DORE AND TOTLEY

PART II

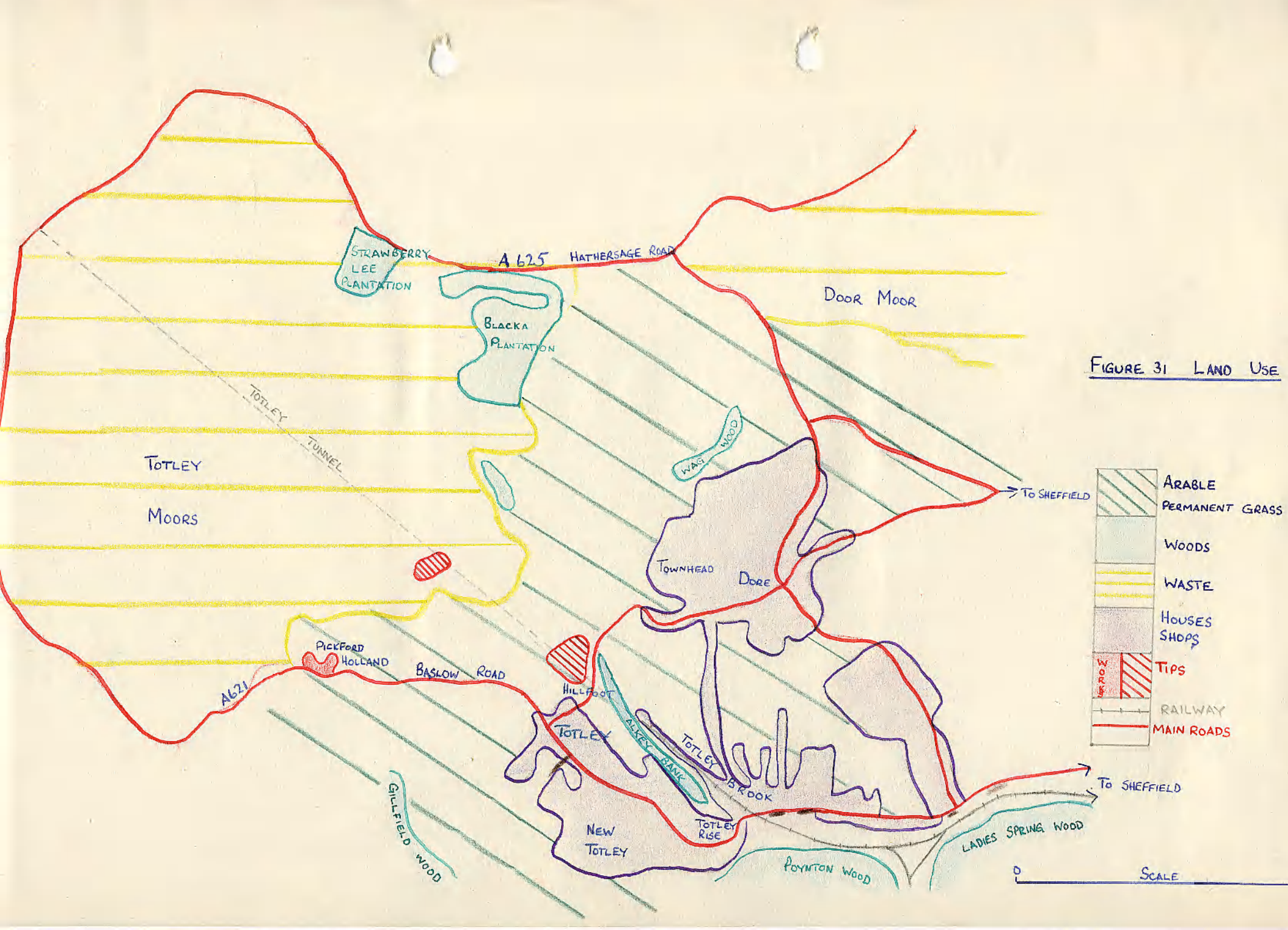

FIGURE 31 LAND USE

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DORE
NEW ESTATE

CHAPTER THREE

THE AREA TODAY

Having traced the human pattern on the physical pattern let us now consider our area in its present setting.

Since the Twentieth Century there has been a steady growth of both Dore and Totley, and in 1935 both were absorbed into the City of Sheffield. This area is part of the residential area of Sheffield, and it preserves much of its former rural character. Map number 31 makes the present general pattern clear. A glance at the map shows us there is virtually no industry within the area, and the greater part of the area is moorland, arable land or permanent grassland. A large part of the area is now occupied with houses, usually private but in parts there are some prefabricated houses to be seen.

Perhaps the most striking feature of Dore today is the vivid contrast in the houses. One finds an old part of the village with houses dating from the Seventeenth and Eighteenth Centuries, and then the next block of houses are of most recent birth. This is the exact position when moving along Townhead Road. (Photo.26-8) The old everywhere blends with the modern, and we find old cottages with modern villas facing them, and in some cases adjoining them. Photograph number 8 shows a view of Dore taken from The Grove Totley. All the new houses on the left of the picture have been built during the last ten years. These houses have been built in the main by Sheffield industrialists, and other areas of newly constructed houses in Dore include the estate behind Newfield Lane, and along Limb Hill. Only a few houses are under construction within our area, but a new estate is being constructed along Devonshire Road. This road is being extended so that it will eventually reach Dore, at Vicarage Lane. In Dore itself there has been a recent addition to the antiquity of the region opposite the church. Here a new block has been opened consisting of "The Coffee House," and what will eventually be a fruit and flower shop next door. (Photo. 30) The interior of the cafe seeks to preserve the historical significance of this the oldest part

part of Dore, (there is a farm next door about 300 years old. Photo. 29) for it is decorated with historical pictures and antique furnishings. The whole block is owned by one person and already the cafe has been well received. The significance of this new establishment is that eventually it may serve travellers and business men of the area who are unable to obtain any form of mid-day meal in Dore or Totley. One wonders whether travellers using the Hathersage Road will now deviate and call at Dore, instead of lunching at Hathersage. The fruit and flower shop is not open yet, but this will serve the local community in the very near future. The shopping centre at Dore is centred round the old part near the church. (See Photo. 11.13) The outskirts of the village are unprovided for in shopping facilities, and unless the housewife relies on the few travelling fruit and vegetable dealers, she must make her pilgrimage into the village.

On the edge of our area we find that one of the large steel works of our city have their sports ground between the Hathersage Road and Limb Lane. Arthur Balfour and Co. Ltd. hold athletic meetings from time to time, and we sometimes find our area being invaded by people from all districts of Sheffield. These events disturb the peace of our area, but in normal times the grounds are restricted to tennis, bowls, football and cricket. A recent addition to the ground has been construction of some all-weather courts. This land may be compared with Abbeydale Park in Totley;they both provide a means for physical relaxation through their verdant areas. (Photo. 35.36)

Although Dore is within the city boundary, it preserves much of its former village characteristics, and one may determine the nature of village life even today. There is an essentially peaceful atmosphere all day and in all the corners of Dore. Apart from the modern elements, one could well imagine oneself in the Nineteenth Century, so quiet are the afternoons.

Totley, in relation to the physical features of the area, has spread along the escarpments edges, and down the dip slopes, and into the valleys of the region. We therfore see that settlement is not

as concentric as at Dore. Travelling towards Sheffield, we leave the old for the new. After passing the Cross Scythes Hotel, we begin to encounter the more recent parts of Totley. There is an obvious contrast in the type of house in Totley, but here, unlike Dore, we do not find the old amongst the new in the same pronounced way. The old part of Dore is centred round the Hillfoot Road- Baslow Road cross-road, whilst the new is spread for some distance in the direction of Sheffield. The distribution of houses has led to the establishment of four distinct shopping centres along the Baslow Road and Abbeydale South Road. The first is situated on the site of the old village, (Photo.37) the second is at Green Oak, (Photo. 38) the third is at Totley Rise, (largest) and the last is at Totley Brook. Each shopping centre serves a section of Totley and one feels that the shops are a clear indication as to the spread of settlement. Clearly there has been a marked difference in the pattern of settlement between Dore and Totley which is reflected today.

The village life marking Dore is absent in Totley, except perhaps in the older part near the post office and in Totley Bents. This difference is accounted for in the Baslow Road which runs through the heart of Totley whilst the Hathersage Road, its counterpart at Dore, only skirts that village. It is significant that Totley Bents standing apart from the Baslow Road, has retained its hamlet life, centred round the Cricket Inn or round the cricket pitch which was probably regarded as the former "green." (Photo.39) Here one may peacefully watch a village cricket match, unaware that modern life is feverishly capturing Totley. The railway is a further threat to the peace of Totley, although this is not as marked or apparent as the busy road.

There is a noticeable absence of parks in the two parishes. We have already mentioned the Balfour Sports Ground, and Abbeydale Park, but these are not parks for the general public, and must be counted for naught in our above intended meaning. The region is favoured with an unlimited amount of green, open country, and this compensates for the apparent lack of facilities in this respect. Just behind the Baslow Road at Totley, near Mr. Pearson's Nursery, there is a space which has been used as a recreation ground for some fifteen years, but the two tennis courts and bowling green are of recent construction and are

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only about two years old. There are no extensive building projects to be thrust upon the area within the next five years, for the district is protected from domestic and industrial acquisition of land by the area's bordering the "Green Belt" area. The most important expansions of the area have already been mentioned and are well underway at present. The opening of the "King Ecgbert Secondary School" in the future poses certain problems which we shall subsequently present, but the extension of the Devonshire Road estate will simply mean another estate of residential houses.

One further new project for the future is only at the discussion stage. Totley Moss is proposed to be an area for afforestration by the North East Derbyshire Water Board.However, this is only in the initial stages of conception, and the writer's attempt to establish details of the project from the North East Forestry Commission (Totley Moss being part of their area) proved fruitless. It seems probable that the scheme had not been submitted at that time for the sanction of the Forestry Commission.

The 1st. June 1957 we saw an attempt to unify the two parishes of Dore and Totley, and one feels this also serves to preserve a little of the former village life of the area. On this day the Dore and Totley Union Church held a "Summer Fete," on the cricket field at the end of Totley Brook Road. Situated approximately halfway between the two parishes this fête showed the strong link between the two parishes even in our present day. One felt that with a little imagination the scene could easily be transformed to the days when such village events were commonly held on the village green, or at some other place. (PHOTOS. 32-34)

Dore and Totley were extremely fortunate to escape any damage from German Bombing during the Second World War. Only one bomb fell anywhere near the villages, and this demolished one half of a house opposite "The Elms" in Oldhay Lane, Dore.

TOTLEY NEW HOUSE CONTRAST WITH

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NEW TYPE

HOUSE TOTLEY

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There are no recent population statistics available for these parishes, and one must refer to Vernon Brelsford's estimated figures for 1950, Dore 3,863, Totley 4,000. As we have seen this area is a residential region, and there is only a small percentage of "working class" people who live in the old cottages at Dore, and in the older types of houses at Totley. The parishes present a cross section of present society, but in the main the residents of the area hold positions in the Town Hall, banks, some are managers of works, and a high proportion of retired business men live here.

We have considered how the physical needs of the population are catered for, but one must also consider what educationists would call, "the growth of individuals of all ages embracing any human activity designed to influence the development of children or grown men or women, whether individually or collectively." To the layman, however, this is reduced to one word, education. There are limited means for the education of adults within our area, and it is necessary to travel further afield for any solid instruction in "further education."

The first school in Totley has already been mentioned as being an infant school in Totley Hall Lane 1827. It was fifty years later before Totley Church of England School was opened. (Photo. 40) The school was originally an "all-age" school, but since the opening of the new Totley Grange Junior and Infant School in Baslow Road on the 9th. April 1951, the older school is soley for senior children.

In 1923 a private school was opened, and still functions in Totley Grove, "The Dore and Totley High School for Girls." Children come to this school mainly from the surrounding districts, and besides the provision for older children there is a kindergarten for young children. Amongst the comparatively new schools in Totley there is the "Oakwood" school which assembles in Totley Union Church Hall. This school caters for the needs of the younger children of the district, and it is the counter-part to the "Oakwood School" firmly established at Norwood Road, Pitsmoor.

At four o'clock there is an array of colour from these school uniforms as the younger memebers of the community make their way home.

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The significance of these schools is felt in the fact that land has been used for the building of these schools, and the area now provides education of a special type in these private schools. The problems connected with the forthcoming opening of the new secondary school will be mentioned at a later stage, but it is felt that the old and the new systems of education may provide our area with an extra problem in the fact that more buses will be needed at least in a morning and in an afternoon, and the railway does not seem likely to become a means of transport to ease the situation. The further connection with our topic is that many of these schools have been started in old buildings, and so a new cycle of life has been given to the old.

We are afforded an example of this in the Totley Hall College of Housecraft. We have already mentioned Totley Hall, and how it was eventually taken by Sheffield Education Authority. There have been extensive addition to the old part of the Hall, but once again the old blends with the new. (Photo. 41.42)

Dore has an equally interesting history of schools. Education was being prepared for from the early part of the Eighteenth Century. The early education at Dore appears rather obscure as to the type of school, but various people donated money for education, and Vernon Brelsford tells us, "at the beginning of the Nineteenth Century the income of the school at Dore was £12 4s. per annum.

The present Primary School at Dore stands on the site of the old Dore "Chappel," and was originally an Endowed Day School. (Photo. 43) From the exterior at least, this school seems to have changed little since the days of 1821 when it started, for there is a stone with the inscription, "Erected by subscription 1821," in the face of the wall. This school provides the needs of primary children of the parish.

Children of senior school age who are not selected for grammar school education have now been transferred to the new Silverdale Secondary Modern School at Ecclesall, although a few children attend Totley Church School. It is interesting to note that Dore has to send most of here secondary children out of the village whilst she "imports"

senior children in the future to the new secondary school for girls.

As one regards Dore from The Grove, Totley, one is arrested by the noise of a most powerful engine. On closer observation one distinguishes the great tractor at work on the area's largest building project, "King Ecgbert Secondary School." (Photo. 45) It was 1952 when the Sheffield Education Authority made an application for the compulsory purchase of land in the old Dore parish, and now five years later the work is almost complete. It is thought the school will be functioning by September 1957. One is restricted from movement within the building, but from the exterior one clearly sees that here in the heart of our area is a newly developed project equal to any in the country of the same nature (Photo. 44.46) The school is for girls only, and is proposed to take the present girls at the Rowlinson School Norton.

One feels that this new school will raise a problem in the future. Most of the children who attend the school will be drawn from the north and east of the city. Here we see the immediate problem of transport arising. Certainly the present facilities of public transport would be unable to cope with the situation, and one feels the Education Committee must take steps to meet this measure. With the construction of the playing fields and recreational facilities for the school, one imagines that the present peaceful nature of the dip slope from Dore will soon be transformed, and with the new activity mark the beginning of a new age. The children should certainly enjoy the pleasant positioning of the school, but one must remain aware that the school is virtually isolated at the southern tip of the city, whilst the areas from which the children will be drawn are situated at the other side of the city. One will watch the situation with interest when the school is once established.

As one walks along Short Lane on a summer's afternoon, the noise of children playing in the grounds of "Fairthorn" ais brought to one's attention. This white building is a convalescent home for children, and is ideally situated facing Blacka Moor. "The Moss" is also a children's nursery for children requiring "special treatment" and one often encounters the children as they are taken for afternoon walks.

