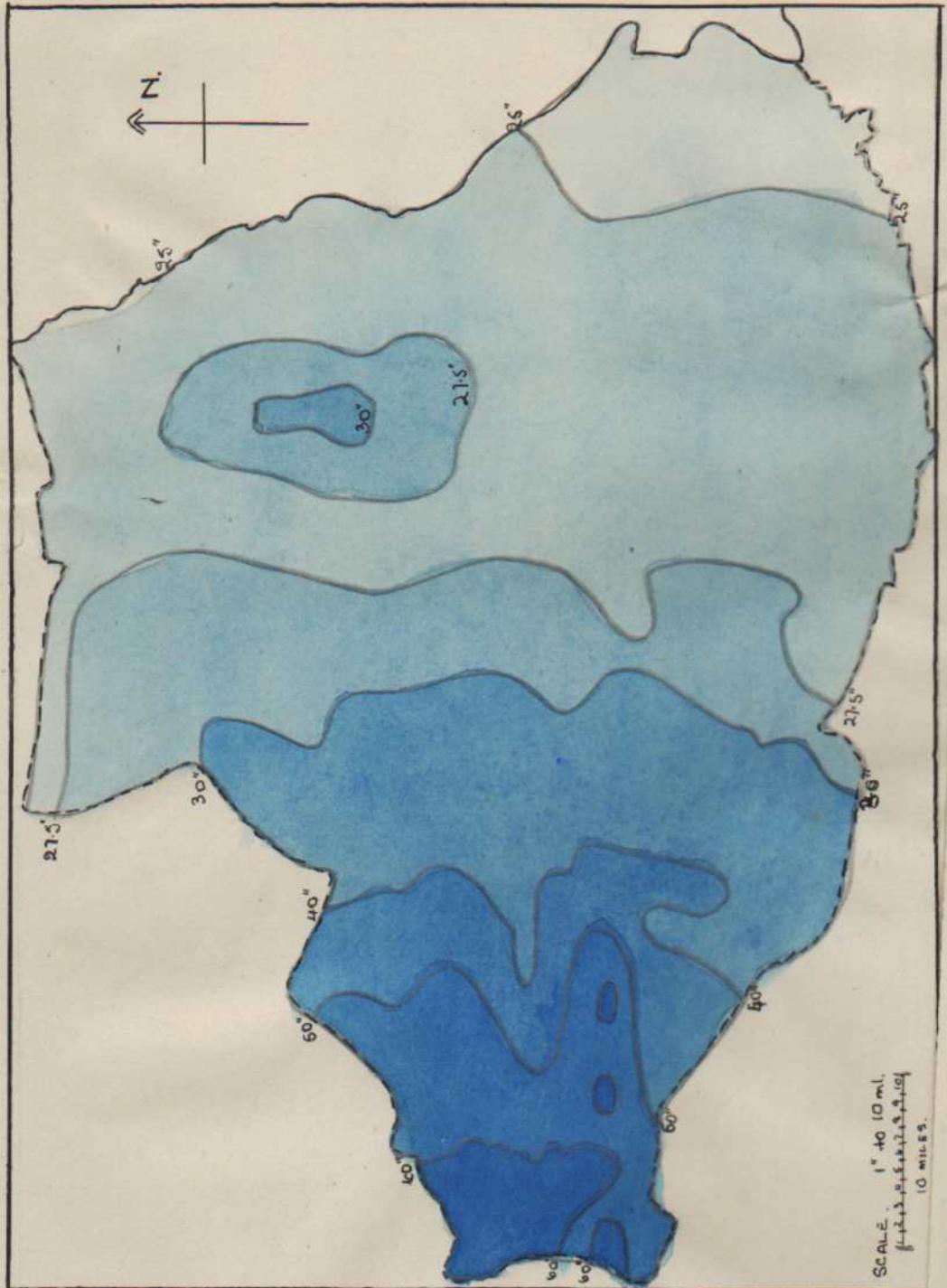
and from the township of Helton - le -
Hole are seen to lie northwards.

CHAPTER II. CLIMATE.

[Their skies are fast and grey
From their castle walls a man
may see
The mountains far away.
Belloe.]

One of the most striking things about County Durham, and one which leaves a lasting impression is its climate. A rather cloudy and breezy summer is followed by a damp, misty autumn with leaves falling early. Although the North East coast is said to have an extreme climate in comparison to the Western coast, and that it tends to have interior conditions, the mid-winter is not worse than usual, but one expects, and gets, persistent cold in late winter and early spring, and chilly days extending far into May.

In such a climate, a large and important part is played by altitude and exposure. This was recognised as long ago as 1570 when it was reported that the lands of Brancepeth were not so clement as the lands of Raby "on account of the winds from 'Fiends Fell', the old name for the Crossfell region. The vigour of the West wind over the Pennines is marked by the



RAINFALL IN
COUNTY DURHAM.

Dwarfed trees and bleakness of Tow Law which is one thousand feet above Sea Level. The trees in Wearhead, which is a much more sheltered area, are much larger. Along the coast is a narrow strip in which the sea winds make themselves felt, and here, even on the lowland, the trees are not so tall and sturdy as the ones in the Valley of the Wear.

Slightly more than fifty per cent of the winds over Durham are South West, and slightly less than fifty per cent are North East. This is not very different from the other parts of England, but as in many the North East winds are as frequent as the milder South West ones. Spring temperatures in Durham, especially in the daytime, are affected by the position, exposure and aspect of the country with regard to the northern seas. Polar air is colder in March than the North Sea, and as a result of this we find the well-recognised features of "instability showers", usually of sleet or snow on the high ground. This occurs especially where uplands front the sea as in Durham, and these showers often cause snow and cloud on days where places of the same latitude but in the West of England are dry and sunny. This Arctic Air continues to give its showers in April and even May, but usually the wind at this time is dry, and blows strongly off

11.

off the sea with considerable cloud during the day. Throughout these two months the adjacent North Sea remains cold and causes the well-known sea-fog when warm humid air from the Continent comes into contact with it, and this frequently covers the majority of Durham for the greater part, if not all, of the day, when the rest of the country is enjoying sunshine. Its persistence along these coasts is due to the fact that the coldest waters of the North Sea are along the coast roughly from Cleveland to Tees.

These three factors, strength of the wind from the sea, cloudiness and sea-fog in quieter weathers are responsible for the late Durham spring which is one of the most prominent features of Durham climate, and which makes it stand out from the remainder of the counties. There is nothing in the autumn to balance this, except when a period of cold sets in with a South East wind as in 1938, when temperatures were lower in the North.

In one other aspect the climate of Durham deserves mention, and that is the frequency, amount and duration of snowfall. Snow or sleet is observed to fall on an average of twenty days per year on the coast, 27 at Ushaw which is six hundred feet above sea level, and more than ~~so~~ fifty and one thousand, five hundred feet. The average date for the first

12.

AVERAGES FOR 1911-1940 DERIVED FROM RECORDS OF
UNIVERSITY OBSERVATORY, DURHAM. (336')

| | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Mean Temp. (F) | 38.2 | 38.5 | 40.4 | 44.1 | 55.1 | 58.7 | 58.2 | 58.2 | 54 | 47.1 | 42.1 | 39 |
| Mean Max. | 43.2 | 43.5 | 47.2 | 51.5 | 57.9 | 63.9 | 67 | 66.3 | 61.7 | 54.5 | 47.4 | 43.7 |
| Mean Min. | 33.2 | 33.2 | 34.1 | 36.4 | 41.7 | 46.4 | 50.5 | 50.1 | 46.3 | 41.1 | 36.4 | 34.1 |
| Avg. Extreme. (60 yrs.) | 53.60 | 53.22 | 59.23 | 63.24 | 76.36 | 76.36 | 78.41 | 77.40 | 71.55 | 64.29 | 57.25 | 53.22 |
| Rainfall. | 2.20 | 1.63 | 1.49 | 1.61 | 2.10 | 2.03 | 2.81 | 2.67 | 2.13 | 2.49 | 2.32 | 2.59 |
| Bright Sunshine Hrs. | 48 | 60 | 101 | 131 | 163 | 180 | 155 | 147 | 125 | 92 | 59 | 42 |
| % of Possible. | 20 | 22 | 28 | 31 | 33 | 35 | 30 | 32 | 33 | 28 | 23 | 19 |
| Days with Snow | 5 | 4 | 5 | 2 | 0.6 | | | | >0.1 | 0.6 | 2 | 4 |
| Snow lying. | 5 | 4 | 3 | 1 | >0.1 | | | | 0 | 0.1 | 1 | 3 |

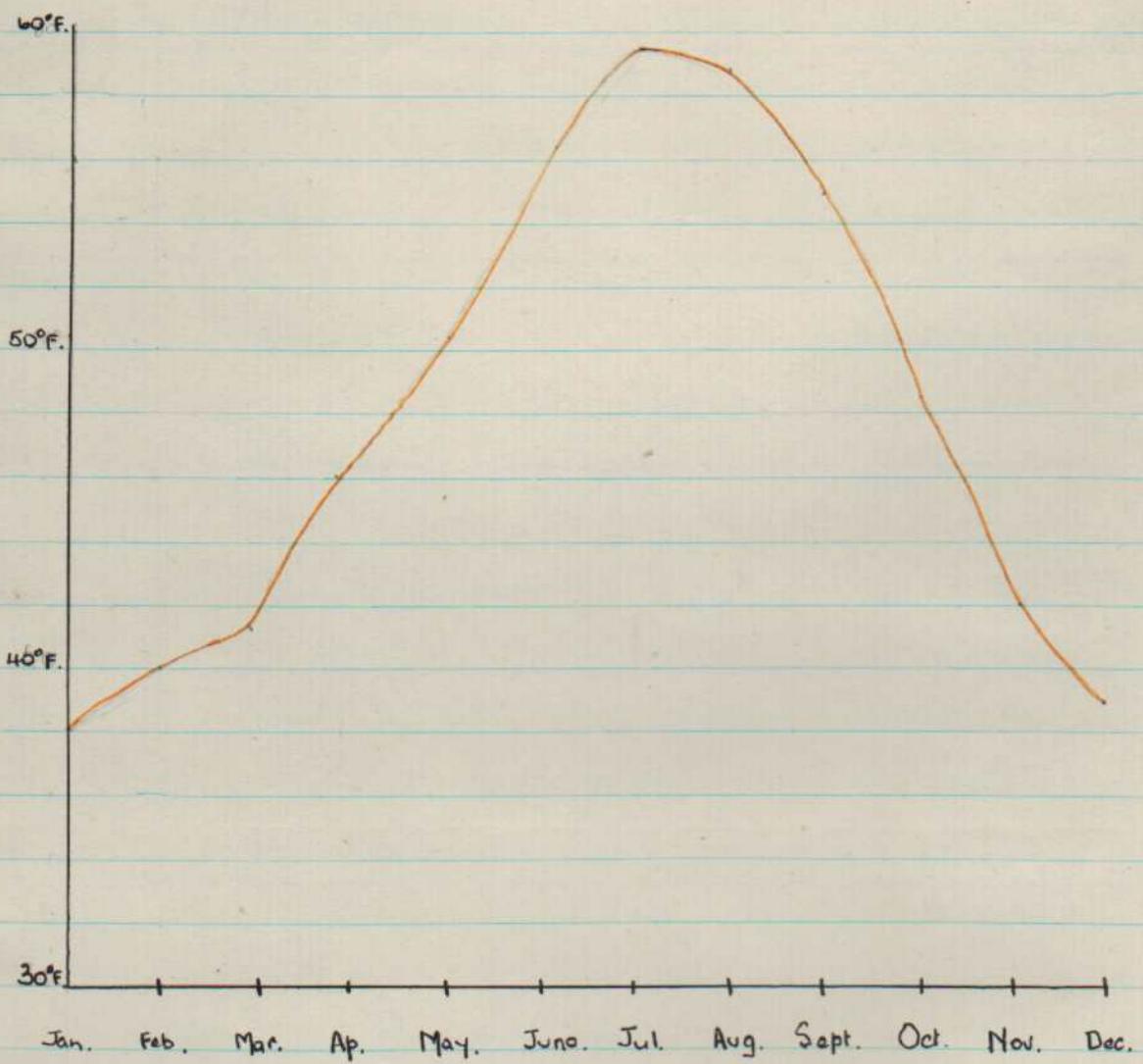
13.

observed snowflake in Durham is November 1st and the last in spring on May 5th.

Over the greater part of England, the snowfall is of little importance, except for brief periods in occasional years; but in Durham the snow plough is frequently in use, especially in altitudes of one thousand, one hundred feet and over, and apart from such memorable storms as in the years 1941 and 1947. Snowdrifts have been recorded as being seven days at Tynemouth, seventeen days at Durham, and twenty-one days at Ulshaw. There are indications that upland snowdrifts lie for about eighty days at altitudes of fifteen hundred feet and it is not at all unusual for roads to remain blocked for some days, even although the remainder of the countyside is clear and sheep can find pasture.

The frequency of snowfall in this county may be attributed to the latitude and aspect with regard to polar air showers; the quantity of snow is largely due to orography, and the duration results in part from altitude and part from the greater quantity that falls.

Apart from the tardy spring, Durham climate resembles that of other reasonably favourable parts of northern England. Temperatures and other data from the Observatory at the University of Durham are well representative of "agricultural Durham".

TEMPERATURE GRAPH.FIGS. FOR COUNTY DURHAM.

15.

Because of the tendency for cloud in Spring, there is a little less sunshine than in the lowlands of Lancashire, or along Edenside. June is the best month, the greater cloudiness of July and August being apparent from the figures. Rainfall occurs on about one hundred and ninety days of the year, and the total amount varies from twenty-four inches to thirty inches in the eastern parts of the County.

Taking the data of the last thirty years, July, August, October and December are relatively wet, February and April having the least rain. It is definite that in the dales the autumn months are the wettest, and that summer and autumn months receive, in general, more rain than late winter and early spring. Drought of any severity is rare, but if it did come the probable month would be June.

Thunder is heard about seven days yearly on the coast and on the Pennines, but about ten days yearly inland. It occurs chiefly in late spring and summer, although a polar shower does sometimes cause a day of thunder near the coast in winter. In quiet weather, smoke-haze at the mouths of the Wear and Tees affects visibility, and also, although to a lesser degree over the coalfield. However, it is to the towns that dense fog is largely confined, and even then the impression prevails that it is not as frequent as in the midlands and

STATISTICS.

Cloud.

Mean Annual - proportion [to] parts of sky covered.

Sunshine.

December - 25 - 30 hrs. per month.

May. - 200 hrs. per month.

Mean Annual. - 1300 hrs. per year.

the South.

The slow rise in temperature in spring cannot be said to be a real disadvantage, and, although there are spring frosts of ^{the} same severity inland, they do not cause as much damage as those in Lancashire and in the Eden Valley. The first frost comes about October 5th, and the last about May 16th. This, however, is not definite, for it has occurred as late as July 19th and as early as August 22nd. The average absolute maximum and minimum temperatures for the year are eighty-one (81°) degrees and seventeen degrees (17°), and it may be estimated from the records that about every century the temperature rises to ninety degrees (90°) and falls to zero. The coldest night of the year comes between the months of October and April, while the warmest afternoon comes between May and September, — a fair reminder of the possibilities of the climate of northern England.

This land of Britain — Co. Durham. Stamp.
Meteorological Atlas. — Bartholomew. 1889.

