

Dear Jonathan

These records of Bichenwood Colliery in 1910 will be
of greater value in your archives than in my cupboard
at home.

Yours
/

This Book is arranged to shew by Plans, Sections, Charts, and Monthly Reports the General Underground Work, and Development in the various Seams:-

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- No. 1. Section of Strata sunk through in 1678 Shaft.
 -a- 2. General Cross Section of Mines: (North & South)
 -a- 3. Estate Plan.
 -a- 4. Ventilation Plan.
 -a- 5. General Manulage Scheme.
 -a- 6. Pumping Diagram.
 -a- 7. Miners Wages Chart.
 -a- 8. Birchenwood, Seam
 -a- 9. Little Row. -a-
 -a- 10. Four Feet -a-
 -a- 11. Rough seven feet -a-
 -a- 12. Stoney Eight feet -a-
 -a- 13. Ten feet -a-
 -a- 14. Top Two Row -a-
 -a- 15. Bottom Two Row -a-
 -a- 16. Bowling Alley -a-
 -a- 17. Seven feet Banbury -a-
 -a- 18. Eight feet -do- -a-
 -a- 19. Bullhurst -a-
 -a- 20. Wimpenny -a-
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The Plans attached shew the various workings over the whole estate in every seam made up quarterly, and also proposed developments.

The Chart will shew graphically the Output, Shifts worked, and Output per person per shift. The Underground Wages and Timber Cost per ton, and the proportion from each seam to the total Output of the Collieries.

With each plan will be a monthly report of the progress made, and comments thereon.

James R. L. Allott.

February 1910.

Birchenwood Seam.

Character: A Superior House Coal. It is probably the same as the Mossfield Coal in the South part of the district, and the same as the Four feet Coal of the Audley district. It crops out at the mouth of the Lunt's pit of the Old Newcastle Collieries. Thickness varies from 5 to 6 feet. The roof is a soft dirt varying from 3 to 5 feet, above which is a strong shale from 7 to 8 yards thick. The roof is consequently bad, and very destructive to timber, the cost for which is excessive.

Analysis:- (Approximate)

Coke and Ash	61.330 %
Volatile Matter	38.670
	100.00

Coke	{	Fixed Carbon	57.584 %
		Sulphur	.246
		Ash	3.500

Volatile Matter	{	Gas, Tar, etc	34.524
		Sulphur	.156
		Moisture	3.990

100.00.

Getting Prices

Cutting, Main Levels, and Dips	6-0 per yard.
Breastings, 10 yards wide	3-0 " "
Breastings, 10 yards wide (New Work)	6-0 " "
Setting Timber, 6 ft. Bars	1-8 per set.
Setting Timber 8 " "	2-6 " "
Ripping	2-0 " yard
Packing	from 2-0 to 3-0 " "
Tonnage	1-9 " ton
Chocks, 3 feet square	1-0 each.
Collier working Day Work	4-11 per day
Loader " " "	4-9 " "
Waggoning on the Level	first 80 yards nil.
	over that distance 7 per ton extra.
Waggoning, including Braking to	
-Dips or Jigs	first 60 yards nil
	over that distance 7 per ton extra.
Ridding Coal	10 yards upbank --- not to be paid for
	succeeding 10 yds. --- to be paid for.
	3 yards downbank --- not to be paid for
	succeeding 3 yards --- to be paid for

Extent of Working; At a depth of 204 yards was proved and worked at the Bathpool pit. The Coal was reached in July 1893, and continued working until August 1901 when it was stopped owing to excessive costs. It was worked at the Nelson pit by a drift from the Ten feet at a depth of 79 yards. It was worked at 16-6 pit by a drift driven from the Ten feet level through the Stone Bank fault at a depth of 238 yards. It was recovered at 16-4 pit in June 1903 at a depth of 287 yards, & continued working until March 1906, when it was stopped, the costs being excessive owing to the bad state of

Birchenwood Seam continued.

the district. A glance at the Main Plans will show by dates of working 1905 to 1906 that the pillars were robbed, indiscriminately.