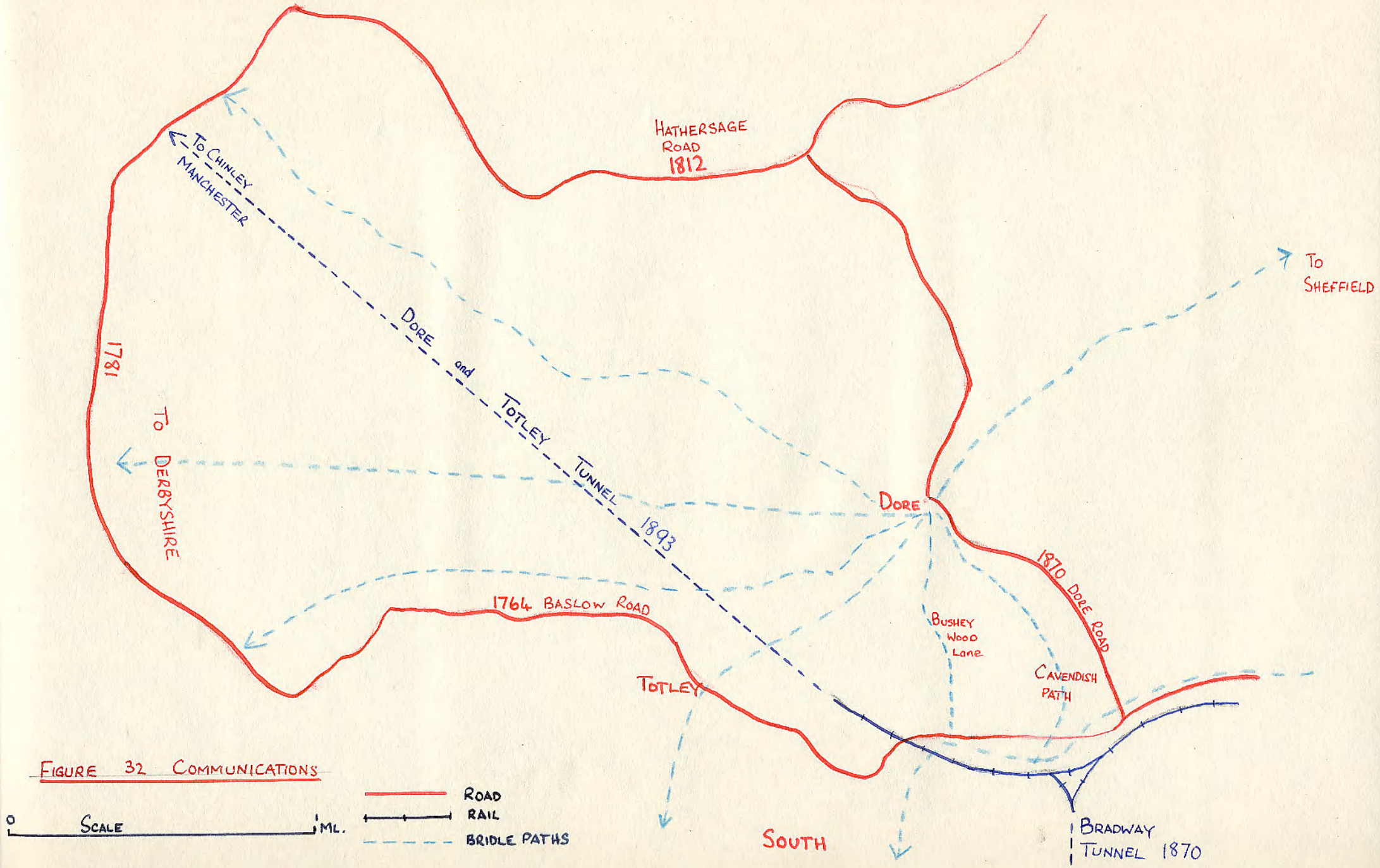

FIGURE 32 COMMUNICATIONS

Communications

Our area shows evidences of long associations with travellers from Prehistoric times, and from the Middle Ages.

There are many old bridle roads and lanes within our area, forming the first communications between the two parishes and the surrounding districts. (Figure 32)

An old pathway and lane . Bushey Wood Lane takes one from Totley to Dore and brings one to Savage Lane, just below the school. The lane is now called Bushey Wood Road. An old path runs from the bottom of Twentywell Lane Totley to Dore, via Cavendish Avenue, Ashfurlong Road, and into Vicarage Lane at Dore. We find many bridle paths on the moors of Totley Moss, Bole Hill, Brown Edge, Strawberry Lee, and these are quite easily seen and traced even today. Paths also lead to the westerly moors of Burbage, Ramsley and Houndkirk.

Our area shows evidences of long associations with the travellers from the Middle Ages. There arose a series of well-trodden narrow ways, often concealed and were known as "packhorse lanes." An old packhorse road ran from Sheffield via Whirlow through Dore village and on to Totley, just passing Totley Hall, and via Holmesfield into the Cordwell Valley. Another path passed from the moors to Dore and on to Bradway where it forked making one way to Dronfield, and the other up to Norton. This path seems to have disappeared about 1844.

Transport by trains of packhorses lasted well into the Eighteenth Century, and passage from Sheffield to the south of the city through our area had always proved difficult and troublesome. In 1692 we are told that a road passing along the Sheaf Valley and over one of the sandstone escarpments on its way south was, "a very ancient way being worne very deep." The routes from Sheffield to the south crossed our region, they followed the River Sheaf and climbed out of its basin to move towards Mansfield and Derby. The roads in our region in 1769 were described by Arthur Young as, "execrably bad, very stoney, and excessively full of holes." We find no records of roads being maintained and they could hardly be distinguished from farm tracks. The weather, poor repair work and fairly heavy traffic must have made travelling very laborious and slow.

BRADWAY LINE

APPROACHING TOTLEY TUNNEL

In the Eighteenth Century there was a general improvement in the roads with the turnpike methods of financing and providing money for roads, and they proved highly successful. In our area we had the Dore Turnpike Road with a Toll Bar at Stoney Ridge;(Figure 32) 1764 saw the establishment of the Baslow Road, now the A 621 road.

Because of the bad roads in these early days many products left Sheffield by water before the Eighteenth Century. It is difficult to assess how some of the goods from the water mills we shall subsequently deal with left Sheffield, but it seems probable that some may have left by water. If this were the case, they would be taken to Bawtry via Tinsley on pack-horse, and from there by boat down the River Trent to Hull where they were transferred to larger vessels.

At the time of the Common Enclosure at Dore,between 1809-22 the old road from Whirlow Bridge to Totley,previously mentioned, was the only cart road from Sheffield into Dore at this time. This road was greatly improved, and certain turnpike roads also came into service. Many of these roads were used by the lead smelters who came with their lead from Derbyshire to use the local supplies of Dore coal.

In 1870 the Duke of Devonshire made the Dore New Road, and this was a great step forward, for prior to this the only road from Abbeydale to Dore was an old pack-horse lane.

Although there are two main railway lines running through our area they do not affect Dore and Totley to any great extent at present.

In 1870 the Midland Railway Company decided to extend their existing line and establish a new railway line to London. The company followed the valley of the Sheaf, and the work took six years to complete, and cost a considerable amount of money to accomplish. Bradway Tunnel connected Totley with Dronfield, and this tunnel is 2027 yards long. Trains en route to London and the south climb a steady gradient after leaving Sheffield Midland Station, and only when about one third of the way through Bradway Tunnel can the train begin its descent at speed to Chesterfield.

Today this is the busier of the two present lines, and forms a most important link with the midlands, south, north and the west of England. The line is an important link with Bristol, Nottingham, Leicester, Birmingham, Leeds and Bradford.

Between 1884-93 a new line was constructed to compete with the route owned by the North Midland and Manchester Sheffield and Lincoln Companies which conquered the Pennine barrier with the Woodhead Tunnel in 1845. The new line was constructed from Totley along the course of the Oldhay Brook, and necessitated the construction of the Dore and Totley Tunnel. A stone over the entrance to this tunnel bears the date 1893. The tunnel is the second longest in the country, and is over three miles in length. The construction of the tunnel was accomplished only after great expense of labour and material, and evidence of the debris from the tunnel is seen near Hillfoot Road where a great mass of material mars the countryside. Another large pile of material is clearly seen near the Totley Rifle Range at the foot of the moorland. When wandering over Totley Moss, in case one forgets the existence of man's influence, the ventilation shaft serves to remind us of his work below. The Totley entrance to the tunnel is just south of the grounds of Totley Grove. When working in the garden at The Grove Totley, pillars of white smoke are seen emerging from the woods of Akley Bank. Traffic has much declined, and the line is mostly used for goods trains which pant slowly up this incline. With the electrification of the Woodhead route in 1954, one feels this route will continue to decline in importance, unless some similar project is introduced.

There is some goods traffic from Chesterfield which passes through the Bradway Tunnel, and then by means of a loop line and the "Dore" Tunnel" (91 yards) joins the main Midland route from Totley on its way to Manchester or Chinley. This area has long been the railway enthusiast's paradise, and many children are found on the triangular piece of ground off Twentywell Lane.

There are only two first class roads of which one may speak about with regard to traffic. The Hathersage Road, A625 skirts Dore, and the Baslow Road A621 passes through the centre of Totley.

The Hathersage Road is the main road taking traffic into the Derwent Valley. After leaving Fox House, the driver has the choice of two destinations. He may continue along the A625 into Hathersage, or take the A6011 to Nether Padley, Grindleford and then south to Froggat. The Hathersage Road is a busy thoroughfare, and all manner of vehicles from cycles to Earl's Cement lorries use the road. Public transport are amongst the procession of the endless stream of traffic found here especially on a fine summer's day. In winter, however, this road is often closed through the drifting of snow, and the stakes have had little effect in preventing the drifting.

The Baslow Road is not perhaps as busy as the above mentioned road, but nevertheless, it carries a good share of traffic to Bakewell, Matlock and Derby. This road is particularly important to the refractory plant on the edge of the parish boundary, and Pickford Holland lorries are quickly distinguished by their shade of green. The Totley bus service and other corporation routes use this road which is the quickest route into Sheffield.

Other roads in the area serve local housing estates in the main and connot justify any discussion in the same manner as the above mentioned roads. The Dore Road is the main road connecting the parishes of Dore and Totley, but one may also be connected by Cavendish Avenue, Furniss Avenue, and Hillfoot Road and Oldhay Lane. In the future the extension of Devonshire Road will make this road equal with its colleagues in providing a passage from Dore to Totley.

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AVENUE FARM

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Activities of the Area.

Today the main activities engaging man are very much limited within our area. Agriculture is still carried on, and together with the nursery produce would appear to be the most important activity in the area. However, this is not the case today as we shall presently discover, for it is the Mooredge Plant which has now dominated the scene in spite of its comparative small size. There are a few garages which service vehicles in the district, and of course the shops supply the community with the necessities of life, and perhaps one may mention the builders of the area, but here one is halted. There is a general absence of industry, for as we have already seen this is a residential area. The future holds no prospect of any new industry being established within the area, as the "Green Belt" preserves the land.

Today we have seen there is little industry in Dore and Totley, but this has not always been the case. Indeed the former industry of the area was very important, and the writer feels it would preserve the harmony of the piece if the historical picture of the industrial development were here presented as a whole. It is therefore proposed to give an outline of the former importance of the region in this respect to serve as an introduction to the modern activities of the area. Indeed this is imperative if an explanation of the present industry and absence of industry is to be attempted.

Excluding farming for the moment, one of the earliest activities of the area has been in connection with the water of the many streams. We have seen the many fast flowing streams in our area, and these have long been used by man as a source of power. It seems probable that these waters have been used since the Thirteenth Century. Although we are given no early dates of mills in Dore, Totley would appear to have had mills flourishing since about 1280. It was about this year that Sir Ralph de Ecclesall gave his corn mill to the monks at Beauchief Abbey, and eventually the monks established about five mills on the Sheaf, and at least one is known to have existed within our boundary. The Abbeydale Works was functioning as late as World War II; the topic is therefore steeped in history and well worth pursuit.

FIGURE 33 WATER-MILLS

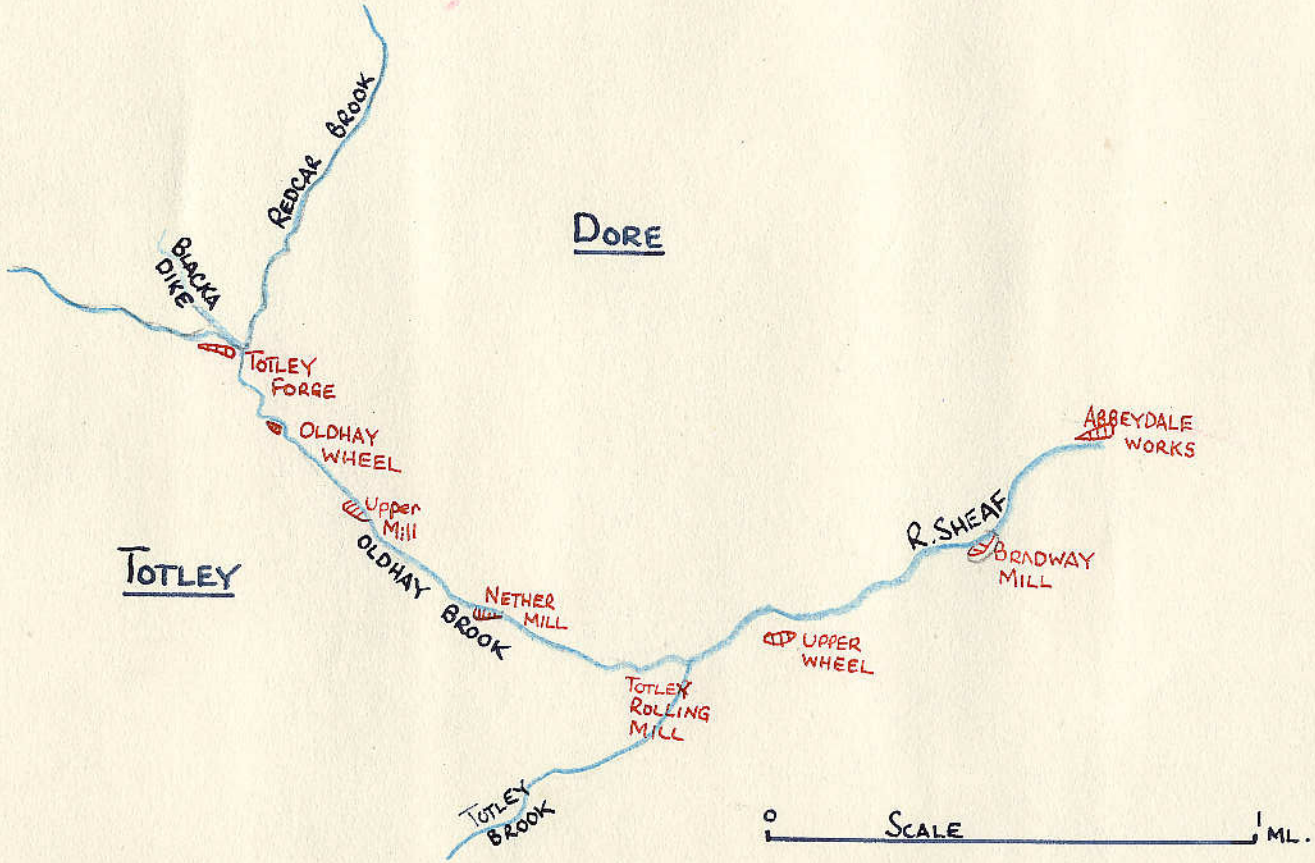

Figure number 33 shows the position of the former water-mills in our region. Totley Forge is situated very near Blacka Moor, and is the mill nearest the source of the River Sheaf. This mill was better known in later years as Tyzack's Forge, and its former position is now marked by Avenue Farm which is still owned by the Tyzack family. The precise position of the mill was at the junction of the Redcar and Oldhay Brooks, and the site is now occupied by the outbuildings of Avenue Farm. (Photo. 47)

The earliest signs of this mill appear on a plan in 1827 which shows a paper mill, but no sign of the Totley Forge. Directories of 1845 and 1852 give George Mountford as owner of Totley Forge, and so we assume it was built between 1830 and 1840. Mountford was a scythe-maker, and he specialised in this product. Today we are afforded an example of the former importance of the industry in the inn named "Cross Scythes" at Totley. (Photo. 48)

In 1879 the forge was advertised for sale. This document tells of a,"forge and tilt with a head and fall of water of 16 feet." The date on the front of Avenue Farm is 1881, and we must conclude that the forge was closed before this date. Only a few years ago, some of the older inhabitants of Dore could remember the noise made by this big tilt hammer. The dam is now covered with grass, but the embankments are clearly visible. One may also clearly see the outline of a former smaller dam above it, which probably acted as a feeder to the main dam. No water flows into this dam today, but one can determine where the stream was diverted to feed this dam. The small reserve dam was most useful in summer when the rainfall was most erratic, and the livelihood of these men was at stake. If one were to follow the stream towards its source, other evidence of the dam would be found in the many weirs along its course. (one is as deep as 10 tiers) Today the stream has returned to its former course and quietly avoids recognising the structure which man once used to enslave it.