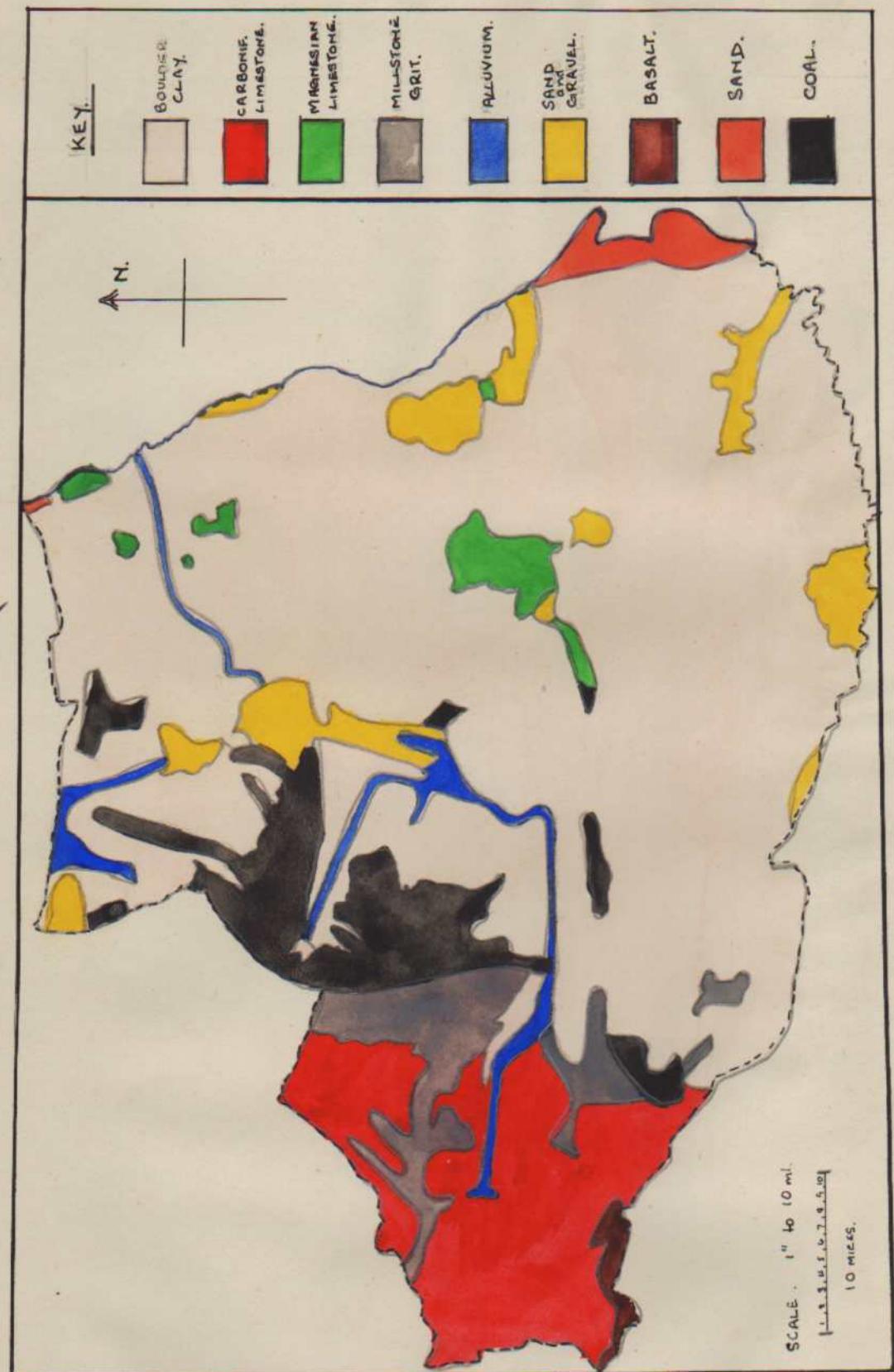
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CHAPTER III.

GEOLOGY.

The solid geology of County Durham consists mainly of Carboniferous, Permian and Triassic Rocks, although there are some interesting complexities in detail. The higher rocks of the Pennines consist of rocks belonging to the age of Carboniferous limestone, but the limestones are quite thin, and are interspersed with much greater thicknesses of shale and sandstone. The thinness of the limestones results in the scarcity of limestone pastures. These rocks are succeeded by the Millstone Grit series, which is, in turn, succeeded by the Lower Coal measures consisting of sandstone, grit, a large proportion of shales and with some coal. The Higher Coal measures are succeeded by Magnesian Limestone, which tends to give rise to a low plateau which is tipped gently eastwards, and of which the western facing scarp is sometimes covered with drifts. Underlying much of the South East of the county in the Valley of the Tees, the Permian is succeeded unconformably by Triassic rocks, mainly consisting of red marls and soft sandstones.

The geological map shows that it is only in the West of the county, along the deeper valleys or on some of the higher plateaux of the East where solid rocks are exposed, for glacial drifts obscure most of the other rocks below 800 feet. This area, during the Glacial Period, was affected by three main ice streams. The Scandinavian or North Sea Ice impinged on the South eastern



GEOLOGY OF
COUNTY DURHAM.

coastal area, and left a boulder clay which is similar to the Bass Basement Clay on the coast of Yorkshire. From local ice caps Pennine Ice flowed down the river valleys in Durham, leaving in its wake blue or purple clay which spread over the greater part of the county. This was abundantly interspersed with Pennine boulders. Upper Clay was deposited by Cheviot Ice which flowed in a North to South direction between the Pennines and the barrier made by the North Sea Ice. This clay contains only a few stones and varies in colour and overlies the older Pennine drift from which sands, gravels, clays and laminated lake muds separate it.

An extensive series of sands, gravels and moraineic deposits left by the retreating ice are above the upper clay, and give a considerable variety to the surface of that of the present day. The upper Skerne flats are included in Alluvial areas, but these, which were lakes, are still too wet for anything save pasture. The country falls into two parts.

- a) Pennine moorlands and the Dales of the West - including the three main dales of the Derwent, the Wear and the Tees.
- b) The Coal measure belt with heavy, cold, coal measure soils. Going Eastwards the drift becomes more continuous.
- c) The magnesian limestone - an area largely masked by drift.
- d) The South East lowlands - mainly drift covered grass.

The Pennine moorlands consist of

3.

flat topped, peat covered, ill-drained hills. Their use is largely to be measured in accessibility from the dales, although, except where the soil is too thin for growing being of economic ~~less~~ importance, conditions improve with the slope.

In the coal measure belt, valleys which cut down into solid rocks were valuable in the early days of the mining of coal seams which outcropped on to the valley sides, for they offered route ways along which coal was transported to the Tyne and the coast. However, they are too narrow and their sides are usually too steep to be of any agricultural use. Although coal measure soils are varied, they are rarely of any marked fertility.

Water holding yellow sands are a feature of at the base of the Limestone series, and settlements, such as the village of Hetton-le-Hole, from the early days have been influenced by the springs at the foot of the scarp. Limestone outcrops on the plateau in some cases, and here there are light brown, medium loams, shallow and in need of phosphatic manures. However, the majority of the plateau is covered with very varied drift soils. The worst areas are south of Sedgefield, for here is boulder clay which is ill-drained - usually this type of soil is cold and heavy, and it is only in odd places that the influence of the underlying limestone is apparent. The sands and gravels are, on the whole, more fertile than the rest.

The South Eastern lowlands are

25.

drift covered, and this, being derived from underlying Triassic sands and marls, affords a lighter, warmer, more fertile soil which makes this area the best for grassland and arable farming. In this county, there are few areas of Alluvium. The reclaimed land of the Tees mouth marshes has a high water ~~time~~ table and poor drainage which is inadequate for arable farming.

This Land of Britain - Co. Durham. Dudley Stamp.

CHAPTER IV.

DRAINAGE.

There are two factors influencing drainage in the Hetton-le-Hole area, namely the line of porous and soluble magnesian limestone hills, which, as has already been described, run parallel to the coast, separating it from the Wear Valley; and the effect of glaciation which will be described in a later chapter.

About forty miles from the coast, in the Pennines, is the source of the River Wear, which is now artificial for the small streams which were originally its source have been united into Bishop Auckland reservoir. The river itself flows out from this reservoir. The river flows out in a South East direction as far as Bishop Auckland, where it changes its direction and flows slowly North East. At Chester-le-Street it again changes direction, due to glacial deposits, and flows eastwards until it reaches the North Sea at Sunderland. There is a peculiar bend at Durham, and the Castle and Cathedral and a good part of the city are practically surrounded by water. The river is only navigable up to about one mile beyond its mouth. The steep, narrow valley of the Wear makes bridging comparatively easy, and is therefore no hindrance to land communications.

Streams, in the upper reaches of the river, from the Pennine watershed,

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flow into it, and from Durham to Chester-le-Street, it receives water from streams on either side of it. The low line of hills between the river and the coast causes this. The watershed of these hills is about four miles from the coast, and streams flow from here to the sea, cutting deep valleys such as can be seen at Ryhope and Brindon Dene, and these valleys, although a hindrance to land communications, provide beauty spots frequented by the inhabitants of County Durham. Streams also flow west from the hills to the main river.

Reference to the Drainage map will show that, due to the porous nature of the limestone, many streams disappear into the ground, and re-appear some distance away. For the same reason, ponds in this area are ~~conspicuous by their absence~~ ^{very few}, and those ponds that are present are caused by the deposits of glacial soil of clay.

Reservoirs, to meet the large demand from the population and industries, have been built artificially at Houghton-le-Spring and Eppleton. The porous limestone and the deposits of clay result in the numerous springs of the district, such as in the 'Bell Wells'.

The many depressions in the surface of the land are not pot-holes, as would naturally be thought, but have been caused, in the majority of cases, by the subsidence of the land due to ~~the~~ coal-mining.

CHAPTER V.

FLORA and FALINA.

Hetton - le - Hole is not an area which is interesting from the point of view of the biologist because the close building and the smoke and dirt are not very beneficial to plants and/or animals ~~elite~~. However, there are certain parts of the district such as Hetton Dene and The Dene which do contain a certain selection of plants. The sides of the Valley are covered with trees, of which Hawthorn seems to be the most predominant. The woods ~~do~~ offer a greater variety of trees ranging from a few scattered conifers to oaks, beeches, ashes and again, hawthorn. Elm trees are occasionally found within the area, but the number of large trees is very small. The industrial atmosphere causes the stunted nature of the trees.

On the higher ground to the North East of the village, near the Eppleton plantations, there is a slight portion of moorland which gives rise to small patches of heather. Round Eppleton Woods, The Bog and the Bull Wells, marshy patches foster water loving plants such as marsh marigold and rushes.

In addition to the common plants, the following plants have been noted in and near Hetton - le - Hole (Guide to Durham. J.R. Boyle.) (See opposite page.)

The plants grow with great efficiency on limestone soils. In this area, plants flower later than those on the west coast, because of the cold spring weather which hinders

their growth.

Large trees are not very numerous and are to be found mostly in sheltered places. Many trees have poor foliage and the "Seven Sisters" (a clump of seven trees at Warden Law) are practically devoid of foliage because of their exposed position. Hawthorn trees are the most numerous and can be found in all shapes and forms from stunted bushes serving as hedgerows to fairly large, study trees in the woods of the Bogs and Hetton Park. There is a curious phenomena in the Hayard Lane - a hawthorn tree there has a most peculiar bend and is noted by all because of this. The cause is attributed to the strong northerly winds which blow here.

It has been mentioned previously that Hetton - le - Hole is very close to the sea, and consequently many sea gulls are found in the village, searching for food. Besides gulls, some animals from the higher parts come down to the village, also in search of food. Foxes are very rarely seen, and animals that are found in the area are the usual English variety with no notable exceptions. The smoke and fumes of the industry seem to in this dearth of animals.

The local naturalists club have noted the animals which are compiled in a list on the opposite page. It will be noted that all are small, and are of the type that usually keep out of the way of ordinary passers-by.

The birds which are found are quite common and build their nests, for the most part, in and near houses. The ducks are the most interesting. They make their home on a

pond near Helton Lyons Colliery, and nearby inhabitants watch with great interest their seasonal appearance.

This lists found in this chapter do not contain every plant or animal found in the district, but show a selection of those found. Ones not mentioned are either too common and are found in every other part of the country, or are rarely found at all.

CHAPTER VI.

COMMUNICATIONS.

In spite of Hetton-le-Hole's great disadvantage in having only one route out of the village which does not have to climb a steep hill, there are ample road communications. This point can be illustrated by reference to the six inch map showing relief. A single track railway line runs through Hetton from Sunderland to Durham, but beyond Pitington, South West of the village, the line is closed for passenger traffic. There is, however, one exception to this — Durham Big meeting Day, when frequent trains run from Hutton through Hetton and Pitington to Durham.* Durham big meeting occurs annually, and is a gathering in Durham City for all the miners in the County.

It is impossible for anyone to travel a long distance direct from Hetton-le-Hole, and when one is contemplating a long journey by either road or rail, one must first go to Newcastle or Durham, both of which have important stations on the London and North Eastern Railway line. Trains leave these stations frequently for all parts of the country, and recently bus services to Keswick, Hull, Birmingham, Leeds and Liverpool have been re-started.

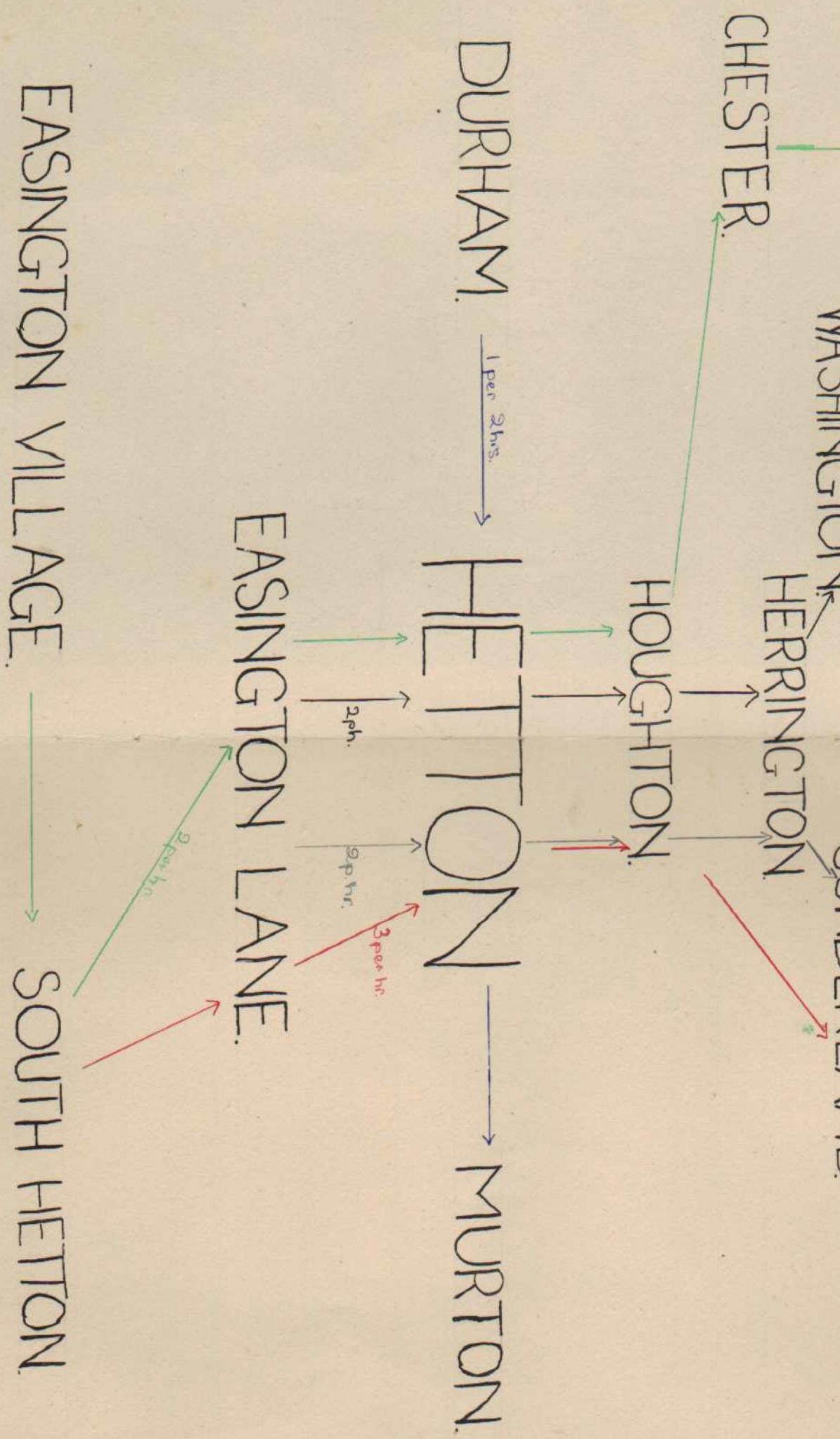
From the map it can be seen that the best route South is through the Sneyhill Gap to Darlington, then through the Northallerton Gate

P.I.O.

* The Elvet Street Station in Durham, which is normally closed, is open on this day to cater for the great influx of people.

'BUS SERVICES.

HETTON-LE-HOLE.



into the Vale of York. Northwards one must go to Newcastle then follow the coast up to Berwick and Scotland. The route to the West Coast is along the Tyne Gap from Newcastle to Carlisle. A branch of the main line goes from Newcastle to Sunderland then down the coast through Seaham Harbour to West Hartlepool, while another branch goes from Bishop Auckland to Wearhead, so serving the Wear Valley. Trains here run every three hours, and are used only by shoppers going into Durham or Darlington. The west coast is linked by a train route from Appleby over the Pennines to Carlisle.