Recent Work, At present time only worked from No. 18 pit. Approached by Main Crut at 430 yards deep. This Crut reaches the Ten feet at 602 yards from pit and a level East to the Oldcote fault through which Cruts reach the Birchenwood 270 yards from the Main Crut. This recovery was made in December 1902. then levels were driven 1020 yards East to within 120 yards of Boundary at Newchapel where the levels turn round at the synclinal. In September 1906 the first small pillars worked drew water from the Ironstone measures above, about 100 galls per minute, and the work was stopped at this point. From 1902 to the present time dips have been driven up from the East Levels 160 yards to the highest point, 7 pillars worked. The Gradient varies from 38° to 45° ; the steepest dip being worked by a balanced cage. This East district has been very costly, the difficulties being steep dip, bad, + wet roof, smooth slippery floor, very destructive to timber horse haulage for 1300 yards + successive costs repairing roads, and Airways, all on a small output which could not be increased from the limited workings of one pair of levels; Although the selling price of this coal is the highest obtainable, the percentage of Slack (54) together with the difficulties abovementioned, reduces the average value to much below cost price. The district is now being worked to the smallest extent possible to maintain trade until a better recovery is made from Lacey's Crut. When the Newchapel water was struck in 1906 fresh recoveries should have been set out, but nothing was done until recently when Lacey's Crut was projected to go on to the Birchenwood Seam. It will probably be reached in 6 months time ready for the winter of 1910-11.

Report for February 1910: On reference to the Chart it will be seen that the Output to week ending Feb. 12, has averaged about 150 tons per week, and the Underground cost has varied from 4/9 to 6/6 + Timber from 7 to 7 1/2. The high cost has been due to falls on the Wet level, + variation in Timber to Stock underground. The pillars are being worked back as quickly as possible to cut off the expense of maintaining long levels. The high cost is reflected in the average output per person per shift, + under the circumstances explained above it is unlikely that much improvement can be looked for from this district.

Proposal for better recovery, in addition to Lacey's Crut Very shortly the Main South Crut from No. 18 pit, which is in excellent condition will have nothing to work beyond the Old 7 ft. Engine dip, except a district of Rough Seven feet which is being recovered by Cruts through the Oldcote fault from the East 10 feet levels.

Birchenwood Seam continued.

As this main Crut is equipped with Endless Rope Haulage, it will form a cheap means of transit for any coal recovered near the end of it. By leasing a comparatively small area of about 25 to 30 acres of Bartlidge's Mines beyond the Crut, and driving the Crut forward in a straight line for 170 yards the Birchenwood seam would be reached, recovering 165,000 tons of coal between the Oldcote, & Stone-bank faults or 8 years output of 400 tons per week. The cost of driving the Cruts would be about £750, or 1.09 per ton. This also opens an area of Messrs Heath's (Lawton Estate) Mines which could not be worked except by Crut from Lacey's Crut through the Stone bank fault, and which alone would not be profitable to recover. It is particularly important that this recovery should be considered in the near future because the coal will be on pit level, at the end of the endless rope, got cheaply to the pit, can be worked by short levels, and secondary endless rope instead of horses, and can be laid out to better advantage than the Old district. It would also form another through connection to Lacey's Crut. There is, however, one objection to this development, the possibility of damage to surface buildings at Goldenhill. This property has already been damaged by older workings nearer the surface. Any damage that may be caused by Birchenwood workings at 430 yards will be less serious. Assuming, however, that damage to the extent of £20 per house is caused to 20 houses, this would mean £400, or about 1/2 per ton on the recovery. The Royalty Value of the Coal would be about £3,175.

Report for March 1910. The Output from the Old East district has been maintained at about 150 Tons per week; Wages Cost has varied from 5/4 to 6/3 but the timber is higher, about 1/2 per ton. As explained last month there is no room for improvement, or development in this district, & its working is only justified by the necessity to maintain the pit output, & retain customers for best coal until a cheaper district is opened, meantime of course every possible economy is being exercised.

Progress of Lacey's Crut since last report 21 yards approximately 95 yards from Coal.

Proposed recovery mentioned in Report for February from the end of South Crut is still under consideration. Objections are more serious when further investigated. Alternative plan for making connection with Lacey's Crut would be extension to Rough 7 feet see Rough Seven feet report.

Little Row Seam.

Character: A good House Coal ranking with the seven feet Banbury, and Bullhurst. It lies about 8 to 12 yards below the Birchenwood, & principally used for making roads for convenience of working the Birchenwood. It is 2' 6" thick, with good shale roof, and fireclay floor. It requires little timber. The coal is uniformly good in one bed with good partings at the roof and floor.