There are a few remains marking the position of the Oldhay Wheel. One may reach this site by branching from Hillfoot Road. The mill was used for grinding scythes after the forging process was complete at

the upper mill. A bill of sale in 1879 advertised the mill as having four or six troughs. Miss N. Hancock of Rushley, Dore, left some notes of her grandfather, Mr. J. Hancock, telling us that there were works used for the smelting of lead near this mill, and that the dam provided the power to drive the blower. If we pause for a moment and consider this information, we see that it is to these works the Derbyshire people brought their lead, using the bridle walks we have already mentioned. One also thinks it most likely that these works also used the coal from the bell pits of the district. There is, however, no evidence to support the writer's view.

It is doubted whether the wheel worked after 1895. The pentrough feeding the water wheel was in position in 1934, and the wheel was pulled down in 1909, the dam being filled in with earth. Today one may see this stretch of land which is covered with grass, and even cars are now parked here. (Photo. 49) Now there are only a few stones marking the head of the dam, but the buildings of the grinding works still remain, and about two years ago were converted into a modern residence by one of the Balfour family. Until this happened the building was used as stables, and there were a few pigs left to wander around it; Mr. Bull was its former owner. Immediately below the works one sees a row of cottages which formerly housed some of the workers for both the above mentioned mills. (Photo. 50) Today these houses are still used, and form a picturesque scene in the valley of the stream.

There are no signs of the Upper Mill today, but it must have occupied some of the ground belonging to Totley Grove. Mr. Hancock records that this mill was a corn mill, but no evidence can be found to support his statement.

The Nether Mill has completely vanished today, and only the manager's house of the Totley Rolling Mill can be seen. Nether Mill was used as a grinding wheel in 1827, but the coming of the railway altered the course of the stream, and now nothing of this old mill remains. Totley Brook fed the dam of the Totley Rolling Mill which was known as the Cupola Rolling Mill. This mill appears to have been built for the rolling of lead in 1804. Seventy years later this mill was being used

by William Tyzack Sons and Turner to produce steel. It is thought that production ceased about 1886.

The Sheaf was now diverted, and two dams were formed close to each other, the Upper Wheel and the Bradway Mill. The former has now disappeared, but the latter is intact, but hidden by trees. There seems much evidence to prove that at least one of these mills was built before the time of Queen Elizabeth I . The Jackson collection (1570) gives the following as a copy of a lease of certain lands, and, "that mill with appurtenances.....said to be in a ruinous condition.....situate lying and being within the Hamlet of Bradwey within the parish of Norton Co. Derby, then or formerly in the tenure of John Barker or his assigns, which mill was formerly of the Monastery of Beauchief, Co. Derby..... at a rent of thirty-three shillings and four pence for the mill payable half yearly."

Bradway Mill was, for most of its time, a corn mill, but both mills have been worked as grinding mills in later years, when owned by Mr. Edward Sampson 1801-16. Bradway Mill dam is now marked on an ordnance survey map as a "fish pond" and has had a few pleasure boats on it a few years ago.

Walk Mill was situated close to the present railway station, and the dam was filled up when the railway was made and the course of the river diverted. This mill also was one of the original mills built by the canons at Beauchief, and was used for treating woollen cloth. The monks of Beauchief did not only keep sheep, they turned the fleece into cloth. It is recorded that in 1280 Sir Ralph de Ecclesall gave the monks some land near the Sheaf for the erection of a fulling mill. If it were found necessary they could divert the river so long as he received one third of the profits whilst bearing one third of the expense. The will of John Bright of Raiseing Hall in 1673 contained, "to son, houses with lands belonging called the Walke Mill." This mill is therefore one of the oldest in our area.

It is difficult to say when this mill changed from a fulling mill to a grinding mill, but in 1804 it is called a "sickle wheel." The Fairbanks fieldbooks' record, "Walk Mill in Norton and Dore, belonging

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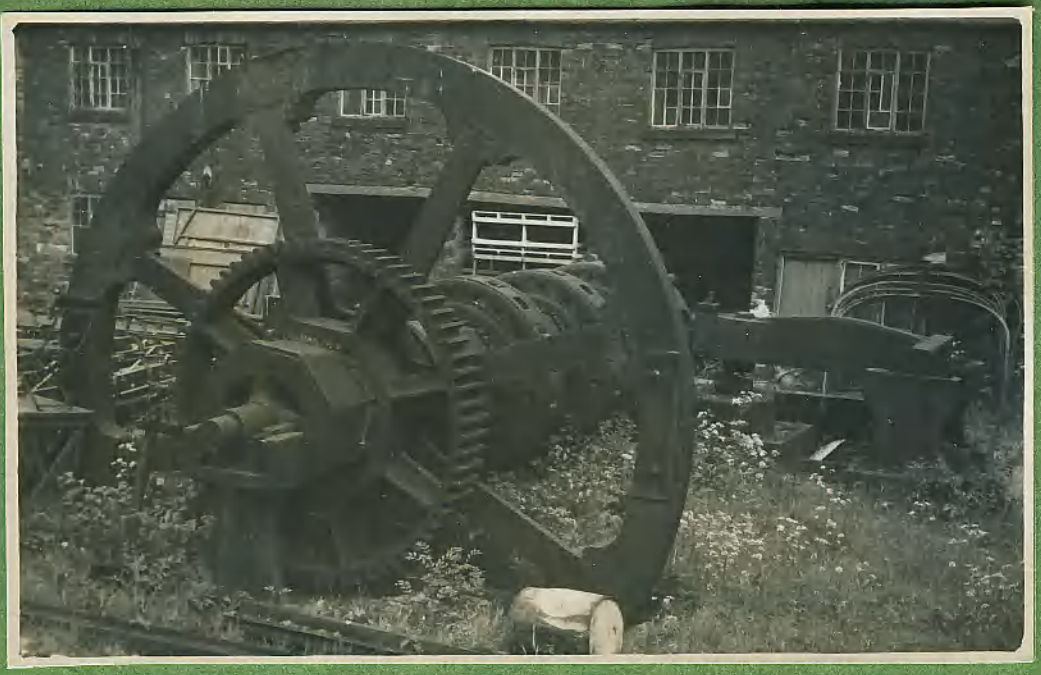

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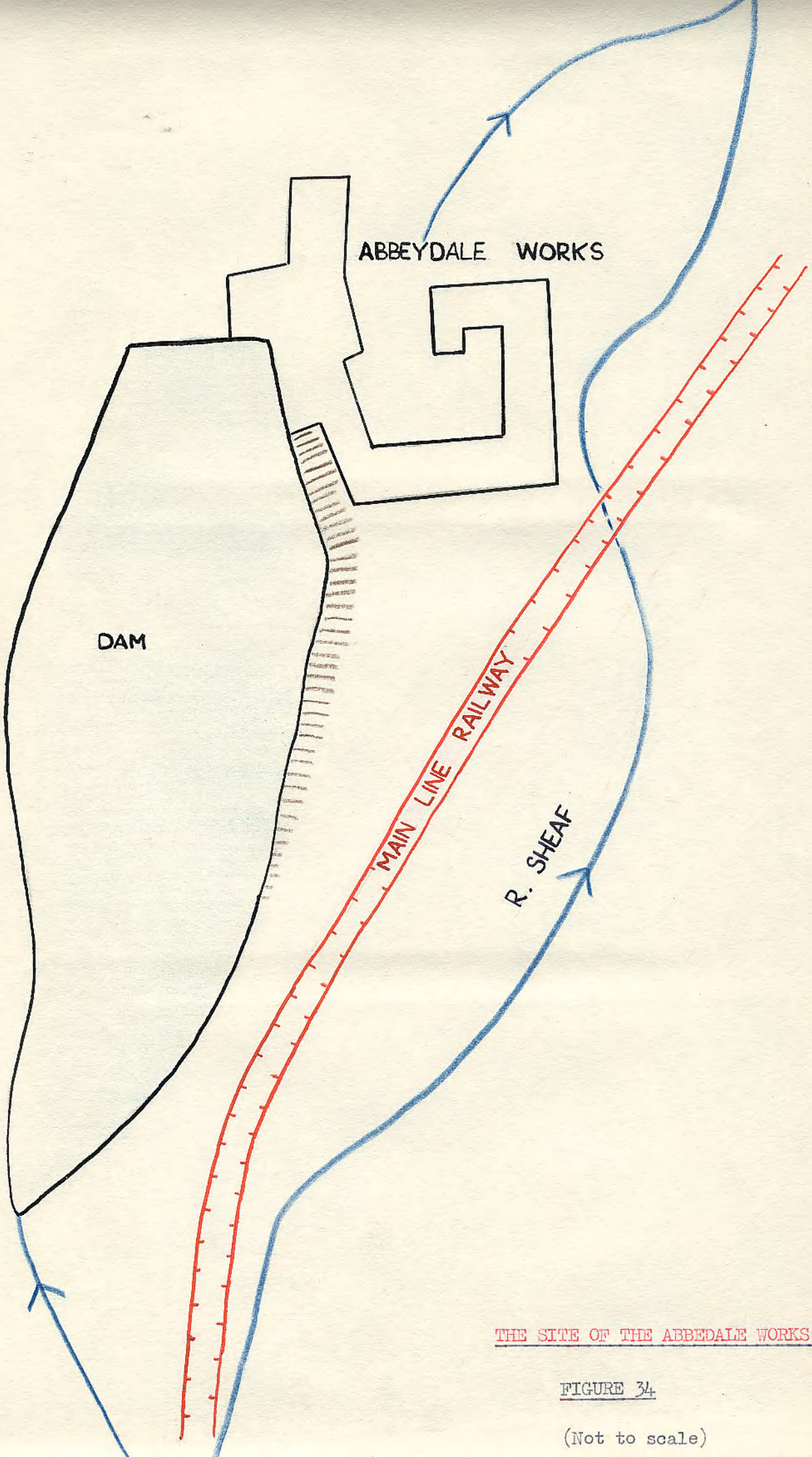


THE SITE OF THE ABBEDALE WORKS

FIGURE 34

(Not to scale)

to Mr. Broadbent on lease for 42 years from 1826 at a rent of £150 per annum."

During this lease period the mill was used as a paper mill by Ibbotson's of Hathersage. They were paper manufacturers at Walk Mill in 1828. It must have reverted to a grinding wheel shortly afterwards for the directories of 1845 and 1849 give Thomas Tyzack and Sons as saw manufacturers of Walk Mill. The mill seems to have been demolished in 1890, ending a period of history which lasted 600 years. Certainly this mill has had an interesting and varied life.

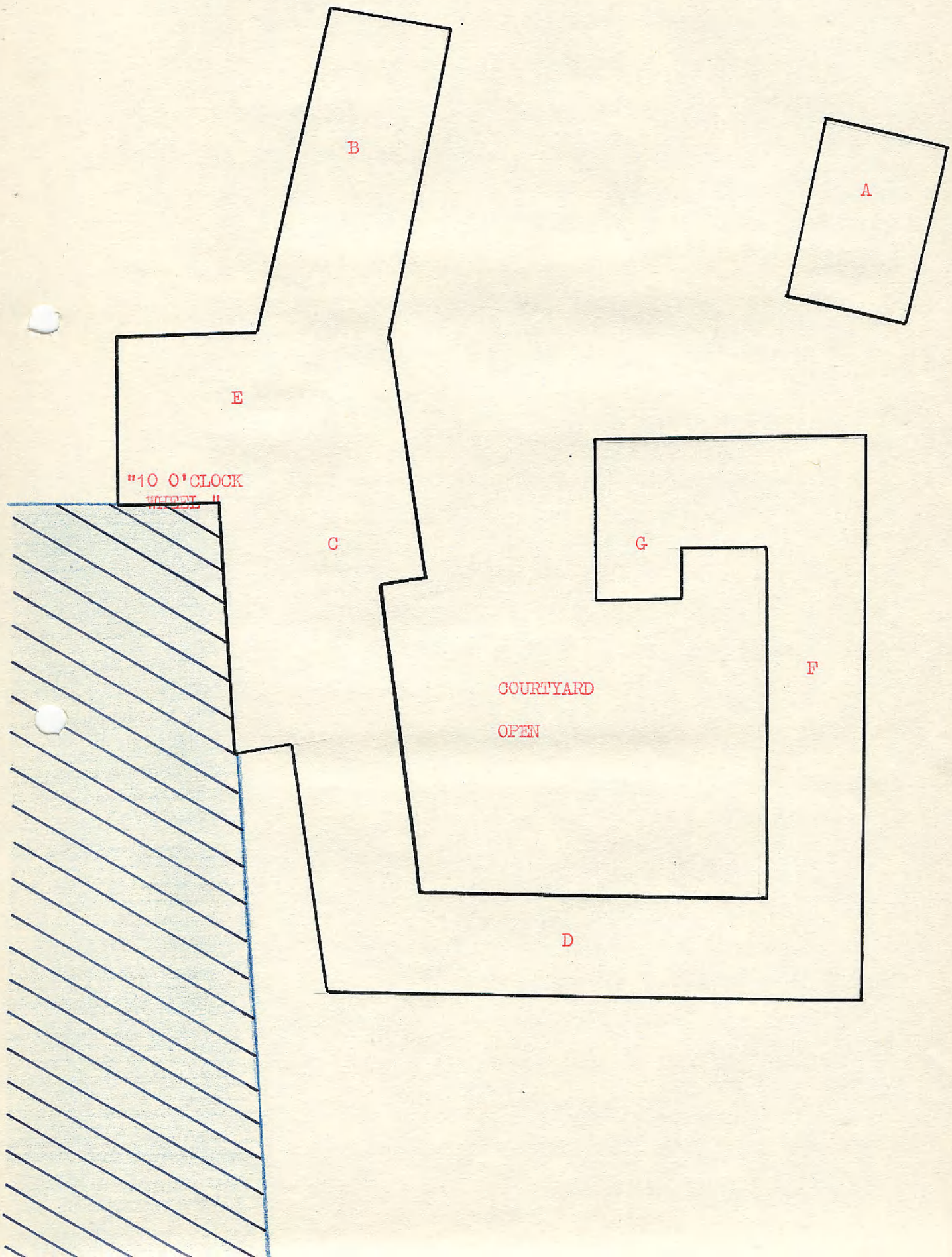
Approaching Sheffield along Abbeydale Road South, we find a small, but exceedingly attractive, garden at the side of the road, Beauchief Gardens. If we linger here we are struck by the picturesque scene of the gardens and the former dam of Abbeydale Works, now deserted except for the bird life. It is the Abbeydale Works that we intend to study in more detail. Figure number 34 shows the site of the works and its dam, whilst photograph number 52 shows the view of the dam from the gardens. (PHOTO. 52)

This mill dates from 1280 when Sir Ralph de Ecclesall gave his corn mill to the monks at Beauchief Abbey. Thus the present works and dam occupy the site of one of the five mills which belonged to the Abbey. As time passed, the water was used for heavier processes such as forging iron, and after Huntsman's invention of crucible steel in 1742, the forging of steel by tilt hammers was its main business.

The earliest plans of the works date from 1780 when it was marked as a "wheel." From the dates on some of the stones of the buildings it would appear that the tilt was added in 1785, and the grinding wheel built in 1817. Michael or Martin Goddard, a scythe-maker, probably erected the tilt hammer. Vickers and Carr owned the works in 1914, and were followed by Dyson and Bishop 1825, Thomas and John Dyson 1828, John Dyson 1833 and Dyson and Biggin and Company in 1841. During the disturbances of 1842 we see that, "Mr. Dyson's wheel at Abbeydale was blown up by gunpowder." From 1841-1852 the name of Moore is associated with the wheel, and in the latter year the firm William Tyzack and Sons

FIGURE 35

PLAN OF THE ABBEYDALE WORKS



began their long connection with the works, holding a lease from Earl Fitzwilliam. Today the works form part of the Sheffield Corporation Parks Department's store yard.