The importance of these gaps cannot be over-estimated, for, were it not for them, Durham and Northumberland would be isolated from the remainder of the country. It will be noticed that the railway lines at Newcastle are about fifteen miles from the sea. This is because of the wide estuary at the mouth of the true Tyne, and, although there is a ferry from North Shields to South Shields, it is a great hindrance to both north and south bound traffic. The first possible bridges at Newcastle, therefore making this city an important route centre. The steep valleys at Durham have been overcome by a viaduct. The narrow streets of this city are also a hindrance to traffic, and the main thoroughfare, Silver Street, is only eleven feet wide at its narrowed point. However, the Great North Road has been built which passes to the West of the city, and this is a great help. The hills of Durham, although not high, are steep, and this has hindered, to a certain extent, development and communication.

Communication with other lands is possible from the deep

43.

estuaries of the Wear at Sunderland and the Tyne at Newcastle. To these ports come food ships laden with goods, and into the Tyne with its many wharves come iron, timber and pulp. The chief export is, of course, coal. The rivers far cross the coalfields and so facilitate transport. The coal, before 1939 was sent to other lands such as Sweden by sea, and also to London. France and Belgium were our best customers then. A small port at Seaham Harbour deals mainly with the export of coal and the import of timber. The magnesian limestone spur has partly been responsible for its non-development, allied to inadequate communications.

The main route from Hetton-le-Hole is Northwards. There is no direct traffic through to West Hartlepool in the South. The buses stop at Easington Village which is the terminus for West Hartlepool and Newcastle. Every two hours a bus runs from Hutton through Hetton to Durham. The reason for the infrequency is that the route crosses a steep-sided spur, and the road here is very narrow. The usual way to Durham is through Hots Houghton-le-Spring, but this necessitates a change of buses. The route from Hetton to Sunderland is used a great deal, as it is the main shopping centre for all the villages. There are two routes from Houghton to Sunderland, both of which have steep climbs up. The direct route lies over Houghton But, a limestone spur which has been cut through, but which still has a gradient of $\frac{1}{15}$ at its steepest part. Heavier traffic does not use this road, but instead goes round the edge of spur via Hewbottle. The bus service from Hetton to Sunderland is frequent; ~~it~~ ^{three} four buses

144.

Bus Services

In view of the extensive bus services operating through Hetton we feel that the most recent move to have the Chester-le-Street — Houghton-le-Spring service extended to Hetton should be discouraged. Few of the smaller townships in the county have as good a bus service to all parts as Hetton and it would appear that if all the demands in this connection were acceded to the bus companies would require a new fleet of vehicles to cater for the residents of Hetton only. If a direct service to Chester-le-Street is desired might it not be a good idea to endeavour to have such a service operate via Rainton Bridge and Fence Houses. The existing service between Houghton-le-Spring and Chester-le-Street is just sufficient to meet the present needs without extending it to Hetton.

Taken from

'Durham Chronicle' Nov. 1947.

Houghton-le-Spring and Hetton Councils have been agitating for some time for better bus services to Sunderland on Saturdays. We understand that Hetton Council have obtained a half-hourly duplicate service from Hetton between 1 and 3 p.m. A small concession but a step in the right direction.

D.C. Sept. 1947.

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per hour going via Hewbottle and Sunderland to South Shields, and two per hour going via Heslington to Sunderland. Then there are four buses per hour going from Durham to Sunderland which can be ^{boarded} caught at Houghton-le-Spring. These buses use the Houghton Cut route. Every hour four buses go from Hetton to Newcastle, another shopping centre. The routes diverge at Houghton-le-Spring, one going via Chester-le-Street and Birtley to Newcastle, and the other going via Heslington and Washington to Newcastle.

Of recent years the development of Sunderland's seaside resort, Seaton, has caused an increase in buses and trains during summer months to cater for holiday makers who are spending a day by the sea. Saturday afternoons see a congestion of traffic and many queues, for the inhabitants of Hetton visit Houghton Dog Racing Track or Roker Park Football Ground at Sunderland. The time taken to go from Hetton to Sunderland is about half-an-hour.

The railway at Hetton is not used to any great extent today because of the good bus services, and because of the fares, for it cost one shilling and three pence to travel to Sunderland by train, while it only costs one shilling and two pence by bus. Before the war however, the fare was only ninepence and trains were used a great deal more. Trains used to leave Hetton for Sunderland once every hour, but now there are only two per day, one at 8^{a.m.} and another at 1.30 pm. The goods station at Hetherope Hole is not used very much now. Goods are left at Fenches' station and are

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From our own Correspondents
*Hetton and the Stephenson
centenary*

WHEN the George Stephenson Centenary is celebrated in August, it is hoped that the day will be duly recognised at Hetton

Stephenson built the eight-mile railway from Hetton to Sunderland over Warden Law, so that the owners of the Hetton Collieries could ship their coal on the Wear.

The line was opened on 18 November, 1822, and in Sykes' Local Records of Northumberland and Durham it is stated that there were on the line of the day "five of Mr. George Stephenson's patent travelling engines."

One of these engines worked at the Hetton end of the line for 90 years and was eventually, in 1912, sent to the Railway Museum at York.

It was brought into service again 14 years later, to take part in the celebration of the centenary of the Stockton and Darlington Railway in 1925.

The suggestion has been made that the old engine might be brought back to Hetton for the centenary

"Northern Echo". April 1948

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delivered to Hetton by the L. N. E. R. delivery van. However, the railway at Hetton plays an important part in the transport of coal from the three collieries. A private line runs direct from Warden Law to the staithes at Sunderland where the coal may be loaded direct on to boats to be taken abroad. This single track railway line, which runs unguarded through the village, was built by George Stephenson in 18²²/₄₈ (and was the first railway line in the country, being built before the Stockton and Darlington Railway.) Trucks are pulled over a rise of three hundred feet by a stationary haulage engine.

There are a large number of taxi services in Hetton-le-Hole, but there are only two which are not run as a sideline to another business quite remote from motor engineering. There are not many lorries passing through the village, but most of them are connected with the delivery of food. Some belong to Pritchies, a large haulage contractor who have business throughout the country. Many shops in Hetton use their lorries to deliver their goods and groceries. The firm Hall and Summersell bring, from wharves at Newcastle, foodstuffs for cattle, agricultural manures etc., into Hetton. A limited number of horses and carts are still used for food delivery, and at least one carrier uses the horse and cart for local carrying, most of which is now done by Wakefield's and Hardings motor lorries.

There is now a private bus company in Hetton-le-Hole owned by Pearson. There are about

49.

four buses, and are used for Club
Trips, funerals or anything which needs to
cater for a number of people. This has been
in operation for about eighteen
months.

Development in the future lies in
the air stations at Newthorpe, Grantham and
Ouston, which already have the embryo of
an air service. The charges range from
sixpence to one shilling and sixpence per
mile.

The roads leading from the village are
all wide and are kept in a good state of
repair, but those within the village are
poor, the majority being unmade, only
those within the new housing estates are
excepted. Some have been neglected so
much that even although they are now
surfaced they are spoiled. Traffic during
recent winters has been brought to a
standstill due to the deep covering of
snow. The roads leading to the collieries are
very poor, but as this does not affect the
transport of coal, little attention is paid to
them.

In spite of grumblings, Helton - a - Hole
is amply served with communications.

OUR DURHAM COAL

Another Call To Public Men

MR WAKEFIELD ADAM, the eminent London engineer, having noted in recent issues the active interest that Dr. Dalton, M.P., and County Councillor N. F. Natrass are showing in the effort to improve the industrial situation in this county, has put forward another plea.

COUNTY RICH IN MINERALS

He writes: Nature has provided Durham with water power, but you must harness it at several suitable places along the Wear, and along the other rivers bordering the county.

Nature has also provided your county with rich coal, famous prosperity of your county should neither be wasted by the many wasteful methods of using coal in industry and railway transport, nor exported raw to enrich countries abroad. The prosperity of your country depends on intelligent leadership which will undertake the conservation of your resources of workable coal and also the utilisation of your rich coal to the fullest possible extent.

Plans Needed

These problems should be studied carefully, and intelligent plans should be formulated, in a matter of weeks (not years), and carried out without further delay. In this way, and in this way only, your county can become rich and prosperous.

It is a tragedy to see so much suffering for lack of industries when nature has provided your county with available water power and rich coal.

I wish that the Bishop and also the Dean of Durham would pray for the better leadership of the county and the opening of the eyes of their people to see and appreciate the bountiful riches which God has provided for them, and that they may be given initiative for the intelligent use of these riches so that the people might derive full benefit.

Suggested Coal Processing

You should prevent your valuable Durham coal from being exported. Britain to-day is in the position of a man who has become insolvent, who must either pawn or sell some of his possessions in order to live. The national policy should be to get out of this dreadful situation as soon as possible, and instead of selling raw coal we should get about four times greater revenue by processing coal to produce smokeless fuel for domestic requirements and exporting the very wide range of valuable products obtainable from the large number of coal derivatives produced from the manufacture of the smokeless fuel. These derivatives are at present being burned in domestic fires producing large quantities of smoke and soot to pollute the atmosphere.

The result would be the installation of prosperous industries in Durham County, and a clean atmosphere, to replace poverty and dirt.

The fact that your present leaders are willing to continue putting up with poverty and dirt is not God's fault. You must use your brains and your hands to take full advantage of what God has provided for you before your very eyes. Don't allow the people of certain towns and villages to be transported to Northumberland; there should be plenty of work for them in Durham County under intelligent leadership.

Danger of Exporting

If some coal must be exported to meet the present needs of a desperate Britain, don't let your rich Durham coal be exported; you need it for your own prosperity. Let Northumberland export some coal for this purpose.

During a period of 50 years prior to the end of 1939, official records show that more than 2,740,000,000 tons of coal were exported from this country at relatively low prices. With modernised basic industries, Britain would only require 150,000,000 tons of coal per annum, so that it can be said that by exporting this great quantity of coal during 50 years we have written off more than 18 years of Britain's existence as an industrial nation. That is indeed a dreadful price to pay in order to satisfy the vested interests of coal exporters and coal shippers.

If instead of shipping all this coal abroad we had been using smokeless fuel for domestic purposes, and making and selling valuable products from the coal derivatives, this country would have been in a far stronger financial position to-day.

Durham Chronicle.

Jan. 1948.

CHAPTER VII

VILLAGE of HETTON.

This will ^{include} comprise:

- I. Position and Size.
- II. Relief and Geology.
- III. Population.
- IV. Growth and Development.
- V. The Village Itself.
- VI. Facilities for Entertainment.
- VII. Spiritual Welfare.
- VIII. Hetton Park.
- IX. Education.
- X. Housing.

I. Position and Size.

Hetton-le-Hole is situated in the North East of the County Palatine of Durham, seven miles from the County Town, Durham, six miles from South West of the Industrial focus of the area, Sunderland, and six miles due West from the nearest point to the North Sea at Seaham Harbour. The area of the parish is approximately ~~four~~^{ten} square miles, but there are other villages included in this area such as Woodley, East and Middle Rainton, and Easington Lane. Hetton - le - Hole is actually a township, not a village.

II. RELIEF AND GEOLOGY.

Hetton - le - Hole is situated on a magnesian limestone outcrop, and is between three hundred (300) and five hundred (500) feet above sea level. It

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stands on the hidden part of the Northumberland
and Durham Coalfield.

III. POPULATION.

For administrative purposes, Hetton-le-Hole is divided into five wards, the Downs, Hetton, Easington Lane, The Raintons and Moosley, and the population according to the 1931 census is as follows:-

Downs. - 6380.

Hetton. - 5513.

Easington Lane. - 6140.

Raintons and Moosley. - 2684.

The total population of the district therefore is two thousand twenty thousand, seven hundred and seventeen (20,717) and as the total area is ten square miles, the population is approximately two thousand (2000) per square mile. But, there are about five square miles of semi-moorland and marshes, so the population is approximately four thousand per square mile. This makes the housing situation grim, but housing will be dealt with in a later paragraph.

IV. GROWTH AND DEVELOPMENT.

The origin of Hetton-le-Hole was the building of some miners' cottages in the early part of the nineteenth century. The modern village was founded as a result of the finding of accessible coal measures. A local water supply and a sheltered situation, allied to the fact that there were means of livelihoods in agriculture as well as mining, were factors in favour of the present situation. The village was originally known as Hetton-le-Hoyle. The land belongs to the family of Her Majesty Queen Elizabeth, and there was once a Hall,

559.

Hetton Hall, there. This was built on what is now Appleton Colliery Welfare Football and Cricket Field and Barnes Park Football Field.

V THE VILLAGE ITSELF.

Hetton-le-Hole is built with the main street running from North to South, and streets running parallel to it. Most of the building is to the East of this road, and it is just recently that houses have been built on the other side of the road (ie the West).

The main street, Front Street, which continues into Houghton Road, is fairly wide and is kept in a good state of repair. In this street are shops, two schools, Hetton Infants and Hetton Council Junior Boys', a Public Library, the Food Office which serves Hetton, Houghton, Moorsley, The Raintons, Easington Lane, Chilton Moor and Fencehouses, two Bants, Martins and Barclay, (the only two in the village) the Post Office, the Council Chambers, Blanch's Café (the only one in the village) the Hetton Branch of the Moorsley Co-Operative Store, St. Nicholas' Church, Union Street Methodist Chapel and Front Street Wesleyan Chapel, the Imperial Cinema and four public houses. In this area is a new housing estate, Peat Carr, which is near Hetton Lyons School. Leading off from the Junior Boys' School is another road, The Dray, which leads to the Oldest part of Hetton, Bog Row where there is another school, Hetton Council Junior Girls', or, as it is more commonly known in the village, Bog Row. The Lyons School is about two hundred yards north of this school. From Front Street, another street,

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Caroline Street, branches off East, and this leads to Market Street, another shopping centre and to the Pit. Market Street is neither so well kept nor so wide as the main street, and there are never any buses there. This street contains shops of which there are three Drapers, five grocery stores including the Meadow Dairy, Walter Wilsons and Helton Amicable Society (which is one of four in the village yet which has twenty members) two hairdressers, two electrical engineers, three butchers, two cobblers, two shoe shops, two chemists, four confectioners, three public houses, three fish and chip shops, two newsagents and one Billiard Hall.

The residential areas are mainly in the streets between Market Street and Front Street. The Colliery Houses are to the East of Market St. for example in the Downs area. There are three new housing estates in Helton-le-Hole, being Council Houses, Peat Carr and the High Downs. They will be described in a later paragraph.

To the south of the village is the station this is less rarely used, there being only six people employed. The station is on the Durham Sunderland line, beyond Pittington it is closed except on Durham Big Meeting Day. Near the station, in Station Road, is the fire station.

VI. FACILITIES FOR ENTERTAINMENT.

Helton-le-Hole is fairly well provided with facilities for entertainment. There are two picture houses,

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The Imperial and the Pavilion, each of which have two performances every night, excepting Sunday when there is only one performance. The Imperial has a matinee on Tuesday afternoon, which is especially for old people. On production of an Old Age Pension Book, they are allowed in at reduced prices. This was instituted during the War, when afternoon performances were given so that old people need not go out in the blackout to go to the cinema. This picture house is on the main road near the Station, the other one, the Pavilion, is in John Street, and is older and smaller than the Imperial. The shows are thrice weekly here, (excluding Sundays), but at the Imperial they are only changed twice.

Next door to the Pavilion is the miners' Hall where concerts, whist drives and dances are held. There are two Billiard Halls in Hetton, one opposite the Imperial, the other in Market Street. The only cafe is in the middle of Hetton and belongs to Mr. Blanch who also owns two confectionery shops. The public houses in Hetton number fifteen.

Besides this there are numerous Youth Clubs in Hetton-le-Hole. Each of the two Secondary modern Schools ^{has} clubs for Old Pupils. There is the Old Bryanians Club, and Appleton Old Scholars. The Primitive Methodist Church in St Union Street has a Youth Club attached to it - Hetton Methodist youth centre. They meet Friday and Sunday for discussions. The male portion of the club run a football team which competes in

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the local League. At present they are very near the top of that league, much to the delight of the local supporters. The other club belongs to the National Association of Boys' Clubs, and has for its club premises an old engine house which has been reconverted, and which is now reputed to be one of the best equipped clubs in the North. They have a large gymnasium, canteen, billiard room, office and cloakrooms for both boys and girls, downstairs, and upstairs there is a table tennis room complete with boards and all the other paraphernalia and a room for discussions. This is essentially for boys, but on Sundays and Wednesdays it is open to girls. On Wednesday evenings classes are held for drama, cooking, handicraft and plastics. On Sunday evenings there are discussions and talks by Ministry of Information officials.

There is also a Women's Institute in Helton, and five youth organisations, the Scouts, Girl Guides, Brownies, Rechabites, and Boys' Brigade.