Analysis: (Approximate)

Coke and Ash -----	60.290 ^x
Volatile Matter -----	39.710
	100.00

Coke.	{	Fixed Carbon -----	53.830
		Sulphur -----	2.060
		Ash -----	4.400

Volatile matter	{	Gas, Tar, etc. -----	33.990
		Sulphur -----	1.370
		Moisture -----	4.350
			100.00

Getting Prices:

Cutting, main levels, and Dips -----	4-0 ⁰ per yard.
Blowing bottom up in 6 feet levels -----	7-0 " "
Blowing bottom up in Dips -----	8-0 " "
Setting Timber. Bars under 8 feet -----	1-9 per set.
Setting Timber. Bars 8 feet, & over -----	2-6 " "
Tonnage -----	2-0 " ton.
Chocks, 3 feet square -----	1-0 each
Collier working day work -----	4-11 per day
Loader -----	4-9 " "
Waggoning on the level ----- first 80 yards -----	Nil
over that distance -----	7 per ton extra.
Waggoning, including braking to Dips, or figs ----- first 60 yards -----	Nil
over that distance -----	7 per ton extra.
Ridding coal ----- 10 yards upbank -----	not to be paid for.
exceeding 10 yards -----	to be paid for
3 yards downbank -----	not to be paid for
exceeding 3 yards -----	to be paid for

Extent of Working: It has never been worked in the Birchenwood Area except for roads off the No 4 cut, and off No 18 cut.

Recent Work: In January 1909 levels were started East and West from No 4 cut at 287 yards from the surface, for the purpose of driving East to the New mine Ironstone for the Newchapel & Turmhurst Water, and West for the purpose of draining the old Birchenwood workings at Bathpool, thus bringing Newchapel & Bathpool water to the new Turbine pumps at No 4 pit bottom. During the past month, Feb. 1910. these levels have advanced 12 yards East, and 11 yards West. The West levels are now at the Stonebank fault

and cutting has been commenced to the Birchenwood Coal, in which it is proposed to open out a district & so make use of the existing roads, and their cost to some advantage.

Report for March 1910. During the past month the East levels have reached the Oldcote Fault, & cutting is in progress on both East & West sides. The cuts through the Oldcote fault to the New Mine are set out at an angle of 45° to the level course so as to escape faulty ground expected about the junction of the Turnhurst, & Chell faults, with the Oldcote, & Red Row faults. It is estimated that the cuts will be yards to the New Mine:

Rough Seven Feet Seam.

Character:- High class Steam coal, at one time the N.Y. Co's paid 6 per ton more to Bidder and Elliotts for this coal than for Eight feet. It is 4'-0" to 5'-0" thick. Very good roof, & rock floor with soft prickling dirt under the coal. Its only drawbacks are its steep inclination, & water which comes through the roof from a rock 3 yards above the base. It makes a good percentage of hard round coal, and is below the average in timber cost.

Analysis: (Approximate)

Coke and ash	64.80%		
Volatile matter	35.20		
		100.00	
Coke	{	Fixed Carbon	56.943%
		Sulphur	.557
		Ash	7.300
Volatile matter	{	Gas, Tar, etc	34.837
		Sulphur	.303
		Moisture	.060
		100.00	

Getting Prices:

Cutting main levels and Dips	6-4 per yard
Breastings - 10 yards wide	3-2 " " "
Breastings - 10 yards wide (New Work)	6-4 " " "
Setting Timber - 6 feet bars	1-8 per set
Setting Timber - 8 " " "	2-6 " " "
Packing	4-11 per yard
Cutting up to open out drifts	3-2 " " "
Tonnage	1-3 per Ton
N.B. Consideration for	3-6 " " "
is paid in difficult places.	
Chocks - (3 feet square)	1-0 each
Collier working day work	4-11 per day
Loader	4-9
Waggoning on the level, first 80 yards	Nil
over that distance	7 per ton extra
Waggoning, including Braking to	
Dips or Sigs - first 60 yards	Nil
over that distance	7 per ton extra
Ridding Coal - 10 yards upbank	not to be paid for
Exceeding 10 yards	to be paid for
3 yards downbank	not to be paid for
Exceeding 3 yards	to be paid for

Extent of Working:- Old workings dating back probably 100 years. This seam was worked from old shallow pits, and afterwards from No. 4 and 6 pits down to a point 287 yards below the surface, these workings extended about 1320 yards East, near Trubshaw, and 1600 yards West, or 300 yards beyond the Tunnel barrier.

Recent Work: In September 1904 levels were commenced at the far end of No. 18 main south cut 430 yards from the surface, and yards from the pit bottom.