The Abbeydale Works are of especial interest as it was one of the most self-contained mills in the Sheffield area. The writer has been fortunate enough to be given permission to visit the works, and the notes which follow have been constructed from the visit and information given about the former workings.

Photograph 51 shows the dam as seen from the works, and today visitors arriving by train must receive some of the beauty of our city before passing through the industrial area to the north-east. Photograph 53 shows the view of the works as one approaches down the the drive, and figure 35 shows a plan of the works. At the entrance to the works one passes the ancient gatehouse which formerly contained a weighing machine. To the left one notices two old buildings which formerly housed some of the workers at the mill, but now they are empty. (A) Other cottages the workmen used to live in are on the right-hand side of the works and are now used for storing material used in the parks. (B) (Photo. 55)

Figure 35 shows the works are built round an open courtyard and dominating the scene is a two tail-helve and front helve hammer from William Jessop and Sons, and shows the type of machinery used in the second decade of the Nineteenth Century. (Photo. 54.56)

The principal work was scythe forging, and the tilt hammers used in the shop (C) dated from 1785. A tilt hammer is simply an ordinary hammer enlarged and mechanised. The tilt had two hammers and was driven by a large water wheel. The speed of the hammer was about 80 blows a minute, but this could be regulated by allowing more or less water through the dam's sluice gate. One shop (C) had six Huntsman crucible steel melting coke-fired furnaces for the casting of ingots, and the wooden floor where the local ganister clay was trodden underfoot (by bare feet) until it was the right consistency for crucible making, is in evidence. The shop was used as recently as World War II

There were various small workshops concerned with the finishing of scythes, hay knives and the like, and these were mainly at the far end of the works. (D)

Next to the forge was the grinding shop (E) which dates from 1817. It had four "trows" or troughs originally for grindstones, and was driven by the "Ten o'clock Water Wheel" - 18 feet diameter and 5 feet 8 inches wide. The water power was not always sufficient, especially in summer, and so a steam engine was brought to the works and this helped matters considerably. The boiler has been scrapped and the chimney stack felled as it was judged to be dangerous. There was another smaller wheel which was used for the drilling machines and these cut holes in the bodies and backs of the scythe blades.

On the side of the yard opposite the forging shop was the warehouse where all the finished articles were stored.(F) The upper part of this block was used as offices, and the counting house (G) still has the "door-jamb" carefully marked out for the measuring of scythes, knives, and rods up to 60 inches. Today the upper parts of these buildings house scenery which is used for the flower and similar displays the department sometimes institute in our parks. In the court - yard in addition to the numerous park seats, one sees a number of grindstones scattered about, these were apparently discarded when they had worn to about 14 inches diameter.

All the firms we have mentioned in connection with the works were scythe-makers, and so the works specialised in this for 130-140 years.

The works are now included in the estate constituting Abbeydale Park, and were bought and presented to the Sheffield Corporation by the J. G. Graves' Trust. The original intention was that the works should form the basis of an industrial museum and to include the "Benjamin Huntsman Memorial." It was hoped to preserve the works as a typical home of the cutlery craftsmen of former days, and keep some of the old Sheffield tools and equipment, scythes, hand forges, tilts, tools and machinery preserved in this museum.

The plan has never been realised, and today it is used

by the Sheffield Parks Department, and their presence is felt everywhere. It seems a pity no further action has been taken along the above mentioned lines, but perhaps the future will see the scheme rejuvenated.

Mining

The area surrounding our region of study has long been associated with the mining of coal and other minerals. Coal workings have been recorded since the time of the Roman and Saxon times,and the nearest evidence of this to our region is at Wincobank Hill, where bell pits have been discovered on the Roman rig.

Other evidence of coal mining nearer our own region is afforded once more in connection with the monks of Beauchief Abbey. Late in the Thirteenth Century King Edward II confirmed the grant made to the monks of Beauchief Abbey by Sir Thomas Chadworth to give them a license to mine sea coals in Norton and Afreton. During this period, however, there was little use for the coal, and no cheap means of transportation were available, so we presume the local smithy, lime-burners and domestic fuels were its sole uses. In these days the coal was simply extracted from a hole, and no thought was given to underground working.

No further interest was taken in coal until the Seventeenth Century witnessed an increase in the industry. The presence of explosive gas (fire damp) began to attract attention. Dr. Plot in his "Natural History of the County of Stafford," makes references to underground workings, gases, and a few explosions as near to our area as Chesterfield. Mr. Jessop of Broomhall also mentions accounts of gases found underground in our local area. The Duke of Norfolk also took an interest in the mining of coal from about 1770-1800, and in his employ was an engineer, John Curr, who made many important advances in the mining of coal which later affected our area.

In 1869 Hunter says, "the parish of Sheffield is rich in its mineral productions, and especially in three mineral bodies most

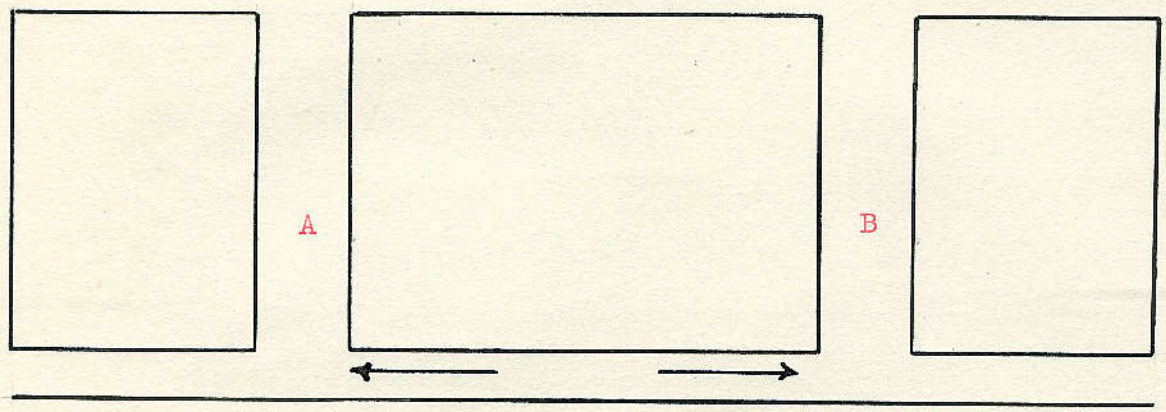


FIGURE 36

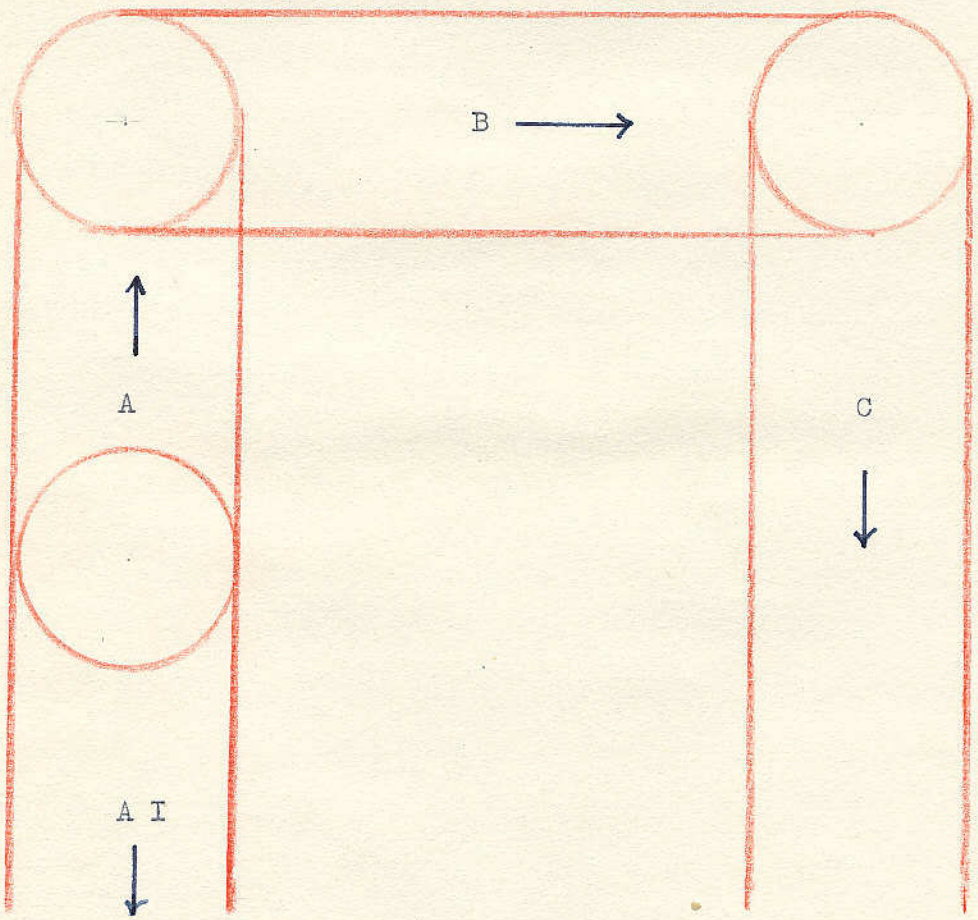


FIGURE 37

important to man - iron, coal and stone. " Hunter also makes reference to Leland's writings in the time of Henry VIII, "Hallamshire hath plenti of woodde, yet ther is bunid much se-cole."

From the above historical records one feels that in spite of the absence of written evidence our local area played its part in these early days of mining. Although we can find nothing to substantiate the views, one feels that in our own region there may have been some workings of iron ore which lies on top of the coal. We are, however, given evidence to support our statement that early coal workings were carried out in the area. It seems highly probable that as this is the case, the iron ore seam would also be mined, thus accounting for its absence in later years when mining was continued.

We have just spoken about the early mining of coal, and the writer wishes to say that the following work has been pieced together from conversations and questions with the older inhabitants of Dore. The one obscure fact about the research is the date of these events. Nobody could accurately define the period other than the Nineteenth Century. We are told that until 1805 much of the land in this area was owned by the Duke of Norfolk who in that year allowed private companies to lease the land. In the light of this, the writer thinks that it is probable the methods we are about to unfold belong to the late Eighteenth and early Nineteenth Centuries.

The early mines of our area were very similar to the Bell pits we read about. Diagram 36 gives a clear picture of how the pits functioned. A shaft would first be sunk to a depth of twenty or thirty feet to reach a seam of coal. (A) The seam would then be opened out in the direction of the arrows. All the work was done by hand, and the men had to drag the coal to the shaft on their stomachs with a chain round their necks pulling the coal on a sledge. When the distance from the shaft became too great, another shaft, (B) would be sunk to continue the work. The men were lowered down the shaft in a tub in which they loaded the coal to bring it to the surface. The diameter of the shaft was about twenty to twenty-two feet, and these were later filled in as the mines became obsolete. The tubs or buckets had to be

wound by a hand winch as no machinery was used in the pit. The miners would cut down trees for pit props to support the roof. When later miners worked here, they often came across the old seams and the old timber used in these former mines could still be seen in places. Figure 37 shows how the mines were worked. The miners would work on "one straight face," that is to say in one direction,roughly the width of the shaft. The miners would firstly work seam A, then continue with AI, B, C, and so forth, sinking the shafts as they went along. Only coal was mined, and was used for lead smelting. In the days before there were any works in Dore and Totley the coal would be taken to Eyam for the lead smelting process. The amount of coal produced and when production ceased is not known, but they did play an important part in the economic development of the region. Today there are few signs of these old workings, but it requires the skilled workman to detect some of the bell pit summits, as nature once more claims them as her own, and covers them with vegetation.

At the beginning of the present century man once more discovered that our area contained some minerals which he could use. Today we see evidences of several old worked-out quarries, which were formerly very important.

North of Dore Moor, in the "Barberfields Allotment," there is an area of 5a. 2r. 10p. named "Coal Pit Field." An old copperas mine was also in this area, and today it is remembered by "Copperas House." In the 1930's this mine was worked for "slack" coal, but it has never been used since. If one is fortunate enough to be watching a cricket match in Abbeydale Park,whilst a new batsman strolls to the wicket a searching glance towards the railway by the Chesterfield loop-line shows the face of an old quarry. Behind the hill we see in front of us, there is a larger quarry and disused brickworks. This may be seen just before one enters the Bradway Tunnel.

At the beginning to this century, however, certain mines were very important in the area, and it is to these mines our attention is now drawn. Once again this material is derived from the people who have actually worked in the mines, to them to our thanks for their

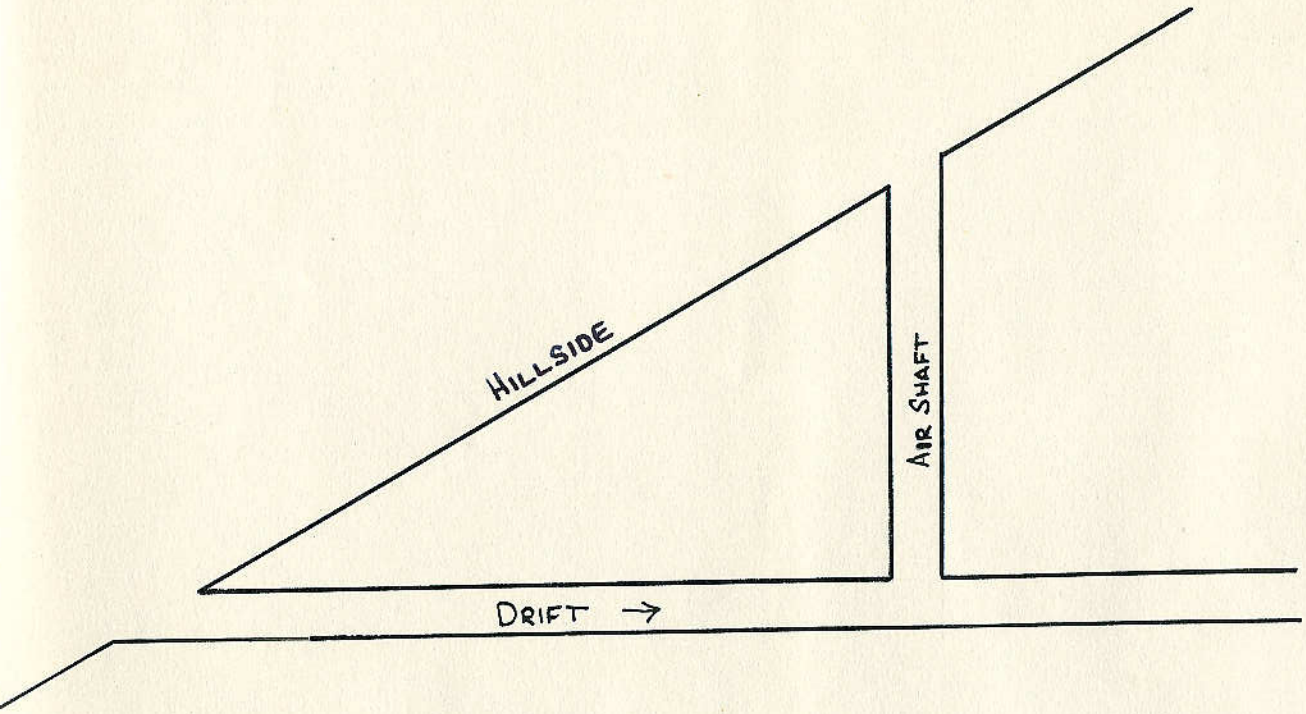


FIGURE 39

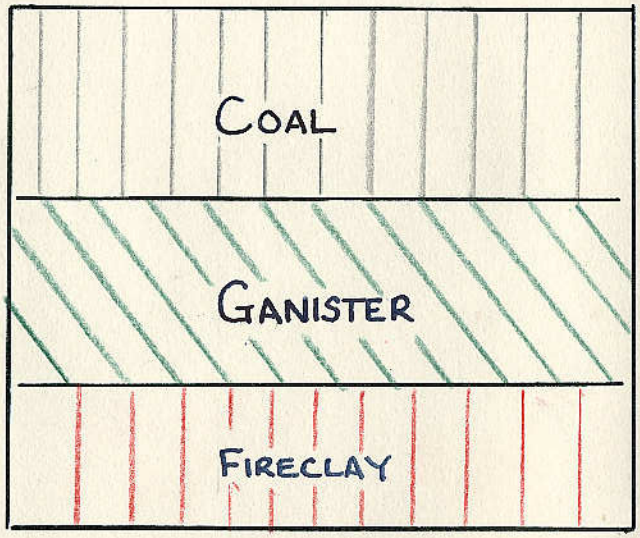


FIGURE 38

patience and interest shown and created in the writer.