VII. SPIRITUAL WELFARE.

There are nine places of worship in Helton-le-Hole to cater for the eleven thousand and eight hundred and ninety three (11,893) inhabitants of the village. (The other nine thousand live in the surrounding villages in Helton Parish.) Two of these are Anglican Churches — St. Nicholas' in the centre of Helton caters mainly for the people in the Helton ward, Peat Carr, Bog Row, the Council Houses and the Four Lane Ends. It is not a very large church, but is beautifully decorated, and is well situated, lying

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back from the road and being sheltered by yew trees. The other church is All Saints' Church in Church Road. This is in a more exposed part of the village being in the north east on a hill. The people of the north end of Houghton Road, the Downs, Market Street and the High Downs estate use this church. Union Street Primitive Methodist Chapel is the mother chapel for all the district. It is a large building with a school-room belonging where Sunday School, concerts and socials are held. This chapel was built in 1866. Every Good Friday an oration is given by the choir, with celebrities taking the principal parts. Among the celebrities who have visited this church to give concerts are Heddle Nash, Kathleen Ferrier, Isobel Baillie. Every Easter Sunday the Ladies' Choir give a concert, and people come from all over the district to hear these performances.

Apart from the threerd described, there are only ~~another~~ ^{other} sixⁿ places of worship including Conna Congregationalist Church, a Spiritualist Church, a Wesleyan Church and a Salvation Army Hall. Now, however, the Wesleyan and Methodist chapels are amalgamated.

VIII HETTON PARK.

Hetton Park is a well known feature of Hetton-le-Hole. It is fairly large, and is, for the most part, in a steep-sided dell through which runs Hetton Burn. All entrances are down a steep bank. At the South end is the Tennis

65.

Club, which has a pavilion and four grass courts. Further down into the park itself is the Bowling Green, which is always kept in beautiful condition, and four more tennis courts, two of tarmac, and two red asphalt. These courts are available for anyone, member or nonmember of the Eppleton Colliery welfare, to whom the Park belongs. A subscription of five shillings per season ensures membership, and the cost of a game is one penny per half hour. For non-members the cost is three pence per half hour. Miners are automatically members, and so are their wives, sons and daughters.

About two hundred yards further along was a putting green, but this is now non-existent. Beyond the putting green the park is more or less left in its natural state of woods and grassy banks although here and there there are evidences of man's handiwork in the erection of drains to drain the land which is normally very swampy. Towards Houghton-le-Spring the Park merges into Hetton Dene and the woods thin out giving place to fields. This part is also very swampy, and paths have been made above the water level, ensuring safety.

This is a very popular place for walks, particularly on Sunday afternoons and evenings. There is also a play ground for children here, although of recent years it has been sadly neglected, and all that remains are the skeletons of various swings etc. In the future there are plans to extend and develop this park

67.

and also to add an open air swimming pool near the main road.

IX. EDUCATION.

In Hetton-le-Hole there are six school buildings, but some of these are both Primary and Secondary modern, thus making eight schools in all.

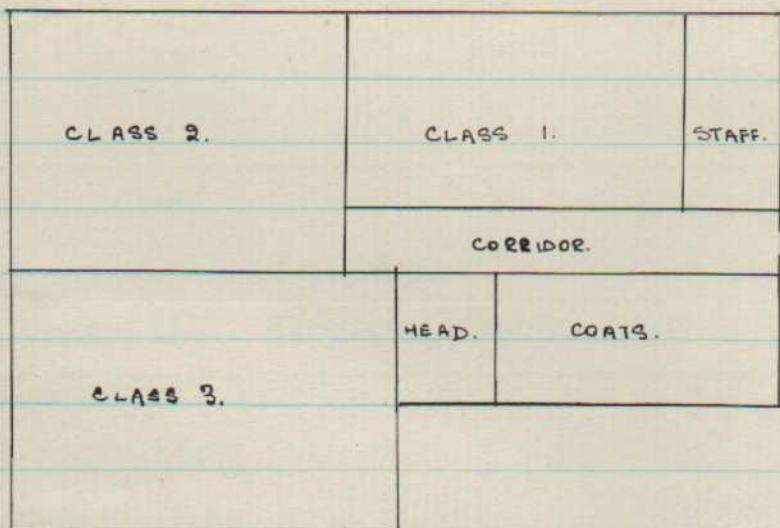
1. Nursery School. - This was built during the war near Hetton Square, and was originally used by mothers who went out to work and wanted somewhere to leave their children. There were six people employed, a matron, a cook, a cleaner and three assistants, usually young girls straight from elementary school. However, since the new Education Act of 1944, the nursery has acquired a new status, that of a nursery school, and no longer are untrained girls employed, but now only trained teachers go there. The nursery caters for about fifty children from three to five years of age, and is built of red brick and is of modern design.

2. Hetton Infants' School. - This school is very small, having only three classes. It is at the junction of Houghton Road, Front Street and Caroline Street. In recent years it has had many alterations, for at one time it was only one large room, with curtains dividing each class, and one class being the general corridor for the whole school. It was built on the following plan:-

| | |
|----------|----------|
| CLASS 2. | CLASS 1. |
| CLASS 3. | COATS. |

269.

how however, after numerous alterations there is a decent sized cloakroom for the children, a staff room, and a corridor so that no person must pass through another classroom to go outside. The plan is something like this:-



Children leave this school at seven years of age and the boys go to Hetton Council Junior Boys' or Barrington Boys' while the girls go to Hetton Council Junior Girls' or Bog Row.

3. Hetton Junior Boys - this was a Church of England school but it went bankrupt and the County Council took it over. It is a very poor building which glass partitions about the classrooms and no set plan about the school. There is a class for Infants here, taken by the only woman member of the staff. The ages range from five to seven years of age. There are four other members on the staff, including the Head who also has a class - the top class of ten and eleven year olds. There are plans to demolish this school and build another and the sooner it is done the better, for no child can work really well in such dirty, dark, dingy overcrowded conditions.

4. Hetton Junior Girls - this too is a very old school and is at Bog Row. It is a

7124.

better building than the boys school. There are two cloakrooms and six classrooms but only five classes, one from five to seven, then from seven to eight, eight to nine, nine to ten, ten to eleven.

The classrooms are fairly large but are not centrally heated. Instead they have large fireplaces at the front. This is very unsatisfactory, for the poor children at the back never have any benefit from the fire at all. However, this is going to be changed and central heating put in.

5. Hetton Lyons School. - This school is at the Town Lane Ends at contains both Infant and Junior, as well as Senior, Departments, all of which are mixed. This school was built about forty years ago and it used a great deal today for night classes.

However, with the building of a Technical College in Hetton this ~~will~~ not be used any longer for this purpose as the College will be used then. The school caters for about four hundred to five hundred children and has a Youth Club attached for Old Scholars.

6. Eppleton School. - this, like the Lyons, is a Primary and Secondary Modern School now. This is the newest school in the district, and is built in the shape of a letter T. In Junior and Senior Departments, the school is built round a square with a lawn in the centre and a border of flowers, and on which boys practice their gardening. There is an open verandah round which acts as a corridor and, although beautiful in summer must be rather cold in winter. This is very near

Rough Dene Burn⁷³⁴ as can be seen from the six inch map. This also has a fourth Club for Old Scholars. This

Children from Brookhill Estate, North Houghton Road, Market Street and the surrounding streets, High Downs Estate and the Low Downs attend this school, and some from the Southern part of Houghton-le-Spring.

As has been mentioned, there are also evening classes held in Hetton-le-Hole which are attended by many people, for as well as being classes in English and Mathematics there are some in Leathercraft and Dressmaking.

X. HOUSING.

There are different types of houses in Hetton-le-Hole as follows:-

1. Old Houses at Bog Row. - these were the first houses in the village to be built. Now they are condemned, and nearly all empty and falling to pieces. They were small, with narrow windows. Most of the people from here have gone either to Peat Carr Housing Estate or the Council Houses Estates.

2. Colliery Houses. - these houses are in long, narrow rows in the North East of the village near the Colliery and are owned by the Colliery companies and are allocated to miners who receive both rent and coal. Most of them have four rooms, two up and two down with a backyard and a back street. Many of these streets are left in their natural condition, and are in an appalling state in wet or snowy weather.

733.

The rooms themselves are small and low, with tiny windows letting in a minimum of light. In many cases the stairs go up from the back door. Many have only cold water which is drawn from a tap in the pantry. Hot water is only obtained by heating cold water on the large cumbersome fireplace with which the house is equipped. There is no indoor sanitation and no bathroom, baths being taken from a large bowl or tin bath on the hearth rug in front of the kitchen fire. Cooking is done in a large round oven where the miner's wife bakes her bread every week.

Many of these houses are equipped with gas, not electricity and this gives a very poor light.

3. Council Houses. - These are in five estates in Hetton - le - Hole.

1. Council Houses Estate.
2. Broomhill Estate.
3. Peat Carr Estate.
4. Coalbank Estate.
5. High Downs Estate.

(See map).

Broomhill Estate and the Council Houses Estates consist solely of bungalows which vary in size according to the size of the family. The houses in Broomhill Estate consist of two or three rooms, while the others consist of three and four rooms, (except bathrooms with which all are equipped) The High Downs Estate consists solely of two-storeyed houses of modern design, and the other two estates consist of bungalows and two-storeyed houses. Broom Peat Carr is very similar to the

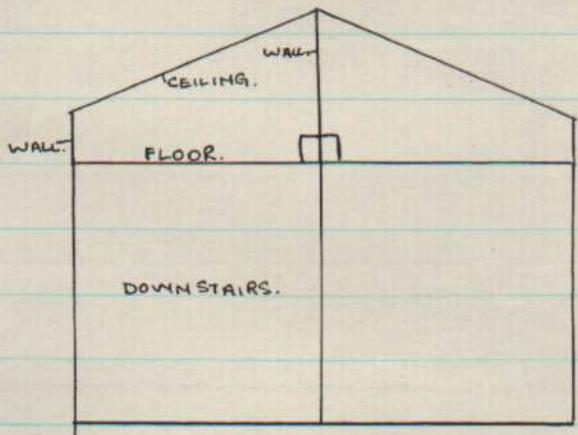
and 775

Council Houses which cater for rather larger families, while CoalBank, with its two storeys, cater for large families. All these houses are built of red brick.

4. Private Houses. - these make up the remainder of the houses in the village and consist of
- terrace houses.
 - semi-detached.
 - detached.

They are mainly in Houghton Road, and on The Hayard Lane. They too are built of red brick. In the centre part of Houghton Road they ^(the bedrooms) are "fan-fall" - that is, the room is like a right angled triangle, the ceiling slopes down to meet the floor.

e.g.



There is a great shortage of houses in Hetton-le-Hole, and many families live together, so causing great overcrowding. In many cases, "newly-weds" live with their "in-laws" and it is very common to find two or even more families in one house. This, naturally, leads to great overcrowding, and in the Future Development of Hetton-le-Hole, housing is an important item on the list. This will be dealt with later, in the chapter on Future Developments.

CHAPTER VIII.

MINING.

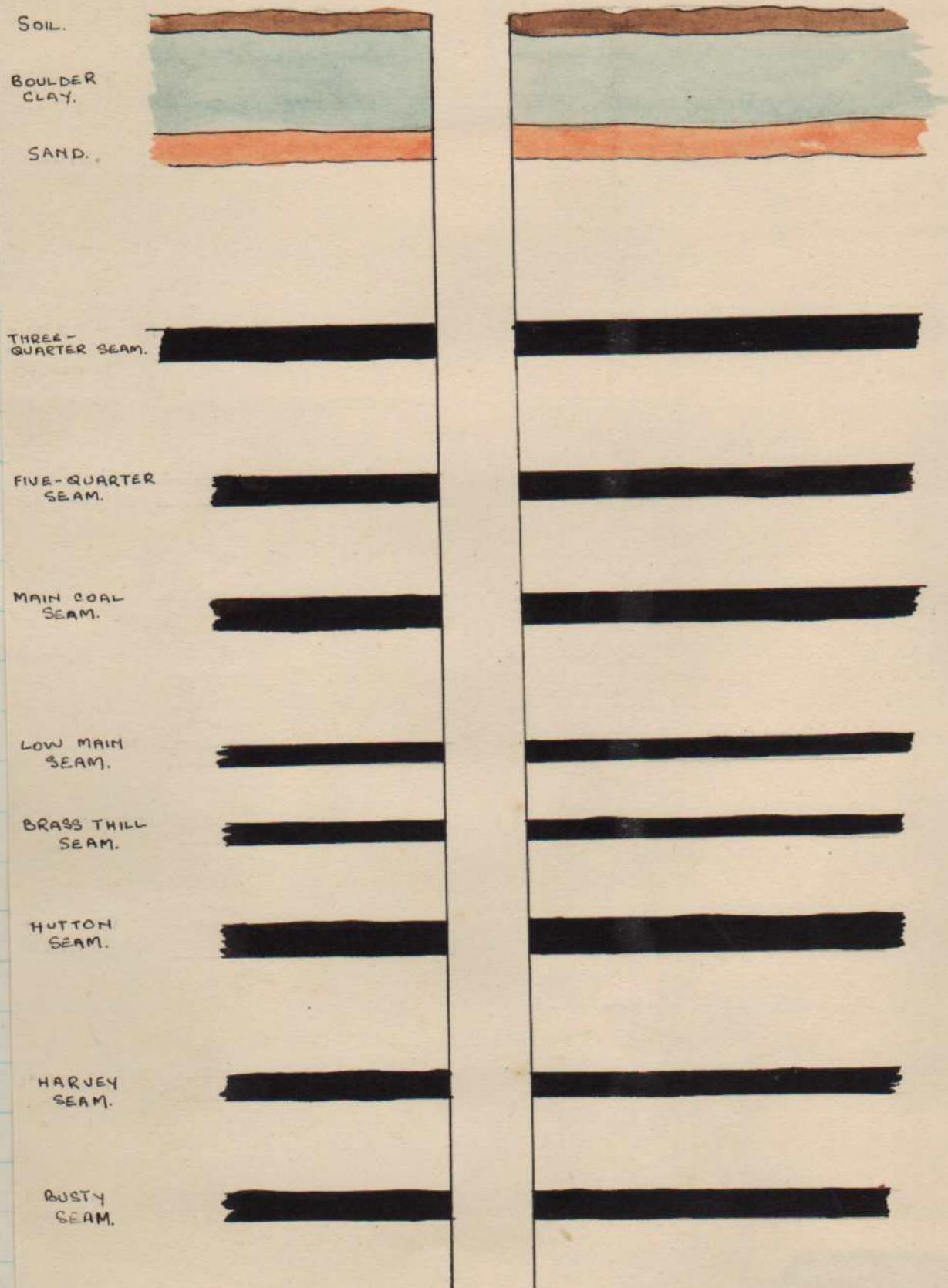
The chief industry in Hetton - le - Hole is naturally coal-mining, although by no means all the population are engaged in this. Coal mining today is one of the nation's most important industries, for it provides the necessary power for our industries. Without it, all our industries would suffer, and it is only in recent years that the nation has begun to see coalmining in its correct perspective and give it ^{its} the importance to which it is due.

There are three coalmines in Hetton - le - Hole, although only one is in the actual village, that one being Eppleton Colliery. The others are Hetton Lyons Colliery and Elmore Colliery. I was fortunate enough to be able to go down ~~to~~ the mine at Elmore and have therefore taken that one to study, as it is typical of all the other mines in the district.

It is not a very large mine, and its extent being approximately two miles, and its depth one thousand, two hundred feet (1,200). There are one thousand, four hundred and ninety (1490) men employed and the output is about seven thousand, one hundred (7,100) tons per week. Last year the output was three hundred and fifty four thousand, nine hundred and eighty (354,980) tons. The type of coal mined in this area is lithuminous

CROSS SECTION OF ELEMORE MINE.

SHOWING:- ORDER OF SEAMS.



52.80.

and the coal which is sent from this colliery
is usually Household and Steam Coal. It
is transported by land and sea to all
parts of the United Kingdom, as far North as
Aberdeen and as far South as London. At
the moment, export trade is very little, and
overseas trade can be regarded as
practically nil. Household and Steam
coal is so called because of the heat it
gives in comparison with other coal. Hence it
is used in factories and in power stations to
raise steam, and in homes because of its
heat.

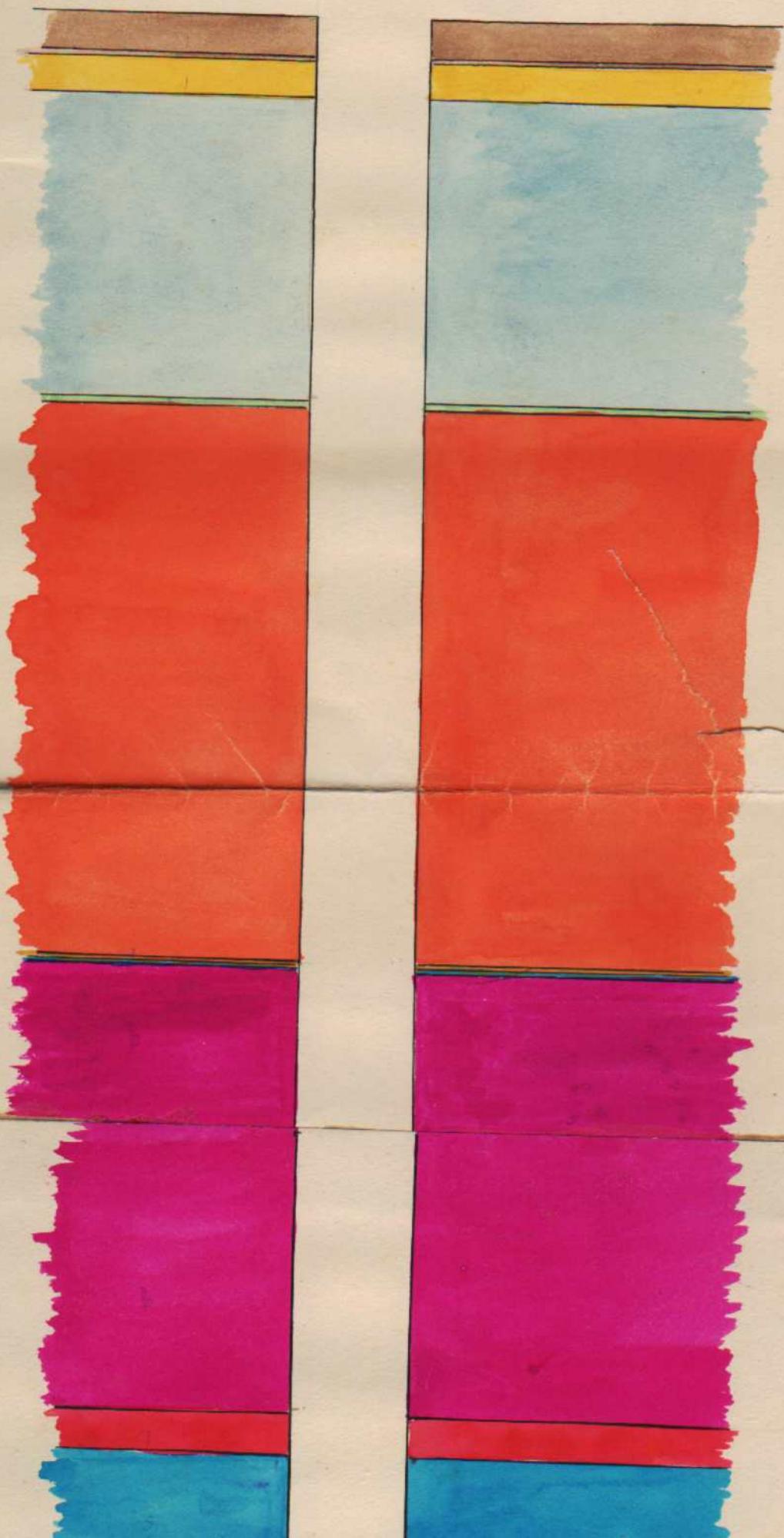
There are approximately sixty-three (63)
seams in this coalfield, nine of which are
workable and of commercial value. These nine
seams, however, are not consistent right
throughout the coalfield. They are missing in
parts due to the action of the agents of
denudation etc. The principal seams in
the Hetton-le-Hole locality are, in
geological order, commencing from the
surface:-

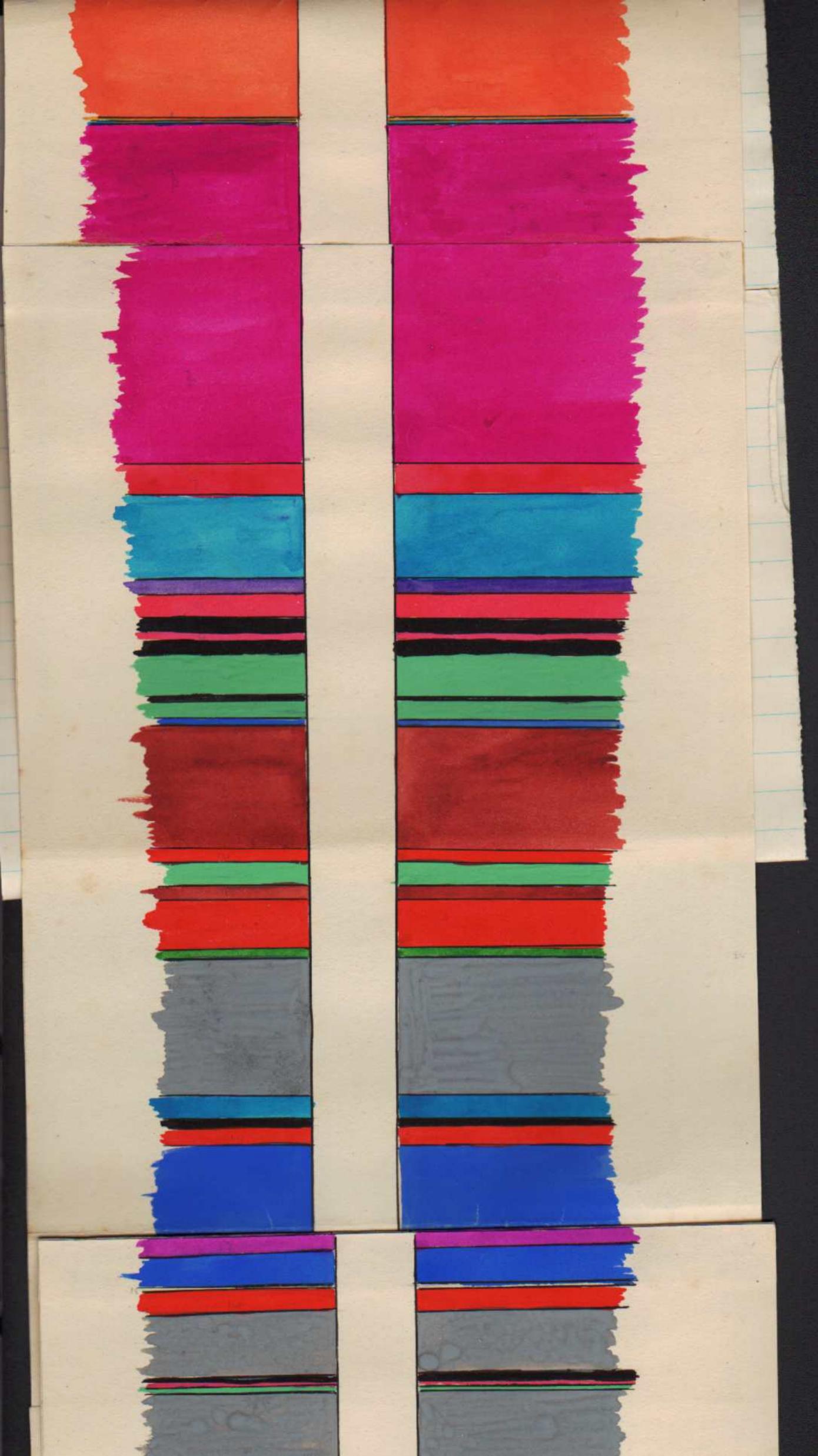
1. Three Quarter Seam.
2. Five Quarter ..
3. Main Coal ..
4. Mandlin ..
5. Low Main ..
6. Brass Hill ..
7. Hutton ..
8. Hawey ..
9. Beuty ..

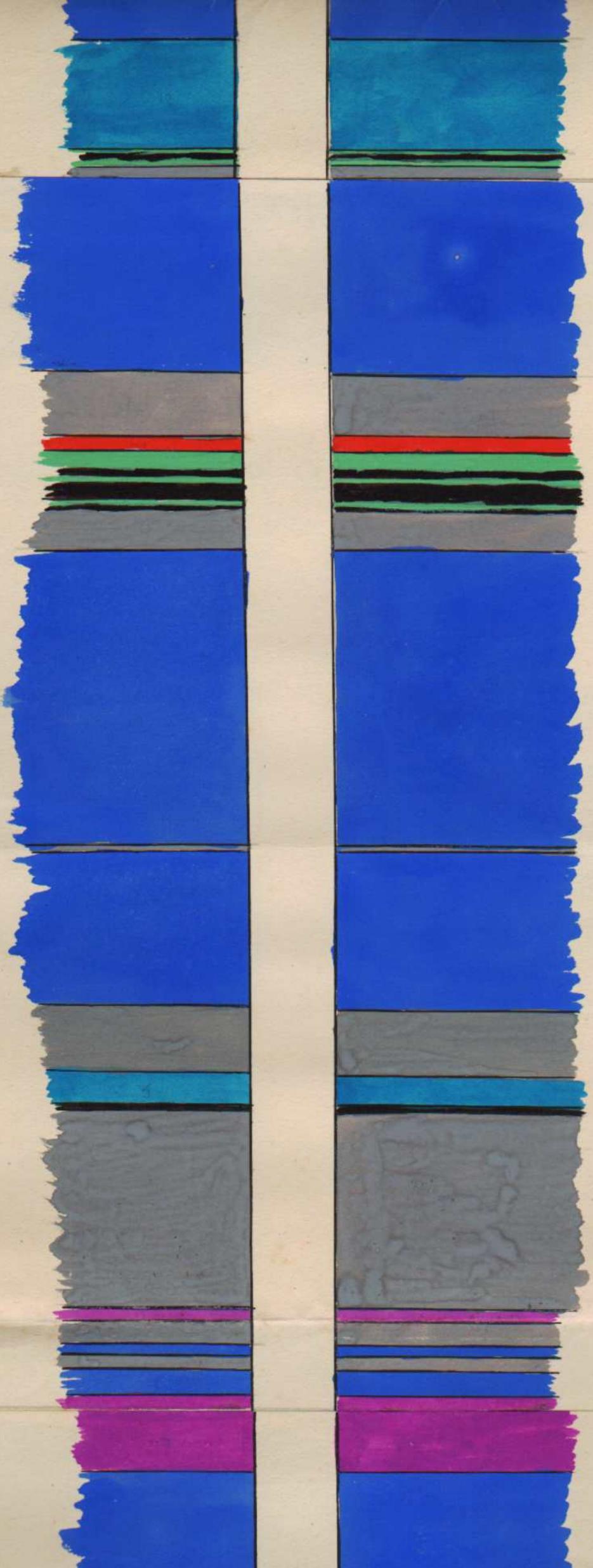
All these seams have been & are being
worked in the Hetton-le-Hole area. The
Mandlin seam is not in existence or does not
occur at Elenmore Colliery, but does at
Eppleton, the reason for this being the

CROSS SECTION OF ELEMORE MINE.

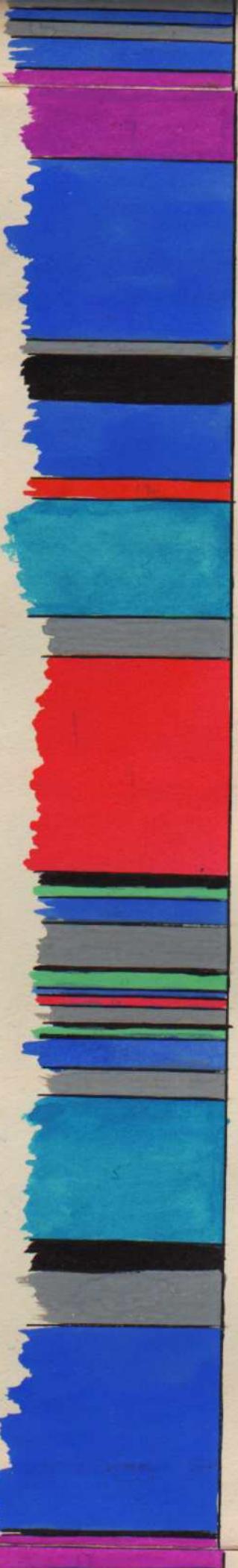
SHOWING:- TYPES OF ROCK.

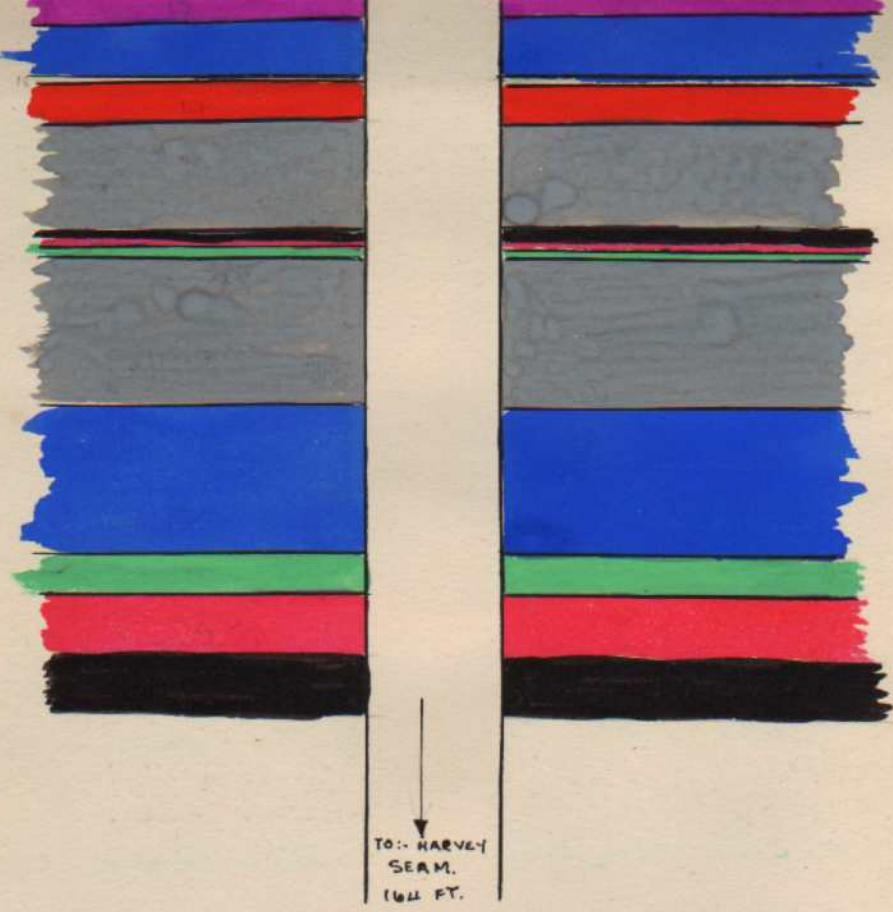






63





55. 81.

numerous faults which riddle the coalfield. The Bushy seam has not yet been located at Ellemore Colliery. A shaft has been sunk two hundred (200') feet below the Hawey Seam but the coal has not been found.

At present, this shaft serves as a reservoir - the water from all over the colliery seeps down here, and is then pumped out by a compressed air water pump.

There are two shafts or drift entrances in Ellemore Colliery, one upcast shaft and one downcast shaft. As their name implies one is for downcast air and the other is for upcast air. The ventilation is produced by a suction fan. This type of fan produces a partial vacuum by means of centrifugal force. The air rushes to this lower potential. Before it finally reaches the fan, it is conducted around the workings of the mine by the erection of doors, air-crossings etc., and by means of splits. In this way ventilation is produced, and fresh air is constantly kept flowing through the mine.

The following types of machinery are used in Ellemore Colliery:-

Two vertical steam winding engines

Both centrifugal and ram pumps driven by electricity.

Electrically driven fan.

Longwall and arc wall coal cutters.