Five mines were worked in the district; Strawberry Lee, Short Lane, Moss Mine,Webster's Quarry and the Wagg Wood Mine. There is little or no information which anybody could supply about Webster's Quarry or the Wagg Wood Mine, other than that the former was used to produce coal and ganister and owned by a Mr. Swift, and the latter was a drift mine in the bank above the Redcar Brook and produced coal and ganister. There is, however, much one can write about the three remaining mines. The work is based on questions answered by the former deputy of one of these three mines, to whom the writer is most grateful for his encouragement and help.

Strawberry Lee Minewas opened about 1914-16, and was owned by Pickford Holland and Company. Coal, ganister and fire clay were mined here. Coal and ganister were mined in all three mines, and so one feels it would be fitting to say a little about each mineral at the outset. The coal was of poor quality, and would only burn with a forced draught. There were two different qualities of ganister, one brown, and the other a grey-blue colour. The former contained 60-80 % of silica, whilst the latter had 90-95% silica content.Although there was some brown ganister in all three mines, the predominant type was the grey-blue mineral in Dore and Totley. The fireclay was grey in colour, and when in a wet part of the mine it very much resembled putty, but in the drier parts it was a semi-hard mineral. The fireclay mined at Strawberry Lee was under the ganister. Figure 38 shows how the rocks were arranged in seams. The coal seam was 2-3 feet thick, the ganister was a similar thickness, but in some places was up to 4 feet thick,this was very rare however. The above information also applies to the Short Lane and Moss Mines. The fireclay at Strawberry Lee reached a depth of about 2 feet, and was taken to the silica works which, as we shall subsequently discover, were owned by the same firm. Coal and ganister also found its way to the Mooredge Works. The coal was used solely at the brick works to fire the kilns. Neither coal nor ganister were taken to any other part of the city or country in these days. This was truly a local industry.

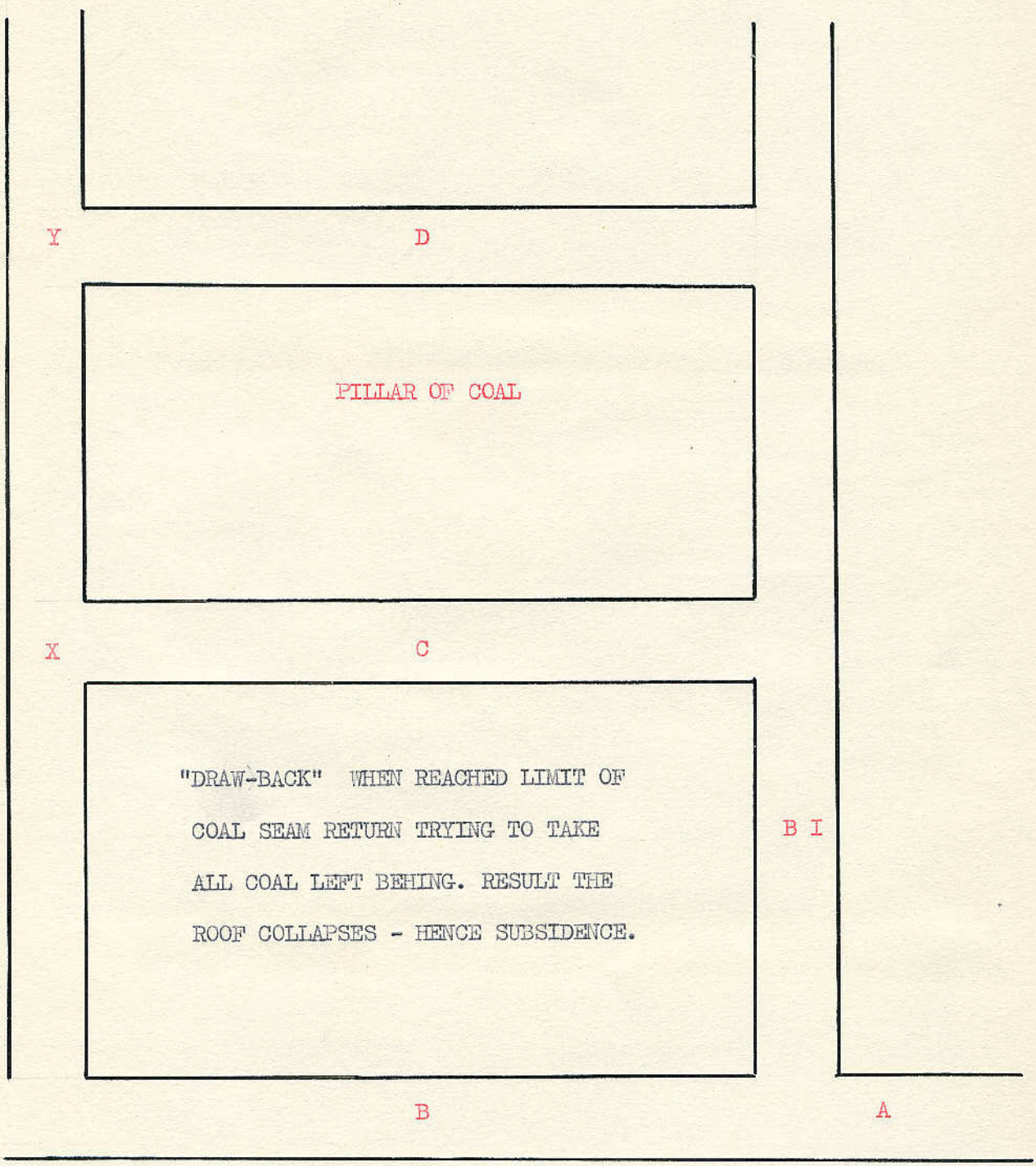

Y
D
PILLAR OF COAL
X
C
"DRAW-BACK" WHEN REACHED LIMIT OF
COAL SEAM RETURN TRYING TO TAKE
ALL COAL LEFT BEHIND. RESULT THE
ROOF COLLAPSES - HENCE SUBSIDENCE.
B I
B
A

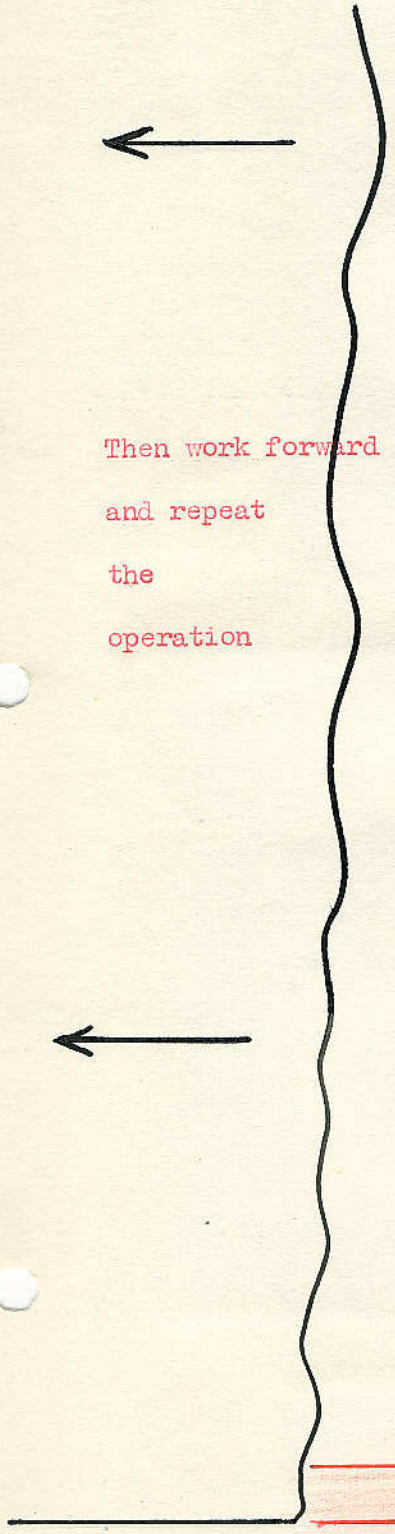
FIGURE 40

Strawberry Lee Mine employed 20-30 men who came from the local area. About 150 tons of coal were produced every week, and the output of ganister for the same period was about 450 tons. All the work was done by hand, and it was only in the latter years of the mine's history that an electrical pump was installed to remove the water. In all three mines the greatest drawback was the water. Where the pump did not follow the working of the seams, men found themselves working in about seven inches of water, all day. Measures were taken, however, to reduce this, and the main face of working would have channels cut to drain the water. A free passage of air was essential, and it circulated along the new faces and made its exit by means of air shafts. None of the mines contained explosive gases, and the men worked by means of a naked light. The only form of machinery employed in this mine in the early days was the use of rails and tubs to bring the coal to the surface. At this mine two ponies were used to pull the tubs. They belonged to the firm and were stabled at the hillside farm which was near the mine.

It seems that an explanation of the mines and their workings would be appropriately inserted here, for all were of the same type.

Unlike the former mines of the area, the present mines under survey were all drift mines. Figure number 39 shows how the mines were sunk into the hillsides. Two main methods were used to extract the coal, and these are felt to be important for they resulted in the subsidence of the land, and thus modified the features of the landscape, but to no great extent.

Figure number 40 shows how the men would "drift" along the face of the coal seam. (A) Then some would branch off to the right BI, whilst others would continue to cut the main haulage road (B) which was known as "the drift." BI would be extended, and subsequent seams cut from it (C, D.) until a final seam (X-Y) brought them to the limit of the coal. It will be noticed that coal has been left behind in what were termed "pillars," and when the limit of the coal face is reached



Then work forward and repeat the operation

ALL THE COAL IS TAKEN OUT IN ONE CONTINUOUS OPERATION, THEN THE SPACE IS FILLED IN WITH STONES, RUBBLE AND WASTE TO FORM A ROOF.

KNOWN AS THE "GOB" AND THIS IS SEALED OFF WITH A WALL AFTER TAKING THE TIMBER OUT FIRST.

WALL TO SEAL OFF THE RUBBLE.

"DRIFT"- THE MAIN HAULAGE ROAD

FIGURE 41

60

61

62

57

58

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the next object is to extract the coal remaining here. Now the men operated the "drawback" system. As they withdraw from the mine (towards A) the roof begins to collapse, and this dangerous procedure caused subsidence and these effects may be seen today.

Figure 41 shows the second method of extracting the coal, and the diagram explains itself. Of the two methods this caused the least amount of subsidence, and therfore has had little or no effect on the landscape. This method was used in the Short Lane Mine, and one sees that the farmland above the mine bears no signs of subsidence as does the land above both Strawberry Lee and Moss Mines where the former method was used.

Strawberry Lee Mine closed about the year 1920, but in 1938 the mine was reopened and worked all through the Second World War, finally closing in 1947 when the seams ran out. It was during this second period of life that the electric pump was used. It is thought that this mine will serve no future generation, but on visiting the area today one sees that already children have uncovered one of the former entrances. (Photo. 60) The region is now covered with heather and bracken and it is hard to distinguish some features. Photograph 61 may be the result of slight land subsidence, or a former entrance to the mine. Photograph 62 ~~59~~ clearly shows the former entrance to the mine, but it will be seen that nature quickly claims here former territories, for this mine entrance appears to have been one used as recently as 1947. The old gate and walls enclosing the lands of the Pickford Holland mine are still standing, and everywhere there are mounds of coal shales and dust, providing conclusive evidence of the former industry. The area shows signes of where the ground has been formerly exposed,and one wonders whether these features are the early attempts to find coal, or simply the result of land subsidence.

Short Lane Mine was opened about 1912, and was not owned by Pickford Holland, but by J. J. Dysons. This mine produced coal and ganister which were sold to Pickford Holland, and used locally in the Totley Works. The mine closed about 1920 but was reopened in 1942 and continued to be worked until it finally ceased production in 1947.

The mine employed about 30 local men, and production of minerals per week was about the same as the Strawberry Lee Mine. This mine finally closed for the same reason we have already mentioned- the seams ran out. Unlike Strawberry Lee Mine the mine was run entirely by man power and the tubs of coal were brought to the surface by a system of pulleys and a hand operated winch.

It is possible to wander over the site of this former mine today, and much evidence of former workings can be seen. There are old huts containing machinery- winches, pulleys, wheels, wire rope, rusty lines and rails, and everywhere coal shales and slack. The former trucks of the mine are seen scattered about the mine, and one has now reached the bottom of the escarpment on the banks of the Blacka Dike. The strata and thickness of the coal seams is visible on the exposed series of rocks, (Photo. 57-9) and the former mine entrance is easily discerned. On the edge of the mine there is a hut with an old winch and the remains of a shoot by which the lorries were loaded. (Photo. 63) The present owner is said to be Mr. Hatton, a builder of Norton, and the mine has been used for building stone since the end of the Second World War. Evidence of the builder's use of the mine is seen as one peers into one of the sheds where the outline of what is thought to be a pulveriser is just visible. The mine suddenly came into the lime light in November 1947 when explosives were known to be in the mine and a danger to the public. The explosives were the remains of the paratroopers who trained on the site in World War II.

Moss Mine opened about the time of the 1914-18 War, and was owned by Pickford Holland. The mine produced coal and ganister, and all the 150 tons of coal and 450 tons of ganister per week went to the Totley Works. About 30 men were employed at this mine. Unlike the mine we have just described, this mine had a steam winch to pull the waggons to the surface. The mine closed about 1938 when the seams ran out.

This mine show evidences of former working in a similar manner to the Strawberry Lee Mine. There are no marked exposures of rock as at Short Lance, but shales of coal and slack everywhere cover the site of the mine. The entrance to the mine is on the hillside

above the stream which eventually enters the Lim Brook, but it has long since been filled in with rubble. On the site of this mine one comes across another opening in the ground. This was apparently a former vault for gelignite stored throughout the Second World War, and one cannot mistake this for the entrance to the mine. (PHOTO. 64)

The men who were employed in these mines were 90-95% local inhabitants. The coal seam mined was known as the Halifax Seam. This term is the Yorkshire equivalent of the Derbyshire Alton Coal we have already mentioned. Surveyors visited all the mines every three months to give the companies an accurate knowledge of their exact position below in relation to the surface. Ganister was the chief aim of the mines but to obtain this the coal had first to be removed, and so the coal was used as an economy for the fuel at the brick works.

We therefore see that although one would never suspect it from a general journey over our area, it has in fact been a thriving mining area in the past. These mines were responsible for the establishment of the local silica works, and we shall subsequently see how important a factor it has been in retaining the industry in our area. It is to this industry our piece now moves. Before a start is made on this the writer wishes to indicate that the information used in the next topic was obtained from the answers to a series of questions when speaking to the people engaged in the plant, and whilst visiting the works. The writer wishes to thank the managing director of Pickford Holland for his kind permission in allowing the works to be visited and for photographs to be taken.

Industry Proper.

The present industry proper of the area was conceived at the end of the last century, 1899. In that year two gentlemen started to manufacture firebricks at two different places, but they were united as one company. Mr. Pickford established the works at Crook, Durham, and Mr. Holland started the present works at Totley. The latter is the sole survivor of the partnership, and is retired living in Jersey.

It is felt that the early history of the establishment of the industry is important for it is one of the factors which must be considered when considering this industry as an example of one continuing by geographical inertia.

The works were established on the site of one of the former quarries of the district, and a mine was opened producing coal, ganister and clay. The coal was used for the boiler which produced steam for the engines and the drying processes of the bricks. The ganister and clay were used to make fire bricks and "grissel" bricks, another type of fire brick. These bricks were used in and around the Sheffield district for the local steel manufacturers. The mine was of the drift type mentioned above, and its equipment included small boilers and winch which brought the waggons out of the mine. Production at the mine ceased in 1912 because the quality of the ganister was not a high enough standard.