(Their work will be described later on)

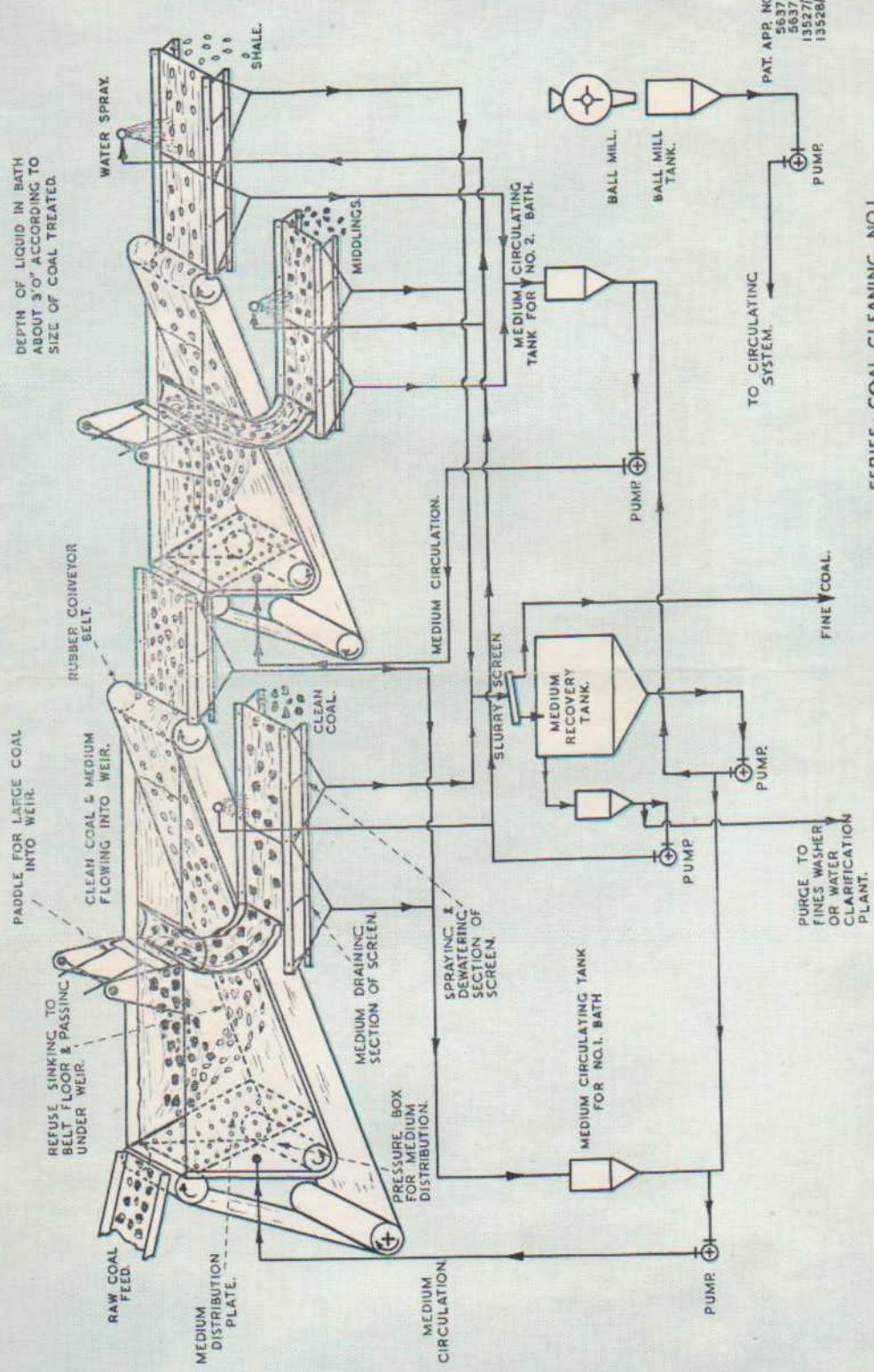
They are electrically driven.

Short wall cutters.

Jay loaders.

Various types of conveyors:-

e.g. face conveyor



RIDLEY - SCHOLES WASHING MACHINE.

room conveyors.

gate conveyors.

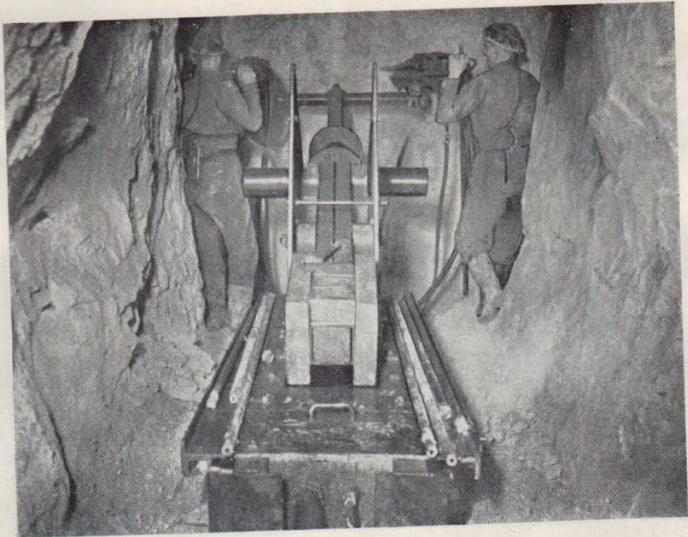
gate end cutters.

The following

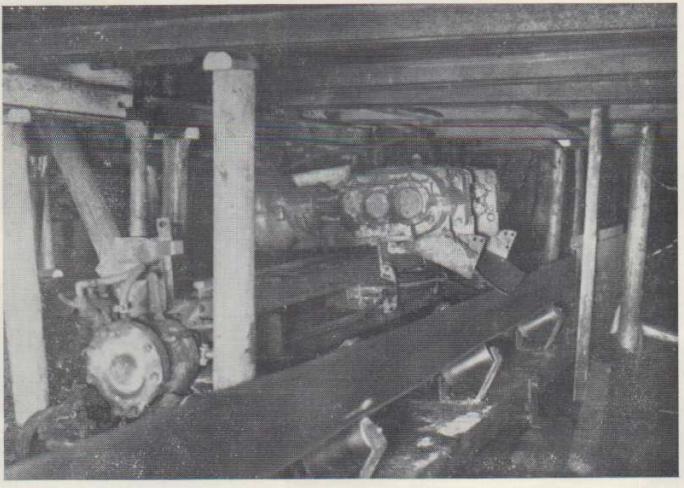
methods are used adopted when hewing the coal.

1. Hand hewing. - This is done by coal hewers who hew the coal from its natural bed by the ordinary hand pick and shaft. Very little of this kind of work is done now.
2. Scalloping. - This is a mining term denoting the action of removing the coal by means of Pneumatic Picks. These machines are driven by means of compressed air at pressures of varying from sixty to eighty pounds per square inch. They are operated by means of miners who press a trigger allowing the air under pressure to operate the valve and drives the piston in quick successive blows, which, in turn, drives the pick or cutting tool into the coal. In this way coal is removed from its natural bed. It is easier than hewing. About one-third of the output here is removed in this way.
3. Coal Cutters. - By the adoption of coal cutters the coal is undercut to a depth of four feet six inches (14' 0") to sometimes nine feet (9'). The width of the undercut is from five inches to seven inches. These cutting machines can be either "longwall", or "shotwall" and "acwall", but all serve the same purpose of undercutting.

~~88~~ 84.



BORER.



CONVEYOR.

27.85.

the coal. The coal that is undercut is drilled by a drilling machine which drills a hole to the required depth.

The shot hole is then charged with powder and fired electrically, so breaking up the coal. The miners known as "fillers" fill the coal direct into tubs or on to conveyors which carry the coal to a fixed loading point where the tubs are loaded before transport to the shaft. About two-thirds of the coal is mined in this way at this Colliery.

The coal is next taken up to the top "to bank". After sufficient tubs have been loaded at the loading point they are put into a pass-bye or siding and taken to the shaft by means of a main and Tail Hauler in sets of fifty (50). These haulers are driven electrically with a three phase induction motor with a pressure of two thousand volts (2000), and capable of two hundred horse power. The hauler also takes empty tubs back to be refilled. The full tubs are then lifted to the surface by the winder which is steam driven. The coal is tipped on to an arrangement known as "jiggers" which have, in their construction, perforated holes of various sizes, which pass the jiggers pass the dust and small coal to the "Dry Cleaner" which, as its name implies, separates the stone from the coal, i.e. the "Dry Cleaner" deals with small coal only. When the coal reaches the trucks it has been sorted out mechanically into the form of dust, peats and in some cases, rough small. Other perforations in the "jigges" pass the cobble on to the cobble belt, and the



Typical Colliery Houses.



The Cage.



At the Seam Face.

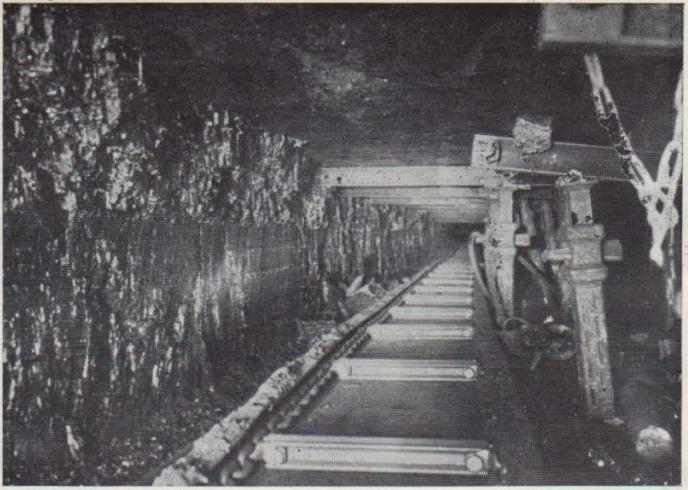


Note Safety Lamp on Cap.

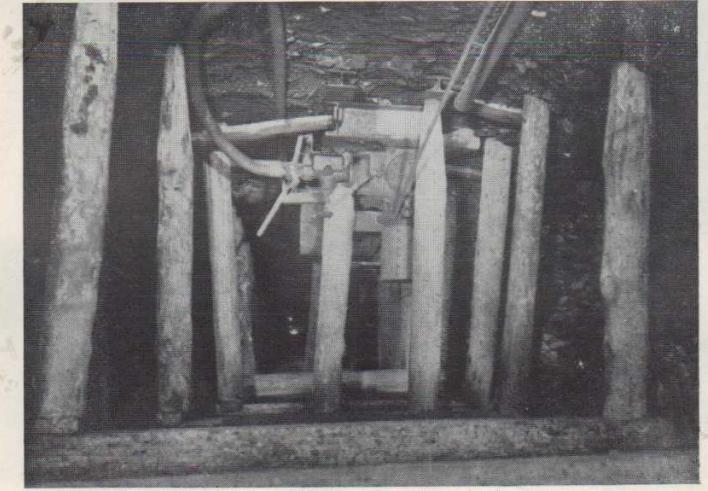
89.

stones on here are picked off by hand. The men who do this are known as "screeners". The machinery also sorts the various sizes and passes the coal to the "washer" which washes the stone from the coal and then enables the coal to be graded into nits, pebbles and cobbles. The large coal, which is the best for all purposes, and is consequently the most expensive, is passed over the jiggers, and is carried, by a belt, to the trucks.

The miner himself is worthy of some mention here. At present he is working underground for eight hours. Only a person who has been down a mine and seen the conditions under which these men work can fully appreciate the significance of that remark. Men and boys averaging five feet ten inches in height work in a seam about two - three feet high, therefore for about seven hours they are cramped up, not able to stretch themselves to ease their cramped muscles. Sometimes, too, they have to work in water which may even reach up to their waists. This however, is not the case in Elmore Colliery for the drainage there is most efficient. Pumps are continually at work and water is never allowed to become deeper than six inches. This eight hour shift is half an hour longer than the usual period, for the miner is working this extra half hour to step up the production of coal and so help the country through its present crisis. At Elmore the weekly target is 7 seven thousand tons, and this is reached, and passed, nearly every week. 91.



A Seam. Note left hand wall of coal.



Propping up Roof.

89.

has been mentioned earlier in the chapter that the average weekly output is seven thousand one hundred tons.

All mines now provide facilities for the miners, and Slemore is no exception. These are pit head baths, a great boon to the miner and his wife, for very few colliery houses contain a bathroom, and having a bath consists of washing in front of the kitchen fire, in a small aluminium bath, a great feat for everyone. These baths at Slemore are of the shower type. The miner leaves his pit clothes here and goes home clean and respectably dressed. There is also a canteen which provides hot meals and snacks at reasonable prices. There is a Welfare Hall, which, although not directly attached to this mine, provides entertainment for the miners' leisure hours. Besides these there are football and cricket clubs, bowls and tennis teams, and in some cases parks where the miners can find an outlet for his sporting activities. Then again, there are miners' homes and rehabilitation centres where the sick and injured can rest and be restored to normal health.

This mine is typical of the other mines in Hetton - le - Hole. Eppleton Colliery is rather larger and is very up-to-date. The other one, the ^{Hetton} Lyons Colliery is not quite as large as the other two. There was another mine in Hetton — The Hayard Colliery which was the smallest of all four. Very few men were employed here. However, this

"SENSATION" AT ELEMORE

MINERS TO BECOME REDUNDANT

What has been described as "a sensational announcement" has been made by the consultative committee at Elemore Colliery. They have stated that 205 men are shortly to be dispensed with on the grounds of redundancy. Out of that number 109 will be transferred to other collieries and 12 old men will be retired, but there is no guarantee of other work for the remaining 78 up to now.

Coun. H. Bainbridge, secretary of the Elemore Miners' Lodge and a member of the consultative committee, told the Durham Chronicle that the committee had met members of the N.C.B. "We were informed," he said, "that numbers had to be reduced at the colliery because the Hutton seam and part of the five-quarter seam were closing."

Coun. Bainbridge said that the N.C.B. stated that Eppleton Colliery would take 68 of the men and Hetton Lyons 41. The remaining 78 would have no guarantee of work as yet while the old men would receive 12 weeks' wages as a gratuity. The Lodge was hopeful that some of the 78 at least would be retained at Elemore.

"To put men on the dole when there is such an outcry for miners," went on Coun. Bainbridge, "appears to be a ridiculous position."

There will be a mass meeting of the Elemore Miners' Lodge on Sunday morning, when members will be addressed by Mr Sam Watson, general secretary of the D.M.A. No names have been submitted by the N.C.B. as personnel to be dispensed with and it is expected that the meeting on Sunday will decide what system should be used.

The colliery employs about 1,500 men and boys and for the last three weeks the weekly target of 7,000 tons has been exceeded.

Durham Chronicle. Jan. 1948.

HETTON

Eppleton miners sent to bank last week 10,442 tons. The weekly target is 10,000 tons.

Feb. 1948.

Coal. — Eppleton colliery exceeded its 10,000-ton target last week by 293 tons.

March 1948.

Elemore Colliery has again topped its target. The 7,000 tons was exceeded by 258 tons.

Feb. 1948.

Wear coal exports. — Total exports of coal from the Wear during February were 223,099 tons, an increase of 10,894 tons on February, 1947, and a decrease of 152,304 tons on February, 1938.

March 1948.

55-91.

mine is not working now. It was abandoned
abandoned about fifteen years ago and
the men employed there went to other mines
in the district.

MINISTRY OF AGRICULTURE LAND UTILISATION
SURVEY.

DURHAM COUNTY.

| | ACRES | % of COUNTY | ACRES | % of COUNTY |
|---------------------|---------|-------------|---------|-------------|
| FOREST and WOOD. | 32,962 | 5.1 | 34,000 | 5.3 |
| ARABLE | 137,571 | 21.3 | 131,840 | 25.4 |
| PERMANENT GRASS | 251,994 | 39.0 | 287,200 | 44.5 |
| ROUGH GRAZING | 132,912 | 20.6 | 140,400 | 21.7 |
| HOUSES WITH GARDENS | - | - | 11,320 | 1.8 |
| LAND AGRIC. UNPROD | - | - | 41,000 | 6.3 |
| UNACCOUNTED FOR | 90,300 | 14.0 | - | - |

CHAPTER IX.

AGRICULTURE.

The aspect of the face of County Durham has been greatly changed with the war, for fields for which farmers have been paid a subsidy from Colliery Companies have been cultivated, allotment associations have been formed, and for a number of years wheat has been grown in the same field.

To survey the agriculture of Hetton - le- Hole these facts must be borne in mind, for the land utilisation map is really of little use considering that it is fourteen years since it was produced by the Armstrong College of Newcastle. The figures which are given therefore, can only be regarded as approximate. B

Bearing in mind the great increase in arable farming, the quotation from R. Jones - North East England is very apt,-

"Despite the evidence of intensive industrialisation, this province part of the province in no way deserves the widely held opinion that its landscapes and scenic qualities are completely marred by chimney stacks and unsightly pit waste heaps. On the contrary, there will be found in the heart of the coalfield itself, samples of rural beauty which will stand comparison with more widely acknowledged beauty spots in other parts

495.
of the country."