From our study of the coal and ganister mines of the district we are able to link the closing of this mine at the works, with the subsequent opening of other mines in the district, two of which were owned by Pickford Holland. Here then, was the first step taken to retain the industry on its established site at Totley, and because it was the first perhaps it was the most important. It meant that in spite of the lack of suitable materials on the site, the industry was determined to continue by the opening of new mines in the district.

With the closing of the mine, the entrance was blocked and now no trace of it can be found, except for an old air shaft on the moors which menacingly threaten the works. The former equipment of

the brick works has disappeared over the years, and there is no evidence of the wet grinding pans, and the dust pans today. In their place we now see material being stored in the yard. The labour supply was drawn from the locality, but only a few people were involved. Three dams were constructed and remain as evidence of the first works. They are shown on an ordnance survey map and were constructed to the north-east of the site. The waters of two dams flowed into the third dam at the works. The water was the natural drainage from the moors, and once more we see that man has used nature to supply his needs.

The works developed with the development of the Sheffield Steel industries, and it was a basic silica brick works using the local coal and ganister from the mines we have mentioned above. We have seen that eventually these local mines were drained of their mineral wealth, and thus we see that once again the works were faced with the question of whether to continue production.

This challenge was met by the supply of ganister from Wessington, Scarborough, Macclesfield, Derbyshire, Wales and the Parkwood Springs Mine, Deepcar. This last source of ganister is from a mine owned by Pickford Holland, and is still in use today, and is thought to be the only ganister mine "alive" in South Yorkshire. The supply of coal presented no difficulty, and the new supply was from Stephen's, a local coal merchant. One feels this to be the second factor to be considered when proving the industry to be an example of industrial survival by geographical inertia. Thus the industry continued and consolidated its position at Totley.

Production of silica bricks for acid furnaces ceased in 1952, when a new process was introduced. The whole project has taken about ten years to be put into practice, but today it is firmly established.

The works are now a basic high alumina plant, that is to say it produces basic high alumina refractories. The writer who finds himself more familiar with the arts than the sciences, thoroughly enjoyed the visit round the works, and was so interested that an

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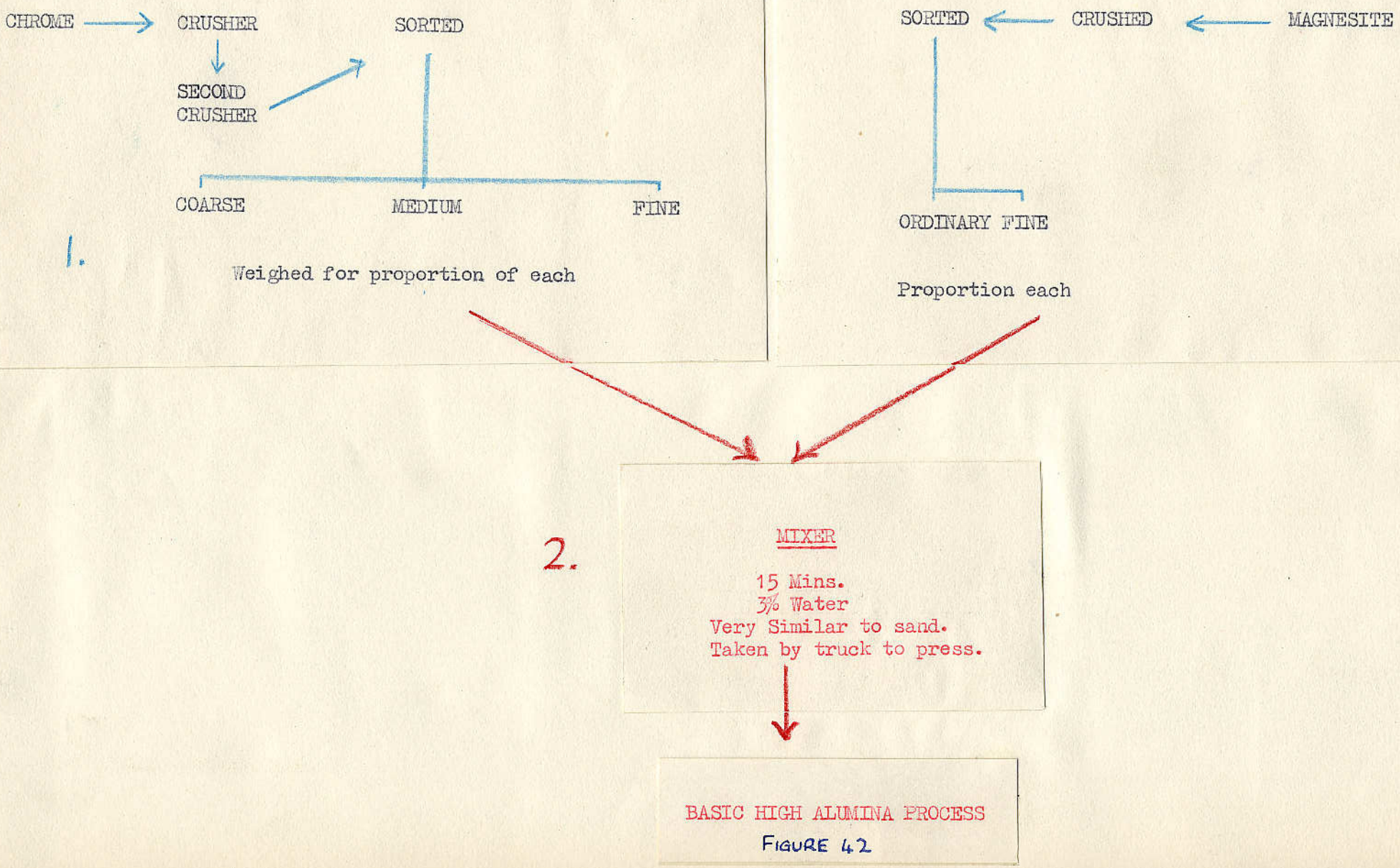
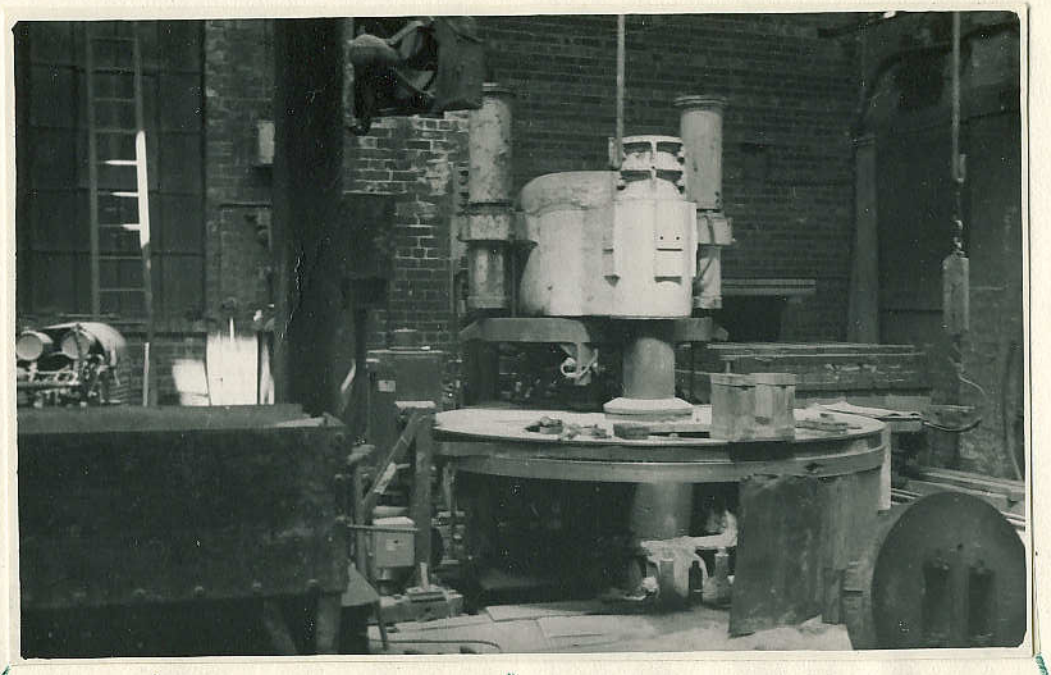

CHROME
CRUSHER
SECOND CRUSHER
SORTED
COARSE
MEDIUM
FINE
1.
Weighed for proportion of each
SORTED
CRUSHED
MAGNESITE
ORDINARY FINE
Proportion each
2.
MIXER
15 Mins.
3% Water
Very Similar to sand.
Taken by truck to press.
BASIC HIGH ALUMINA PROCESS

FIGURE 42

3.



OLD METHOD

HAMMERS
SIMPLY AN OLDER PROCESS ABOUT 700 BRICKS/HAMMER /DAY. DIFFERENT SIZES & MATERIALS-DIFFERENT PLACES

NEW MACHINERY REPLACING OLD. THIS PRESS CAN TURN OUT 500 BRICKS AN HOUR

OLD METHOD

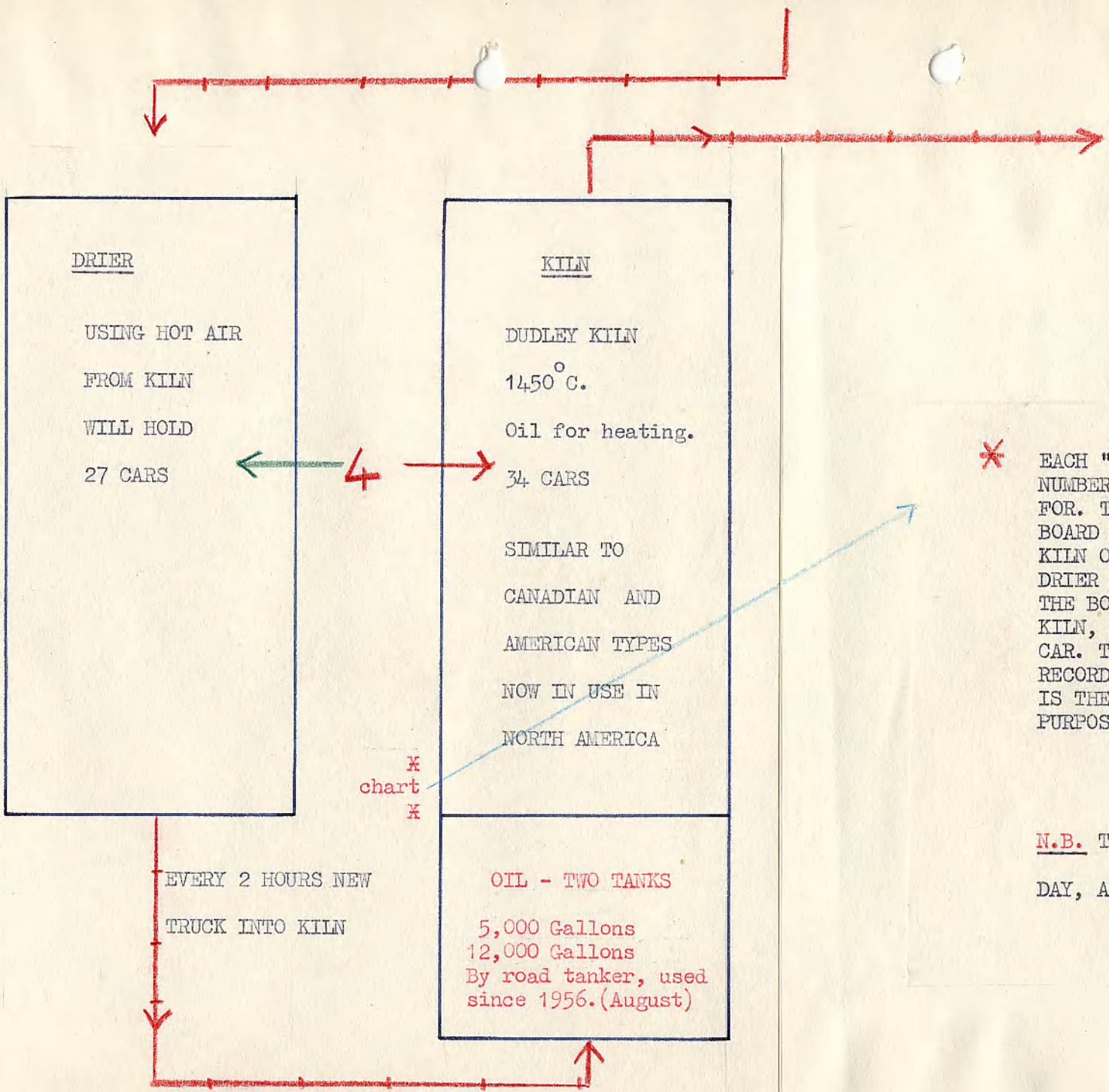
HAND PRESS
ALL WORK DONE BY HAND. SKILLED & ACCURATE BUT SLOW METHOD.

5.

BRICKS ARE LEFT TO COOL OVERNIGHT
READY TO BE MOVED FROM CARS NEXT
MORNING
BRICKS THEN STACKED & STRAPPED
TOGETHER TO PREVENT LOSS OF ODD
ONE FALLING TO GROUND.

CONSIGNMENTS FOR LOCAL FIRMS
DIRECTLY LOADED ON LORRIES
OTHERS AWAITING SHIPMENT ARE
STACKED SEPARATELY.

6.



* EACH "CAR" HAS A CARD WITH A RECORD OF THE NUMBER OF BRICKS, TYPE AND WHO THEY ARE FOR. THE CARDS ARE ATTACHED TO AN INDEX BOARD WHICH SHOWS THEIR POSITION IN THE KILN OR DRIER. AS THE CAR MOVES FROM THE DRIER TO THE KILN, SO THE CARD MOVES ON THE BOARD. WHEN THE CAR EMERGES FROM THE KILN, THE CARD IS ACTUALLY PLACED ON THE CAR. THE BRICKS ARE CHECKED FOR FAULTS, A RECORD OF WASTES IS MADE ON THE CARD WHICH IS THEN TAKEN TO THE OFFICE FOR CLERICAL PURPOSES.

N.B. THIS IS A CONTINUOUS PROCESS, ALL DAY, ALL NIGHT, ALL YEAR.

an attempt was made to present the main steps of the process in diagramatic form. (Figure 42)

The old kilns (Photo. 65) have been standing for well over fifty years, but are only used if the plant has an excess of orders today. In the meantime, they are used to store bricks. Whilst touring the works one sees the firm has its own dining rooms, motor coach, and what one might term "ancillary services," such as carpenters, metallurgical departments, and most important, a chemical laboratory where chemists experiment and carry out tests on the site. The works employ 122 people:-

Labour	96
Clerical	10
Technicians	9
staff	7

Most of the employees were from the local area originally, but now the works draw from the wider area of Sheffield and Chesterfield.

A general view of the plant shows that much of the space is used for storing materials. (Photo. 66.67.) A great variety of materials is used, and as none of the products are of local origin it is our purpose to discover from what part of the world they are transported.

Chrome and magnesite are the two minerals in greatest use at the plant. Chrome comes from Rhodesia, Greece, Turkey, Sierra Leone, and some from the Philipinnes and Albania. Magnesite is obtained from the West Hartlepool sea-water magnesia plant, but prior to 1939 every ounce had to be imported from Austria, Manchuria, India and Czechoslovakia. Two other minerals are used in the process, sillimanite from India, and andalusite from South Africa.

The ports through which these minerals pass depend on their source, but the majority are imported via Liverpool, although the Manchester Ship Canal is used at times, and sometimes they arrive at Hull. The minerals are then transported by rail to Sheffield, and arrive at Totley by the firm's own transport.

The works at Totley produce a variety of bricks, chrome-magnesite, magnesite-chrome, magnesite, chrome, high alumina, and these are registered under the trade names of Alosiono and Silo

Bricks. Totley produces about 15,600 tons of products a year and approximately 10% of this is exported.

It is hard to believe that this small plant exports its produce to every European country and to many other places in the world. The main countries exported to, outside the Continent, include, India, Pakistan, New Zealand, and Australia, with slightly smaller quantities to Canada, the Malaya States, and South America.