About eighty per cent (80%) of the land between the River Wear, the North Sea and a line joining Brandon Dene and Bransby is given over to agriculture. This is not as profitable now as it was in former years, and from 1870 - 1938 the total acreage of farming land dropped from two hundred thousand acres (200,000) to one hundred and twenty six thousand acres (126,000). As Durham is largely concerned with mining, industry and manufacture, the farmer has more difficulty in obtaining labour; there is less land available for ploughing for it has been taken over by for housing purposes; roads have been improved, thus facilitating transport, and therefore the county has less need to be self-supporting for it can import its food from other parts of the country. As a result, many farmers, except in the most fertile areas, have changed over from arable to dairy farming. Another reason for this change is that there is a smaller demand for oats for fodder for pit ponies, as they have, in many cases, been replaced by hawage machines.

Arable land can be divided into three areas:-

1. Land east of the Washington, Houghton-le-Spring, Shotton line.
2. Land in the South East, around Hartlepool, Stockton and Darlington.
3. Land elsewhere in the County.

In the first instance, crops, of which potatoes, oats and wheat are the main crops, are grown on the fertile soils

97

overlying the magnesian limestone in the area mentioned, except where industrial pollution of the air hinders growth.

In the second area, market Gardening is practised. Where there are farms here, the main crops money crop is potatoes, despite competition from other parts of the British Isles. Oats, however, form one half of the total grain crop while swedes and turnips are grown for feeding cattle.

In the third and last area, dairy farming is prevalent, but the great percentage of root crops varies considerably and depends on local demands. A typical farm in central County Durham has one hundred and forty acres of which eighty is arable land, which is worked on a four year rotation of oats, wheat, hay and potatoes. These are sold mainly within the county. A farm in north West Durham might have only nine acres out of eighty-four for crops and the rest for livestock - Shorthorn cattle.

Arable Farming

It must be noted that wartime measures have increased the arable land in Durham, but normally more fertile areas will force it to become once more mainly a county of dairy farms. This county is known in all parts of the world for its breed of Shorthorn cattle and many of the pedigree animals have realised enormous prices and have been sent to the United States, Argentina, Australia and New Zealand to improve the breed in those countries.

Permanent grass is a feature of most of the arable areas of the county. On the

99.

coalfeld it is there because of subsidence. but in other parts it is apparent because of a fall in revenue from selling grain. The Grassland Survey of England and Wales divided the permanent grass of county Durham into the following groups:-

- | | |
|---|------------|
| 1. First grade ryegrass pastures. | 1200 acres |
| 2. Second grade ryegrass pastures. | 1300 " |
| 3. Agrostis with ryegrass pastures. | 54,400 " |
| 4. Dianthus agrostis pastures. | 188,700 " |
| 5. Agrostis pastures with excess rushes and sedges. | 17300. |
| 6. Fescue pastures (including mountain fescue). | 18200. |

Hay on lowland farms is harvested in June, and sometimes, if the year is good, again in September. "Go-ahead" farmers in the dales are cutting hay earlier and thus raising a second crop in September for ensilage. Surplus hay is sold to colliery farms where pit ponies are reconditioned, or to Dales farms.

Since the establishment of the milk marketing board, and the growth of co-operative dairies, there has been a tremendous increase in dairy farming and the county is divided into regions to collect milk and to supply the dairies. The majority goes to Tyne-side collecting centres, and Annfield Plain Co-operative Dairies, but from the Co-operative Dairies at Wingate the milk is sent to the South East Durham area, in which Hetton-la-Hole is included.

Three types of farming are recognised in County Durham by the Ministry of Agriculture in their map of 1941. They are:-

1. Mixed farming with a considerable Dairy side, all over the North East of the County.

NUMBERS OF FOWLS ON AGRICULTURAL HOLDINGS
OVER 1 ACRE. COUNTY DURHAM 1921-1930.

| | <u>No. of fowls</u> | <u>Index</u> |
|------|---------------------|--------------|
| 1921 | 279,513 | 100.0 |
| 1924 | 311,392 | 114.4 |
| 1926 | 371,000 | 132.7 |
| 1927 | 403,968 | 144.5 |
| 1928 | 398,377 | 142.5 |
| 1929 | 434,578 | 155.5 |
| 1930 | 468,574 | 167.6 |

106

2. General mixed Farming - carried on in South East Durham where "it has not been possible to distinguish any one enterprise as more important than others, although dairying may be making the greatest individual contribution to the gross output." Farms are concerned with most of the following:-

production of milk, fat cattle, fat lambs, sheep, pigs, poultry and two or three other varieties of sale crops.

3. Rearing of sheep, cattle and some dairying supplemented by other livestock enterprise, * in a belt stretching west to the moors. Here it is not a question of "how many sheep to an acre, but how many acres to a sheep!"

These divisions, however, are modified to a slight degree by the fact that a surprising number of industrial workers have small garden plots of their own in the most unpromising places. These holdings are too small to be entered in returns, but a large amount of fruit, vegetables and flowers must be grown in them. As a matter of fact, many homes are self-supporting with regard to vegetables except for potatoes, and surplus vegetables are given away to neighbours, rather than sold. To encourage these amateur gardeners, Flower and Leek Shows are held, and these events are looked forward to months before hand. In 1941 it was estimated that there were one hundred and eighty-eight (188) market gardens in Durham, averaging five acres each, and making a sum total of

* This is said by local residents and is exaggerated.

Including Upright Pianofortes in
Mahogany case, by Elbher and H.
Nott and Sons; Antique Oak Buffet,
Sideboard Carved Dark Oak Buffet,
Mahogany Secretaire Bookcase, Oak
Secretaire Bookcase, Walnut Side-
boards, Mahogany Chiffonier, Stained
Bedroom Suite Pine Wardrobe and
Mahogany and Stained Chests of

Seated Chairs Basket Chair, strong
Kitchen Chairs, Couch in Hide,
Tables, Inlaid Wall Clock, Black and
Brass Bed and Bedding, 2 Dressing
Tables Drop Leaf Table, Chamber
Ware, Curtains, Single Bed and Bed-
ding, Pots, Pans, Cutlery and Sundry
Utensils, Fender and Irons, Rugs,
Linen, a large assortment of Garden

UPON LINE
SHOTLEY BRIDGE HOSPITAL
STAFF NURSES required immedi-
ately. Must be General trained
and State Registered. Salary and
conditions in accordance with the
recommendations of the Rushcliffe
Committee. This is a General
Hospital including special clinics for

COVETED TROPHIES COME TO DURHAM

WHEN officers of young farmers' clubs in County Durham assembled for a course of instruction at the School of Agriculture, Houghall, during the week-end, they were naturally elated by the news to hand of the successes of the county team at the London Dairy Show. Against competitors from all parts of England and Wales the Durham representatives carried off two coveted trophies. It was the first competition since the war and, singularly enough, a Durham team won one of the cups in the 1938 show, the last to be held before Hitler started hostilities.

COUNTY TEAMS

WINNERS of the "Farm and Stockbreeder" Cup for the best performance among county teams from all parts of England and Wales were Valerie Nicholson (Butsfield Club), aged 17; William Preston (Crook), aged 20; and Tom Lawson (Sedgefield), aged 19. The contest took place at Olympia, and when the presentation took place the Durham team were congratulated, one of the judges remarking that there was a much higher standard among the North representatives compared with those from the South.

Each team judged a group of cattle, placed them according to merit, and then gave their reason orally. Northumberland were second. It is interesting to recall that when last the competition was held, in 1938, John Nicholson, Valerie's brother, then a boy of 12, was a member of the winning team in the "under 21" section.

Harold Jackson Trophy

John (now 23) was a member of this year's team in the "over 21's" competing for the Harold Jackson Trophy, and his colleagues were: Seymour Brewis (West Hartlepool), aged 23, and Matthew Hutchinson (West Hartlepool), aged 21. John had the highest individual score in 1938 for the whole country.

began at the School of Agriculture on Saturday afternoon, Mr J. W. Cassels, Director of Agriculture for the County, and Mr L. Y. Dent, former chairman, Durham County N.F.U., both congratulated the Durham teams upon their successes.

The school, arranged by Mr T. A. Milburn (the county secretary), was an outstanding success. Young farmers are essentially practical. They take a serious view of their work and are determined to learn all they can about the important tasks they will be called to fulfil. In the course there were some 50 young folk from clubs in almost every part of the county, and they showed real keenness.

After the reception by Mr Cassels, the young people were given some ideas as to the duties of a club chairman by Mr Dent. Mr H. M. Brewis, chairman of the Durham County Federation, Chester-le-Street, presiding. Duties of a club secretary were dealt with by Mr S. F. Jones, assistant secretary, North Yorkshire and South Durham N.F.U., with Mr T. Scott, Chester-le-Street Young Farmers' Club, presiding. Following a discussion on group work, there were films under the chairmanship of Miss Mary Metcalfe, Croft. The evening was devoted

Durham Chronicle.

Feb. 1948.

Fish Curry Savoury Meat Pudding

Main-meal dishes for 4 people

EASY-ON-THE-FAIT RECIPES

FOOD FACTS

Printed at the Durhams' Press, Ltd., Stationers, White Box 224 Adver-

103.

one thousand, one hundred and ninety six
(1196) acres.

| SUNDERLAND DISTRICT. | 35 MARKET GARDENS. | 276a. |
|----------------------|--------------------|-------|
| CHESTER-LE-STREET " | 5 " | 28 " |
| DURHAM CITY " | 13 " | 12 " |
| WEST HARTLEPOOL " | 19 | 125 " |

There is some fruit growing, but solely for domestic consumption. Gooseberries, raspberries, strawberries, black currants, red currants, apples, plums, pears and cherries are grown, but owing to the short summer, their size is limited.

Much land in County Durham has naturally been claimed by industry either for quarries, iron works, collieries or waste heaps. However, some of the space wasted could have been saved by town planning, and acres of land useful for agriculture could be preserved by restricting ribbon development, particularly around Hetton - le - Hole.

Dr

should be noted that Durham County Council actively encourages the cultivation of land and the raising of crops and stock by providing, at Houghall Hall, just outside the Southern outskirts of Durham City, a training centre for farmers, and from which first class farmers graduate, and at Ofterton Hall a dairy school, in view of the increased practice of dairy farming. At Durham University, forestry is taught, and an advisor is supported by the County Council to give help and advice to holders of allotments and kitchen gardeners.

All this can be directly

D. W. A. E. C. REPORT.

County Durham-Hetton-le-Hole Area.

Type of soil. Mainly of glacial origin, overlying coal measures texture medium to strong. The area is badly damaged by pit subsidence and drainage somewhat affected thereby.

Crops Grown. Wheat, Oats, Potatoes, Roots, are main arable crops. Industrial population give ready sale for Wheat and Potatoes- Oats and Roots required for livestock, particularly Cows for Milk production.

Production Figures. Wheat - 18 - 25 cwts. per acre.
Potatoes - 5 - 8 tons. per acre.
Oats - 15 - 20 cwts. per acre.

Live Stock. Mainly cows for milk production. Shorthorn main type - tendency toward Ayrshire breed. Some few farms fatten cattle - cross-bred cattle bought from rearing areas and Ireland. Very few sheep.

Poultry and Pigs. Only in small numbers.

Cultivations. Usual methods with recently a considerable increase in machinery - tractors and modern implements, milking machines etc.

Future Development. Uncertain. - but probably scope for increased milk production and cash crops such as Potatoes, Vegetables etc.

105.

applied to farming in Hetton - le - Hole.
Reference to the six inch Land Utilisation
map will give a more detailed observation. Two
farms in the district have been consulted,
and the information given by the farmers,
can be taken as general to the other farms
in the village. Any authority for his statement?

As is the case with most land
in the district, these farms belong to Her
Majesty, Queen Elizabeth, whose maiden
name - Bowers-Lyons-, is borne by many
places in the district. (e.g. Hetton Lyons
Colliery). The farms are sublet to the local
Colliery Company which is now NUMBER THREE
NORTHERN DIVISION OF THE NATIONAL COAL BOARD,
but which was the ~~LAMBTON~~, HETTON
and JOICEY COLLIERIES, and then again sub-
let to farmers who have the worst side of the
bargain, for no compensation is paid for
damage due to deep coalmining. See the
Durham War Executive Agricultural
Committee report on Hetton - le - Hole.

The two
farms will be dealt with separately.

I. MR. MINTOE'S FARM.

This farm has an area of
one hundred and forty seven (147) acres
and lies on ^{both} either sides of the road from
Hetton - le - Hole to Fencehouses. i.e. The
Hayard Lane. Of recent years a great
deal of land has been lost due to the
building of the Council Houses Estate,
further south, and in the future more will
be lost as there are plans for extending this
estate.

Mr. Mintoe lives in Coondace House,

\$107

and a few yards away, on the other side of the road, is a group of labourer's cottages. Here, however, there is no piped water supply, and the inhabitants of these cottages are compelled to draw their water from a nearby tap and carry it to the house.

No field on this farm is more than twenty two hundred yards from the road. The farm was once noted for its breed of horses, but with the advent of machinery and lack of feeding materials, Mr. Mintose's stock is now reduced to six horses, all of which are used for general farm work. The War Agricultural Executive Committee loans this, and other farms, a tractor, and also issues directions as to the nature of crops grown. One field, owing to subsidence, is unable to be used. Drainage is carried out by the National Coal Board.

Before the War Agricultural Executive Committee were in charge of the farms, Mr. Mintose used a crop rotation of his own, which he says prevents a disease known as "FINGER and TOE" or "CLOVER SICKNESS." A seven year rotation allowed the disease to be stamped out before the crop was planted again. This is the detailed rotation.

FIRST YEAR - Grass seeds, no manure is used.

SECOND YEAR - Grass seeds - one hundred and ninety pounds. (190 lbs). Ammonium sulphate is used to fertilise the land.

THIRD YEAR - Potatoes planted - farmyard manure used, together with

114

and will be entirely surrounded by houses.

96

situation near Ellemore Colliery lowers the general efficiency of the farm, because of the industrial pollution and the smoke, etc., from the works.

The livestock side of this farm is more developed, there being twenty-seven cattle, twelve pigs and twenty-four hens. The cattle are slaughtered at Hewbottle, and other produce is distributed locally by the Central Distribution Bureau at Newcastle. Some oats are used for feeding of animals on the farm, but the majority is sold to the local branch of the National Coal Board for pit pony fodder.

For general observations, see the report from the Durham War Agricultural Executive Committee on page 104.

Small holding seems to be declining in popularity after the publicity given to it in the last decade which resulted in the formation of HETTON POULTRY CENTRE.

The centre was started in the year 1936 under the Special Areas Development Act and Improvement Act of 1934, by the Durham County Agricultural Department. The centre was formed to aid the unemployed men in the district and was initially started by twenty members. The first year each member was given twenty-five chickens, one poultry house (sectional) necessary posts and boarding, suitable gates and wire netting to make a run of area of one acre. The equipment had to be paid for

113.

within four years. In 1937 - 1939, each member received further help from the County Department, receiving equipment as in the first year, each member now possessing three poultry houses, six acres, seventy-five head of poultry and a plot of ground large enough to grow vegetables for his family throughout the year. The total cost of the equipment was one hundred and eighty pounds (£180) which had to be repaid by 1942, but members all made the payment by 1941.

Durham War Agricultural Committee have Warden who visit the centre, and others like it, and give advice on poultry and agricultural matters. The members have now to send their eggs to the Egg Packing Stations which in turn supply shopkeepers with eggs for their rationed customers.

This scheme is not so popular now and of recent years there seems to have been a decline in the interest of the workers in it. This may be due to the fact that the novelty of the scheme has worn off.

CHAPTER IX.

OCCUPATIONS.

The main occupation of Helton-le-Hole is mining which has been described in an earlier chapter. The greater part of the population are engaged in this, but a fairly large percentage of the remainder earn their livelihood in Sunderland which is the centre of occupations in the area, as well as being the industrial focus. A few people work in Durham City, which, although it does not have many large industries, is the administrative centre, and therefore attracts people to the offices at Shire Hall.

Of recent years, people have begun to realise that the mining industry is not a pleasant occupation, and sons no longer follow automatically their fathers down the pit when they leave school at fifteen years of age. Many boys, however, therefore, have gone to earn their living in such intensively industrialised places such as Coventry and Slough.