Within the British Isles, the works supply England, Ireland, Scotland and Wales. Consignments for South Wales and London usually arrive by rail, but cities and town closer to Totley receive their goods by the firm's own road transport. Hence Birmingham, Manchester, Scunthorpe, Corby and Wolverhampton, to name but a few places, all witness Pickford Holland lorries throughout the year. As with the"importation" so with the distribution of the produce; the main Baslow Road ensures a means of quick transportation from the station to the works. The advantage is realised if one considers how difficult it would be for lorries to wend their way from the Short Lane Mine to the nearest main road. Here we have direct access to a first class road.

The demand for the produce is greatest in the steel industries, and a close study of that industry is the best guide to the future demands on the Totley works. At the moment, and for a good many years there has been an increasing need for the bricks as the production of steel has increased, for with the greater effort of the steel works, more bricks are used in a short space of time. In addition to the steel industry Totley also supplies the glass, chemical and non-ferrous industries with products.

The new process shows that the plant is comparable to the present methods in the United States of America and Canada. It also shows us the most recent steps taken to ensure the industry remains at its original site. We are shown that the older methods of pressing are being replaced by modern hydraulic machinery, and so we see that the works are being made more efficient even in the more elementary stages of the process. With such an excellent start to the modernisation of the plant, the present works will seek to consolidate its position

and concentrate on some increase in production, but with an emphasis on specialisation and quality.

Geographical inertia is responsible for the survival of this industry at its present site. As the original fuel on the site was exhausted, other fuel was provided from local mines, and when this supply was finished, supplies from further afield were used, until finally a new system of fuel was used to bring the plant in line with modern thought. The same is true of the materials used in the process, and today we find a new brick replacing the first "Grissel" brick, and the product of 1957 uses material from many corners of the globe.

Farming

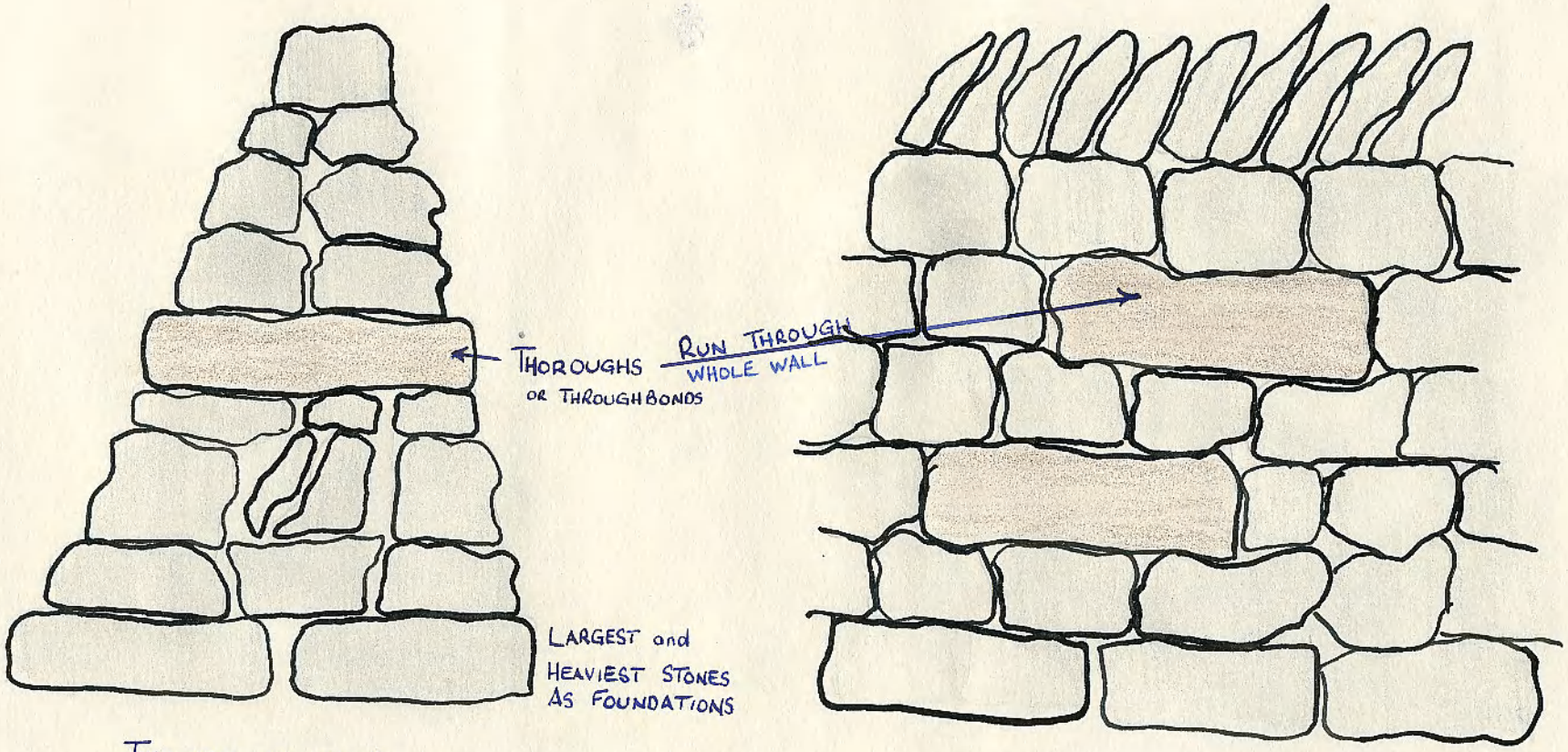
Our historical survey of the evolution of the district has shown that from the earliest of days man has been engaged in farming. In the Domesday Book, we hear of, "land for ½ plough" at Dore, and, "land for 1 plough" at Totley, and even today we see that the greater proportion of the area is claimed as farmland. Clearly farming has long been associated with our area.

One feels the old farm buildings clustered round the heart of Dore, and in evidence round the old part of Totley, show that these farms built in the Seventeenth and Eighteenth Centuries were probably built on the sites of older buildings. Thus through the centures the farm buildings would have been built in the same position as the medieval farms of the district. These old buildings therefore remind us that in the medieval system of open fields, the ground surrounding the village would be devoted to agriculture. This system with the land in small strips and the three course rotation of crops probably continued into the Eighteenth Century until the enclosure of land began. The Enclosures had two important effects on farming. They did good in that larger and better crops were grown, and so there was a more adequate food supply. Socially, however, the new system had a bad effect for it deprived the poorer classes of the use of the common pasture.

Most of the farms in our district date from the Seventeenth and Eighteenth Centuries, and are engaged in mixed farming, but with an emphasis on dairy farming.

Sheep farming is carried out on the moors, and these animals are owned by Mr. Rowarth of Dore Moor, and Mr. Stones of Totley. Sheep farming has been known in the area from an early date, but now this type of farming has very much declined. There were many Old Woodland Sheep originally on these moors, and these sheep were white-faced, horned animals with a tight fleece and reputation for hardiness. The present flocks are all Gritstone Sheep and are to be found wandering over Dore and Totley Moors. A severe winter often kills

FIGURE 43



TWO SETS OF WALLS

many sheep which are trapped in the drifts. Many sheep die of pneumonia even if they are located and rescued by dogs before suffocation. Sheep are the animals who cause the farmer much concern. They eat crops and knock down walls. Mr. Thorpe calls the repairing of the walls a, "catch job," that is to say they are repaired when no other work can be done on the land because of unfavourable weather. Figure 43 shows the basic principles of what Mr. Thorpe calls the art of "dry walling."

It is thought that a study of two types of farms within our area will give an accurate picture of the farming and its problems. The writer has collected material from the farms of Mr. Thorpe of "New Whitelow Farm," and Mr. Hargreaves of "High Greave Farm."

New Whitelow Farm represents the average size of a farm in the area, having 65 acres of land. It engages in mixed farming but with an emphasis on cattle for beef production. This farmland has been in the family for many years, but the soil is not very favourable for farming. The farm is situated very close to the moors, and the soil is of a peaty nature, and if it were left undisturbed and uncultivated, it would be eventually formed into peat. This type of soil is on the higher parts of the farmland, and it is this part of the land which receives the highest amount of rainfall, for it is about 950 feet above sea level, and to the south-west of our region. As one moves to the lower altitudes of the farmland, that is moving in the direction of Dore down Whitelow Lance, the soil becomes what the local farmers term "ratchel," that is fragments of stone lying above the bed-rock. These stones are so numerous that they interfere with the growth of the crops and present a formidable problem for the farmer. Both soils are light and contrast with the better stronger soils of the valley regions on the dip slope from the village of Dore to Oldhay Brook,Totley, for example.

The farm carries Black Angus and Hereford cattle which are cross breeds, and the breeding is performed by insemination. The cattle are taken to Bakewell and there they are presented to one of the Government's Cattle Marketing Boards. All the cattle have to be grade

"A" before they are accepted, and the farmer paid at a rate per pound weight. This farmer does not buy any food for the cattle, he relies on all the food produced on his own farm. In winter the cattle are reared out of doors, and grass is the cheapest food. The farmer therefore aims at extending his grazing periods. In times of snow or very severe weather, the farmer must take the cattle hay or silage.

A four year crop rotation is used for the growing of arable crops, the order normally being, oats, wheat, potatoes and turnips, each crop for one year. At the end of this cycle the farmer will "seed down" with oats or wheat. This last crop may remain for seven years if a good harvest is forthcoming, but if the result is poor, the crop would be changed after the first year. Although there is some variation from year to year, this farm produces grass on the peaty soils, and arable crops on the "ratchel" soils. There is more land devoted to grassland than to arable land.

The land is given a "balanced ration" of fertilizers, that is a combination of nitrogenous,phosphate and potash fertilizers. The fertilizers are bought from local agents, but they are originally manufactured at Hull. Lime has been an important addition to the land for centuries, and in the last century the farmers of the district would take a cart full of coal and exchange this for lime in Derbyshire and especially at Stoney Middleton.

We have seen that the growth of grass predominates on the peaty soils, and in terms of rainfall this means that permanent pasture is found on the higher wetter parts of the land. Spring sowing is regulated by the late frosts which may send the turnips yellow just as they are appearing, especially if a frost catches them before the beginning of May.

Fifty years ago the farm bred horses which were their only means of transport,and upon which they so greatly depended. Three horses would pull a cart into Sheffield where much of the produce was sold. Today there are no horses to be seen, and the owner cannot find a customer for the harnesses which are rotting away in the

TYPICAL FARMLAND

former stables. Whilst most farms today have a van or lorry, this farm requires neither, for all the produce is collected by the various agents. The only form of mechanisation on the farm is one tractor.

During the Second World War there was an increase in the amount of land given to crops, and this affected most farms in the area, including New Whitelow Farm. Here the Ministry of Agriculture stipulated certain land had to be ploughed, and if it were not complied with fines were imposed by an official inspector who came from Harrogate. Consequently there was an all-round increase in production and the farm became self-supporting.

Whilst the War Years produced increased effort and greater productivity, today the farm reflects no sign of prosperity. Indeed, the farm presents a picture of a poverty stricken activity of the area. This farm is not quite as isolated a case as would appear at first sight. Certainly it is the only farm in the immediate district not possessing an electricity supply, but the majority of the farms have only enjoyed this "luxury" for two years. New Whitelow Farm has no supply of water from the mains for its land, only for the farm house, and relies on a spring just above the farm for its water throughout the year. This spring is claimed to have never been dry, but when one considers how ancient a system this is, on wonders how the farm survives. The 1946, 1951 Farming and Livestock Rearing Acts did little to help this farm. These Acts seem to favour the wealthier farmer, and not the poorer class, according to Mr. Hargreaves.

Clearly the economic aspect governs the state of this farm, and may more in the district. The farmer cannot afford to employ casual labour, and so this farm has to be managed by the farmer and his brother. The question of labour is important, for at present none is available, and the land suffers. Men are attracted to the building trades where employers can afford to pay a higher wage. We therefore find that in the majority of the farms, the owner is the sole worker, and that four men now have to do the work which twelve men did originally.

The impression one received of the farm was that the farmer did not live, he merely existed, and that the farm was swamped

with economic problems giving it a poverty stricken appearance. Capital appears to be the most important factor today, certainly the spirit of the farmer the writer met showed that it was not through laziness things appeared on the decline.

High Greave Farm presented a totally different aspect of farming, and served to underline the above mentioned facts. This farm is owned by Mr. Hargreaves, a solicitor, and his farm is run by a bailiff and a farm labourer. The differences in the two farms are clearly seen from the outset to arise out of capital. Mr. Hargreaves does not depend upon the farm for his income, but he is able to use a certain amount of it to supplement the returns for the produce, and so improve his farming methods and efficiency .

High Greave Farm engages in mixed farming, but the emphasis here is on dairy produce. The farm is situated in the lower valley of the Redcar Brook, and the soils here are of the heavier stronger type which hold together better after being worked, and are not as light as Mr. Thorpe's soils. The false clay we have earlier discussed with relation to soils are the soils we have just mentioned above. The soils are therfore slightly better than those of the higher part of the region. When Proctors of Chesterfield arrived to advise the owner about the construction of a rose garden, they recommended that the beds should be three feet deep. Accordingly the beds were made ready and at a depth of three feet, sand was encountered.

The climate of the area makes the period of harvesting sometimes very difficult. Often there is no wind at the latter part of the summer when it is most needed to dry the cereals and the situation is often aggravated by rainfall which one might describe as unsympathetic.

This farm is slightly smaller than our last farm, with 52 acres of land. Here the emphasis is on dairy, and Shorthorn and Ayrshire dairy cattle are found. Much of the land is given to pasture, and during the summer 20 cows need 20 acres of pasture. The electric fence system of grazing is used on this farm, and this is an important method of obtaining the maximum amount of food from the land for these

animals. Whilst producing his own food for the cattle, the farmer must also buy the usual concentrates, known as "milk nuts" or simply "cake." These foods with low fibre contents are rich in nutrients, of which protein is of great importance. The farm is now aiming at becoming self-supporting, and it has enjoyed a certain amount of success in the mixing of its own concentrates. This farm is hoping that in the very near future the production of silage will be their most important dairy food. The Government are prepared to subsidise half the cost of the process, and this farm with its capital should find this method highly economical. This would overcome the drawback of the weather sometimes encountered.

The main production of the farm is milk which is collected by the Express Dairy and taken to Broadfield Road Dairy Sheffield. In the foreground of Photograph 68 we see that the wall has a flat top to it, and this is where the farm leaves its milk urns for daily collection. The Express Dairy also collect milk from Roundseats Farm which is High Greave's nearest neighbour. The farm also engages in poultry farming, and the eggs are sent to the Egg Packing Station on the outskirts of Leeds.

The arable land produces wheat, oats, potatoes and turnips in the main, but grass is grown as a crop for it is so very important. Every few years the grass is ploughed up and new grass seed is sown. This ensures that there is always a supply of new grass, and gives better results than the old pastures. The grass is used as part of the four year rotation system. The majority of Mr. Hargreave's land lies on the sides of gently dipping valleys, and this makes ploughing quite difficult in places. Although this farmer has slightly better soil than his colleague Mr. Thorpe, the natural land features make the land quite difficult to negotiate, and the farmer has his own problems through the situation of being in the valley bottom.

Phosphates, potash, and nitrogenous fertilizers are all used on the farm which is supplied by the local agents of the firm I.C.I. Ltd. Often a combination of fertilizers is required, and

they vary according to the need, but the farm now mixes its own to give a "balanced" fertilizer. Lime is very important and all ground receives the necessary amount when ploughed over. The soil is constantly tested for lime content by the addition of sulphuric acid.

Unlike New Whitelow Farm, this farm has frequent and close connections with the latest scientific research carried out at our agricultural colleges. If any new problem arises, advice will be sought from the best scientific sources, and a strong link is maintained between the land and the scientists. The owner welcomes the visit of such a skilled scientist who may visit the farm from time to time.