There are, apart from mining, three other industries in Helton-le-Hole which claim labour. They are:-

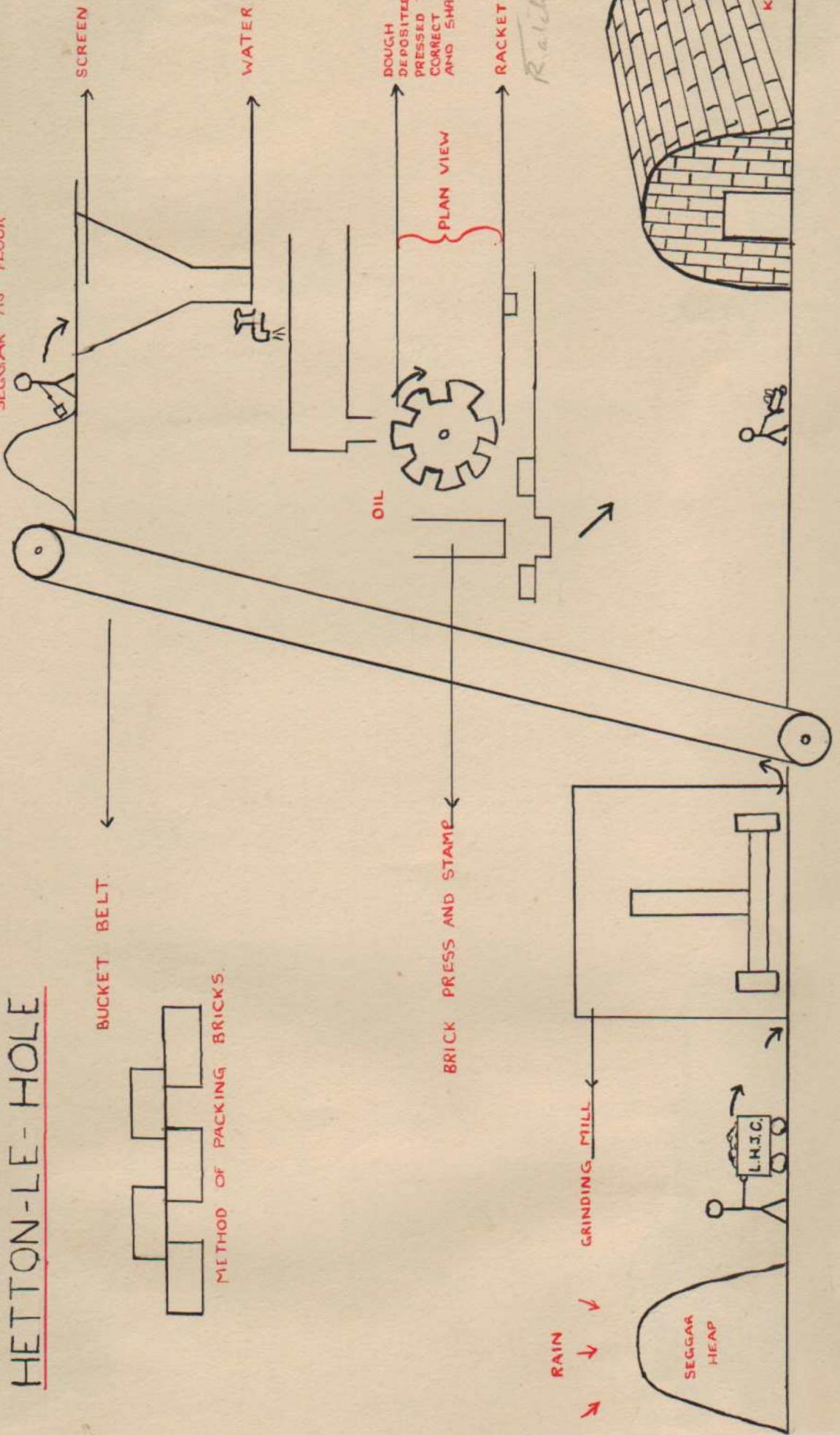
- a) The Brickworks.
- b) Barton's Salt Factory.
- c) The Barnes Pickle Factory.

They will be dealt with in turn.

DIAGRAM OF BRICKWORKS

HETTON-LE-HOLE

SEGGER AS "FLOUR"



I. THE BRICKWORKS.

This was built in 1880, and is connected with Hetton Lyons Colliery. Although both places are under the same manager, there are separate foremen who are each responsible for their own productions. There is only one plant, situated behind Richie's Garage ~~or~~ and on the main road through Hetton to the South. The standard sized brick is produced, of which eighty per cent (80%) are used by the Colliery Company and twenty per cent (20%) by the local council. The production of the bricks is quite simple as can be seen from the diagram.

Seggar, from the pits, is brought by wagon to the brickworks where it is left for a while so that it can be more easily broken up. This is watered in dry months, and about one thousand tons are used per month. The seggar is brought by small tubs into the main building, is tipped into a grinding mill where it is broken up into a fine powder, and is then transferred to a sieve by means of an endless belt bucket elevator going at a speed of three hundred and thirty feet (330 ft) per minute. Any large particles which cannot pass through the sieve return to the mill, the rest passes into a trough with water in, and where cog wheels mix it to a form of dough. (The amount of water which is added here depends on the length of time the seggar has stood and also on its constituency). After passing through this six foot long mixer it is compressed further before being pressed into the form of bricks. (See diagram). The finished bricks, with sand

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between them to prevent them from sticking, are piled on to barrows, and then taken to Kilns which are at the side of the railway line to Hetton Lyons Colliery. Each of the fifteen Kilns holds fifteen thousand (15,000) bricks, and is twenty four feet long, twelve feet wide and nine feet high. The heat travels in an arc to the fire at the back. The Kiln is heated to a temperature of one thousand (1000) degrees Centigrade, the door is bricked up and the bricks are allowed five days in which to dry, two days to heat and two days to cool, and after this they are taken to wagons and lorries for delivery. The first row of bricks in the Kiln is used for engineering. Black patches in the bricks are due to insufficient heating.

In one week about sixty thousand (60,000) bricks are produced, and one thousand, two hundred come from the compressors every minute. Employees, of whom there are twenty two, work an "eight-hour-a-day" shift, except for firemen who must keep the Kiln temperature constant. The average wages are £4 · 12 · 0 per week, whereas before the war they were thirty six shillings per week for men over twenty-one.

2. BARTON'S SALT FACTORY.

This firm, John Barton and Son was also founded in 1880 in John Street, and has passed from father to son since then. In 1936 a new factory was opened at Bog Row near Hetton Burn with a storage shed in the Quay. The factory

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is a large wooden building. In spite of a large business, there are only seven employees. The firm is practically all wholesale and deals with the following processes:-

1. Manufacturing.
2. Bottling.
3. Packing.
4. Wholesale (chemical lines).

Manufacturing lies in the production of hair cream known as hycream and, in pre-war days, clay pipes. Bart's Salt is blended by a special mixing machine. The greater part of the work is Packing and Bottling for wholesale, and the bottles used are brought from London, Leeds and Stockton by rail. Cartons for packing come from Manchester, Stockton and Newcastle, and labels are printed at Stockton. The firm supplies practically all the shops in Helton-le-Hole, and is an agent for many chemical producing firms throughout the whole area. The main sources of raw materials are as follows:-

| | | | |
|----------------|------|---------------|-------------|
| 1. Salt | from | Haverton Hill | by lorries. |
| 2. Whiting | " | Drieffield | " rail |
| 3. Red ochres | " | Salford | " " |
| 4. Bart's Salt | " | Cheshire | " " |
| 5. Soda | " | Stockton | " lorries |
| 6. Epsom Salts | " | Church | " rail |

Other material ^{from} other firms is repacked for wholesale dealing. Areas of finished products cover Northumberland, Cumberland, Durham and Yorkshire.

Hand Packing - Bart's salt, Star Whiting, Kleenup, Petroleum Jelly.

11.123.

Machine Packing - Bart's Sarsaparilla, Epsom Salt, Carbonate
of Soda, Fullers Earth, Sulphur,
Magnesia, Cream of Tartar, Glue
size.

Bottling - Castor Oil, Glycerine, Olive Oil,
Composition Essence, Vinegar,
Imperial, Liquid Paraffin,
Flavourings.

It is estimated that twenty tons of salt
are used per week, and four tons of
Whiting are used.

3. THE BARNES PICKLE FACTORY.

This was begun only
recently and is in Barnes Street which is
near the centre of the village. It is owned by
a Mr. Beauman, and he employs twenty
girls. Sauce, as well as pickles, is
manufactured. The onions are from local
supplies and the vinegar is from Barton's.
The factory supplies the local area. Mr.
Beauman intends to extend this further if
the venture is a success.

Other employment in Helton-le-
Hole, which comprise about ten per cent of
the total employed is found under the
following occupations.

1. Garages and motor mechanics - including
bus drivers and conductors.
2. Haulage contractors
3. Builders.
4. Council maintenance work.
5. Bank clerks and managers.
6. Shop keepers and assistants.

2. 125.
7. Entertainment Personnel - including publicans and employees in cinemas.
 8. Printers.
 9. Hairdressers and Barbers.
 10. School Teachers.
 11. Farm labourers.
 12. Keepers in Helton Park.
 13. Librarians.
 14. Post Office Clerks.

CHAPTER XI

PUBLIC UTILITIES.

Street lighting in Helton-le-Hole is done under two types of electricity:-

a) ordinary filament - this is used for most of the lights.

b) mercury vapour - is used at important points in the district.

e.g. Centre of village.

In the shopping centre.

At cross roads.

These lamps are situated at the Cemetery, Helton Centre, Four Lane Ends, Bog Row, Market Street, the Downs, Dasington Lane.

All lamps are controlled by VENNER TIME SWITCHES, which switch on the lights at dusk and put them out at dawn. However, the system is rather different now, owing to emergency restrictions. The filament lights are alternated i.e. every other one is out at all times, therefore making a light at approximately every fifty yards. One hundred WATT bulbs have been substituted for sixty watts, and only lights at certain points are left on all night, the majority go out at midnight.

The district is not charged on the quantity of units consumed, but is on a type of tariff charge i.e. it pays according to WATTAGE and length of time the lights are on. The amount paid is not for general knowledge therefore it was impossible for me to find it out.

Rates -

Population according to the Census of

Hetton Rate Down

WELCOME EASTER GIFT

"THIS is a substantial Easter egg for the people of Hetton," remarked Coun. L. Kelly, when moving the adoption of a rate of 16s in the £ for the ensuing financial year. Compared with the rate for the previous 12 months, this represents a decrease of 5s 8d in the £. The water rate will be 3s 4d, against 3s 6d last year.

Twelve months ago, Coun. Kelly recalled, he assured the Council that their funds were in such a sound condition that not only would essential services be maintained at efficiency standards, but that the rate would be stabilised irrespective of any adverse fluctuations of the county precept for a few years. He repeated with the same confidence last year's prediction that the rate would certainly not be increased 12 months from now. The Council's accounts revealed a surplus of £6,400, the equivalent of a rate of 2s 5d.

In the highways department, £5,392 of the £6,337 estimated had not been used. This was serious, and while there is a valid explanation of this state of affairs, it must not be allowed to be repeated. There was sufficient work to be done to Hetton's footpaths, back streets, etc., to keep a small army of men employed and to use up a mint of money. It was work that ought to have been done 30 years ago. Last year there was a rate fund balance of £28,000, or an equivalent rate of approximately 10s 8d. This was money they had in the bank after they had met statutory liabilities.

"HIGHLY EMBARRASSED"
Continuing, Coun. Kelly declared that they were start-

ing the financial year highly embarrassed—not with a deficit, but with an almost frightening surplus of approximately £34,000 and they could reduce the rate, if they so desired, by 12s 11d over and above the 5s 8d by which it was being reduced. The Council proposed to make heavy inroads on that surplus during the year, and they would accept no excuses for failure to carry out essential works.

One of the means by which the rate fund balance would be reduced would be several schemes for the improvement of the district, and the year would see the new direct labour venture in full swing.

HOUSE RENTS

Coun. Kelly said the Housing Committee was concerned about house repairs. For years no repairs were done and no attempt made to build up a repairs fund balance, and during the war repairs were almost entirely suspended. Two years ago the Council set about tackling the problem, but found that there was so much to be done, and costs of materials and labour were so high, that the estimates for repairs were swallowed up almost immediately. The huge sum of £10,000 was being set aside to meet repairs to Council houses.

Referring to rents of Council houses, Coun. Kelly reminded them that these were going to be lifted and it could not be avoided. But in view of the reduction in rates, no Council house tenant would be called upon to pay any more actual cash.

Coun. Kelly thanked members and Mr W. J. Dring (clerk), of whom he said, "He has spent long hours in licking estimates into ship-shape."

The fate was adopted.

Durham Chronicle.

March 1948.

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1931 is as follows:-

| | |
|------------------------------------|--|
| Downs. | - 6380 |
| Helton. | - 5613 |
| Easington Lane. | - 6140 |
| Rainton and Moosley. | - 2684 |
| (These five comprise the district) | |
| Total. | - 20117. |
| Area. | - 4527 acres. |
| Inhabited houses. | - 14900. |
| (Inc. 1421 Council Houses) | |
| District Assessment. | - £61647 |
| Assessed Persons. | - 5500. |
| Present Rate. | - 21·8 per £ General - 3·6 " Water. |

Water is the responsibility of the Local Council and is paid by people on their house assessments.

With regard to Sanitary arrangements - Surplus surface water is taken away by ordinary street drains which join the sewage and house drains. The many earth closets which previously existed have now been replaced, with the assistance of about fifty per cent the cost of the conversion from the Council to washaway closets. Practically every house in the village has these now, and it is only in condemned houses that they have not been installed. The sewage all goes to a sewage farm for disposal. This sewage farm is at Brookside, in the North West of the district.

There is a good transport system in Hetton-le-Hole as has been described in an earlier chapter. Two companies, now amalgamated provide the transport. They are - The Sunderland District Omnibus Company and the Northern General

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Transport Company. They leave the district and link Hetton up with all villages in the immediate vicinity. On an average there are twelve buses per hour passing one way through the village.

The village is well provided with amenities. Both Public houses are numerous, there being fifteen in all, and six of these are in the centre of the village. There are two Parish churches, St. Nicholas' and All Saints, the former being in the centre of the village and the latter in the north ^{East} of the village. Besides the two Anglican Churches are Methodist Churches, a Spiritualist Church, and a Salvation Army Hall. There are two cinemas, each being fairly near the centre. The miners, under the Welfare Scheme have been provided with a Park which is open to all. Miners are automatically members of the clubs, and pay less for to play bowls, tennis or putt, for the park is provided with a bowling green, four tennis courts and a putting green. There are also various walks. A stream, Hetton Burn, runs through the park from South to North. This can be seen from the map. It joins Rough Dene Burn in the Bogs in the North East West of the village.

There is no hospital in Hetton-le-Hole, the nearest one being the Royal Victoria Infirmary in Sunderland. However, there is an Isolation Hospital at Rainton Bridge in the North West of the district. In the village itself there is a clinic for expectant and nursing mothers where they are and their children are given help and advice and food for very little. School children as well as women and babies

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can, if they wish, have ultra violet ray treatment at the clinic, also for a very small charge. The clinic connected with the schools is in Houghton-le-Spring, and children go there for teeth extractions and other examinations which the school doctor deems necessary. This clinic in Hetton-le-Hole, however, caters for the people of Hetton, Easington Lane and Moosley, ~~is~~ particularly mothers.

CHAPTER XII

FUTURE DEVELOPMENT.

There are plans for the future development of Helton - le - Hole under various headings of housing, roads, water and drainage, educational, welfare and industrial. These will be dealt with in order.

First of all, housing. It is proposed to develop and extend the Peat Carr housing estate in the South of the village, the exact position can be seen from the six inch map. This estate will be developed and will fill in the land between Helton and the neighbouring village of Moorsley. These houses will replace the old houses of Low Moorsley which have long been condemned. Then again there is the possibility of the development and extension of the Council Houses Estate, which can also be seen from the map showing the housing estates. These new houses will probably be built on the opposite side of the road. Some of the councillors want to build some houses near Dene Street in the North of the village, but there is the objection that this will be isolating a housing estate from the community centre.

Next, roads. This is a County Council liability. There is a new road proposed which will by-pass Helton - le - Hole. It will extend from the Border Tree, on the North West extremity of the village, to across towards the Hayard Road, then along the road there is the Lyons School at the cross-roads in the South of the village.

Another possible development from there is another road going from the Lyons School directly South, thus by-passing the neighbouring village of Easington Lane.

These are no large scale developments planned for water and drainage apart from mains, water and sewage etc., necessary for new housing estates.

Under the new Education Act of 1944, suggestions have been made for a college to be built in Hetton-le-Hole. So far the site has not yet been decided on. This college will probably cater for teen-agers and the training of apprentices for various trades in Technical Education.

There are plans to improve Hetton Park or Dene which belongs to Eppleton Colliery Welfare and include a Swimming Pool, probably somewhere near Fountain Terrace, just off the main road.

There are no industrial developments as such in Hetton-le-Hole, but a Trading Estate is to be developed at Fencehouses which will affect labour in Hetton, and remove some of the surplus labour, not only from here, but also from all villages surrounding Fencehouses.

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This is a good piece of work

C.E.T.