This farm was the first to have electricity installed. The farm is fortunate enough to be able to afford every electrical device possible to make the farmer's work easier, and this policy will continued through the future years. The farm has an electrically operated milking system, electric saws and drills, and the farm generally has every mechanised device it is possible to possess for the work done here. Transport requirements are not essential for all products are collected, but the farm has a small van which is used to visit the owner's other farm at Bakewell. Two tractors may be seen in the yard when not engaged in the fields, and three private cars are found in the garage. The farm established a mains water supply at the same time as electricity was installed, but originally there was only one solitary water tap in the grounds of the farm. The owner has been able to afford to build his farm bailiff a cottage at the side of the farm and with the help of a farm lad, he has no difficulty in obtaining a labour supply.

As with Mr. Thorpe's Farm, visitors from Sheffield cause little or no damage to the crops or to the land, it is to the animal world he must look for such setbacks. Sheep do not affect the farmland as it is too far away from the moors, but the animals we have previously spoken about, all add their share to the detriment of the land. The fox is the chief enemy of this farmer, and in spite of three dogs, there are occasional loses of poultry reported.

Before concluding the work on farming, it is felt a general word about some other aspects of farming would be of worth. Whilst these two farms present a picture of the type of farming in the area, certain factors have not entered into our account because they are concerned with other lands.

Fairthorn Lodge, Newfield Lane, Hillfoot Road, and the Baslow Road,mark the limit of land which may be used for building purposes. The "Green Belt" therefore safeguards farmland in our area from expansion of industry and housing estates. The farmland and crops close to the Mooredge Works Totley,have been affected by the fumes and smoke of the plant, and Pickford Holland have had to pay compensation to the farmer concerned. However, with the new process it seems unlikely that this will happen in the future. Roundseats Farm has suffered a little from the subsidence of the land with the mining of the coal and ganister from Short Lance Mine, but the effects have been so slight as not to interfere with the crops under cultivation.

In conclusion it is felt that a general comment on farming will accentuate the present problems of the area.

Our area has been concerned with the production of food from the earliest of times. At first this was because of sheer necessity, but in time a race of farmers grew up, and the traditions of farming were passed from one generation to another. As the city of Sheffield grew, so the farmers had a ready market for their produce, and whilst the land was not particularly well suited to farming, crops were grown, sold, and a profit made. This system continued for centuries, and as we have seen from Mr. Thorpe's farm, whilst transport from town to town was difficult, the local farms lived on the returns of their produce old in Sheffield. Some of the farmers became wealthy as land was bought for housing estates, and many farms continued to thrive on the money received from these estates. However, modern transport has now so facilitated the marketing of foods, that competition in the local market has made farming unprofitable in the district which is not ideal for farming.

We have seen the differences in the two farms taken for study in our area. Clearly the problem today is the economic survival of the farms, and we find that the majority of farmers in the area are in a state of economic chaos. They cannot afford a labour supply, modern methods to ease work or improve crops, some are a little sceptical of the modern scientific agricultural colleges, and have neither time nor money for experiments. The farmer makes money sufficient for a bare living only, and the state of the farms reflects the general poverty everywhere. It is only where there is capital available that any hope for the farming industry in the area can be seen, and one wonders what will happen when the present poorer farmers are no longer able to continue. Already one feels this spirit of defeat pervades the farms, the description Lees gives to the soils of our area, "cold and Backward," may well be applied to the majority of farms. Having made no intense study of the different subsidy acts the Government have passed from time to time, one must accept the view expressed by Mr. Hargreaves when he says that these acts help the wealthy farmer, but do very little to ease the yoke of the poorer brethren. Such then are the problems of farming in our area, and future survival of the industry appears to be closely bound to economic stability.

Nursery Cultivation

Our final activity of the area also concerns the land but on a smaller scale than our last topic,for the nurseries follow the same principles of cultivation as the private gardeners, but on a much larger scale, concentrating on produce which is in good regular demand at prices which bring a resonable return. Within our area there is a little nursery cultivation based upon the same type of produce, and after indicating the distribution of the nurseries, it shall be our plan to present one such nursery in detail. In Dore there is only one small nursery in Dore Road belonging to Cook Brothers, but it is rather smaller than the rest and only sells its produce locally. In Totley there are two nurseries, and a small allotment area which is devoted in the main to tomatoes. Opposite Abbeydale Hall, there are lands of William Woodhouse and Sons, Nurseryman. This land contains two glasshouses, and next to the Mr. Pearson's nursery, is the largest in the area. Passing further along Abbeydale Road South, one comes to the above mentioned allotment which is opposite the Devonshire Road bus stop. This plot of land also contains glasshouses for the production of tomatoes, and is owned by Bradshaw's who sell their produce in their own fruit and flower shop opposite the land. All the nurseries produce similar types of produce, and it is our intent to study one in detail, the largest in the area belonging to the Pearson family.

The nursery is situated on the dip slope of an escarpment of sandstone of the Brincliffe Edge Rock, and is some 550 feet above sea level. The nursery forms a long strip of land with its drive leading into the Baslow Road. The nursery is owned by Mr. G. Pearson who now runs it as a family concern along with his brother and sons. The family have two more nurseries where plants are grown, but both these are outside our region being situated at Birchen Lea Farm, Dronfield Woodhouse. It is the Totley nursery which demands our attention, and it is at this nursery that all the produce is sold, as retail merchants. There is an area of about 2,000 square feet under

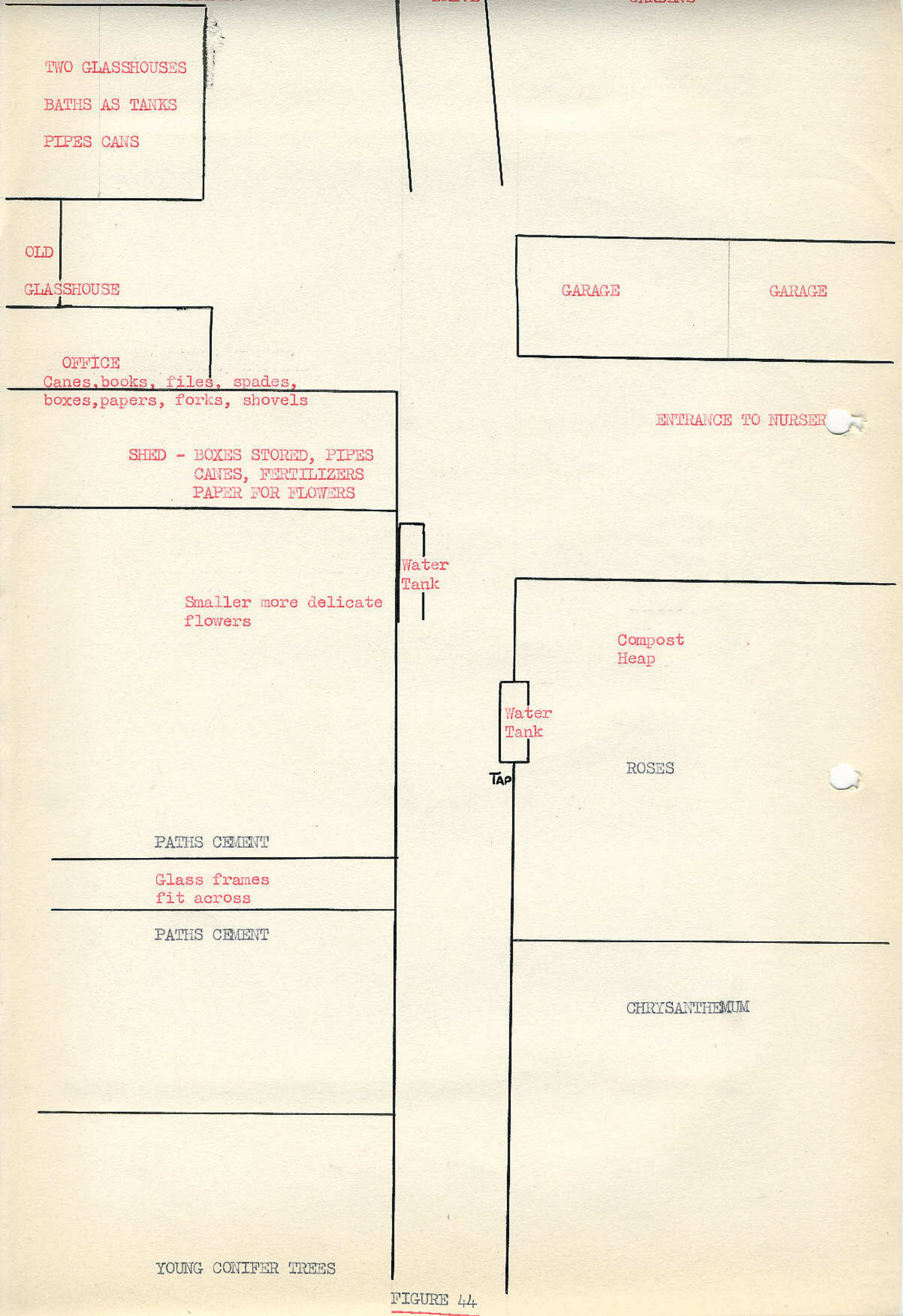

TWO GLASSHOUSES
BATHS AS TANKS
PIPES CANS
OLD
GLASSHOUSE
GARAGE
GARAGE
OFFICE
Canes, books, files, spades,
boxes, papers, forks, shovels
ENTRANCE TO NURSER
SHED - BOXES STORED, PIPES
CANES, FERTILIZERS
PAPER FOR FLOWERS
Water
Tank
Smaller more delicate
flowers
Compost
Heap
Water
Tank
TAP
ROSES
PATHS CEMENT
Glass frames
fit across
PATHS CEMENT
CHRYSANTHEMUM
YOUNG CONIFER TREES

FIGURE 44

'SPRINKLER'

glass and 1¼ acres outside, but there are no plans to extend the present area.

The nursery has been functioning in its present position for 32 years, and has grown up from the concern at Birchen Lea Farm. The nursery is situated on a hill which is very important for it means that there will be the minimum amount of late frosts harming the plants, for temperature inversion is the main enemy of the cultivator in the spring. There have been disastrous frosts from time to time, and most destructive coming about the middle of May, but fortunately they are only occasional. The land faces due south and so obtains the maximum amount of sunshine, and it has never been necessary to introduce artificial sublight into the nursery. The nursery is sheltered by a large hedge which runs the full length of the western side of the ground. The market is found in the locality, but as we shall further consider, some products are sent to other areas. The soil is described as a "heavy loam," and is particularly suited to nursery cultivation. Rainfall is sufficient to meet only part of the needs of the plants, and the mains supply is most important. Photograph 7o shows "the sprinkler" which is used to water the ground, and as Figure 44 shows there are tanks of water in the nursery itself, and watering is also done by hand with a large watering can. The dip of the land ensures good drainage of the land.

The range of produce and production are so great and varied that it is impossible to quote any kind of statistics on the subject. A broad classification could be attempted in - hardy border and spring bedding plants, and vegetable plants on one side of the scale, and rose trees, ornamental trees and shrubs and fruit trees on the other. However, this takes no account of the fertilizers, and sundries such as rustic poles, horticultural sand, peat, garden canes, and even flower pots, all of which are sold. Throughout the day there is a constant stream of customers, in cars, on foot, women who call to collect vegetables for the diner, and mother who brings baby for or some plants or flowers. Such is the traffic at the Pearson Nursery. The business does not rely solely on the visit of customers, but produce is sold in the locality by means of a delivery van, garaged at the nursery.

The produce is not confined to the local area when it is sold, for the marketing of the produce is as important as the gardener's skill. Produce which is sold through the wholesale market is sent to the Commission Agent, who acts as a "middleman" between the producer and the retailer, and taking a percentage of the price obtained to pay for his own services. The grower must therefore take into account not only the cost of packing and transport, but also this percentage of the Commission Agent, before he can arrive at an accurate estimation of the real selling price of the crop. When the produce is sent further afield special care must be taken in packing the material. Roses are therefore picked and packed as buds as they travel better. The care of packing is very important, and because of this Mr. Pearson does not favour the use of the "non-returnable" type of container which is less durable material than the wooden boxes in use at Totley. A nurseryman must guard against producing too great a quantity of flowers or produce, leaving himself with a summer "glut." Mr. Pearson explained that this is inevitable at some stage or other, and he has had one or two, but not one since the end of the Second World War.

Work is carried on at the nursery all year round. In winter we see it is the time for the repairing of the fences, doors, and walls, the boxes mentioned above are made during this season, and the frames,lights, and glasshouses are given special attention. The glasshouses are used to force the rhubarb and bulbs, and this is done by the system of hot water pipes in the houses. The winter nights are spent in book keeping, whilst in summer every available minute is spent on the nursery.

Plant diseases are many, varied and complicated, as are the remedies to counteract them. Our attention as geographers is drawn to the source of some of the materials used in the nursery. Amongst the fertilizers used are sand from Staffordshire, and limestone from Stoney Middleton. Sand was originally obtained from the local Millstone Grit rocks, but now none is produced, and the supply has to come from other districts. Sand and limestone are mixed with soils

71

72

to give certain plants the correct type of soil in which to live. Plants cannot be grown year after year in the same glasshouse unless the soil is sterilised, and this is done by means of steam at Totley. There are many fertilizers used in the nursery, both natural and artificial, and these are bought from one of the main Sheffield agents.

There are five men working on the nurseries all year, but the Totley nursery rarely has three men working there, usually two men are sufficient. The men are not recognised as specialists, although one feels over the years they do become highly specialised workmen. There is no recognised training necessary for the men, the training follows out of experience.

The only mechanisation used on the land is a cultivator which breaks up the earth and so saves valuable time in that no laborious hours of digging are necessary. The glasshouses are most important, and they must be adequately ventilated and the glass be clear. Inside the glasshouses there are water tanks and pipes. The houses are essential in the growing of some tender plants. (Photo. 69) Frames are used in the nursery garden and there are some which fit over the cemented borders to the paths and can be removed when not required.

The growing of trees as individuals or arboriculture, is a most noticeable feature of the nusery. The individaul trees are grown for their beautiful appearance, the shade and shelter they provide and as one of the chief features of the gardens and parks: recently they have been requested for some of the new locally built houses and roads. Photograph 71 showing a general view of the nursery show some of the trees which have been growing for several years and are about six feet high.

As one walks down the drive towards the nursery, one's attention is arrested by a number of rustic poles. (Photo. 72) These are imported form Norway, but the nursery has also bought them from the Derbyshire Water Board. They are used for rustic fences and supports in the garden.

Apart from the frost, and the market "gamble" the only enemies of the nursery are a few cats and dogs, the common sparrow, and the greenfly, all of which try their best to endanger what is a most successful activity in the area.

Heatherfield Nursery is an example of one of the rural activities developed by one family in Totley. It now has a sound economy which has been consolidated over a period of 32 years, and its present position is well favoured for market, climate, communication, soil and "imports" of materials used. The variety of plants produced is a reflection of this most flourishing activity with which we end our account.

Conclusion

We have seen that our area now forms part of the residential region of the city, and that future development is limited, and rightly so, by the "Green Belt." It is felt that in time much of the remaining land within the confines of this belt will be consumed by further developments in the building of private houses, but there are no large-scale schemes proposed in the future. There seems to be no fear of new industry commencing in the area, but geographical inertia will carry the one industry proper to greater efficiency through modernisation and specialisation. The farms of our area present a difficult problem, for they seem to be facing a financial crisis of the first order. Unless there is some measure of relief given, the farms of the area seem doomed to years of misery and povery. The writer feels that effort must also come from the farms themselves, and it would be a great help if some of the conservative attitudes of some of the farmers could be shaken so that more attention could be paid to scientific developments in agriculture. The Nurserymen of the area have given the farms the lead, is it not up to the farmers to rise and meet the challenge?

It is felt that the rural nature and character of the area will be preserved, more especially in Dore, and this is thought to be highly acceptable. People will continue to walk across Totley Moor, and as from time immemorial many will enjoy the natural beauty of this , most assuredly, one of the pleasantest areas of Sheffield.

The writer craves the reader's pardon for the continuous number of typing errors made throughout the piece and well realises that the typing of such a work is not a task to be easily accomplished by an amateur. The writer would also like to mention that all the photographs used in the account are his own work, and not reproduced from any magazine. In the bibliography which is to follow the writer would like to say that for much of the work on the activities of the area "field work" notes from people in the area form the basis of the work, thus accounting for a rather small range of books used.

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