The levels were driven East to the Oldcote fault and West to the Stone-bank fault. Above the East levels an area 140 yards to the rise was drifted out leaving a pillar of 100 yds above, + against the old work from $16^{\circ}4$ ft. The Barrier was not effective, and let the water down from $16^{\circ}4$ at 287 yards to $16^{\circ}18$ at 430 yards. Above the West levels, a similar, but larger area was worked out also leaving a barrier equally ineffective. These two districts are nearing exhaustion and as the barrier is now of no use in keeping back the water it is proposed to work the greater part of it out. In September 1909 the Rough seven feet was struck in Lacey's Crut, and levels are being driven East and West for the purpose of drifting to the rise, + extending West to the Tunnel barrier a distance of 450 yards:

Report for March 1910:- The Output has improved to about 440 Tons per week + the Cost decreased, the lowest being $5/2$, and the highest $5/8$. The timber cost is also better. The Cost is still high due to yardage in levels from Lacey's Crut. Progress in the levels is not satisfactory but unavoidable until Ventilation is improved by re-opening Old West 10 feet levels which were abandoned 3 years ago:

Four Feet Seam.

Character :- second class house, or Steam coal fairly clean, and uniform in quality. Said to have been worked with good results in past years and readily sold. Thickness about 4 feet, with good shale roof, + floor.

Analysis :- (Approximate)

Coke, and Ash -----
Volatile matter -----

Coke { Fixed Carbon -----
Sulphur -----
Ash -----

Volatile Matter { Gas, Tar, etc -----
Sulphur -----
Moisture -----

Getting Prices.

Extent of Working :- Believed to have been worked extensively from shallow pits near the outcrop, and afterwards from Trubshaw at 142 yards deep, at No 4 pit at 287 yards deep also at No 6 pit. The Trubshaw work extended East to the road leading from Bullocks House to Mow Cop, + West to Red Row. The work from No 4 and 6 went East to the Oldcote fault, and West through the Stone bank fault on to Bathpool. Nothing has so far been done in this coal down No 18 pit.

Recent Work :- Lacey's grub now being driven to the Birchenwood has just passed through this coal.

Stoney Eight Feet Seam.

Character: A first class Furnace Coal and was formerly worked, and in great demand for this purpose. It is hard, large, and clean. It is also a good Steam Coal. The seam is in 2 bands, the upper 2'-10" good coal, and the lower 1'-6" inferior, with a band of strong black shale 1'-2" thick between. The roof is a strong shale, and the is a hard warrant:

Analysis (Approximate)

Coke and Ash	-----	65.00%
Volatile matter	-----	35.00
		<hr/> <hr/> 100.00

Coke	{	Fixed Carbon	-----	60.995%
		Sulphur	-----	.705
		Ash	-----	3.330

Volatile matter	{	Gas, Tar, etc	-----	33.259
		Sulphur	-----	.381
		Moisture	-----	1.360

100.00

Getting Prices:-

No prices have been arranged for working this seam, & the little work that has been done during late years have been paid day wages.

Extent of Working:- Old workings from shallow pits were extensive in the neighbourhood of the Old Kidsgrove furnaces. From No 4 pit at 287 yards levels were driven East to the Oldcote fault, & by means of the Rough Seven feet to a district beyond the fault about 70 yards East of the pit. To the West, levels were driven to the Furnace Bank fault. The workings were to the rise of these faults:

Recent Work:- From No 48 pit Main South Crut at 430 yards deep levels were driven a few yards East, and West about the year.

The seam has also been passed through in Lacey's Crut, but no work so far done. It is not intended to work the seam at present.

Ten Feet Seam.

Character:- Excellent Gas coal; Good Steam coal. Second house coal. Thickness averages about 7 feet. Roof, dark grey bass for 6 feet, then hard brown sandstone rock for 26 yards. This Rock is one of the chief Water bearing strata in the district, consequently work in this seam is generally wet & difficult in consequence. The floor is soft fireclay & owing to the water gives much trouble, & adds to cost by lifting. In wet work much timber is required, and much is lost in the waste. When dry the 10 feet is one of the most satisfactory seams in the district as regards cost of working. Unfortunately all the work at Birchenwood is wet, and likely to always be so.

Analysis:- (Approximate)

Coke and Ash	-----	65.200%	
Volatile Matter	-----	34.800.	
		<u>100.00</u>	
Coke	{ Fixed Carbon	-----	51.540%
	{ Sulphur	-----	1.560
	{ Ash	-----	12.100
Volatile Matter	{ Gas, Tar, etc	-----	31.984
	{ Sulphur	-----	.846
	{ Moisture	-----	1.970
		<u>100.00.</u>	

Getting Prices:-

Cutting, main levels and Dips	-----	6 ^s 6 ^d per yard
Breastings, 10 yards wide	-----	6 - 0 " " "
Setting Timber -- 6 feet bars	-----	1 - 8 " " "
Setting Timber -- 8 " " "	-----	2 - 6 " " "
Ripping -- (3 feet thick)	-----	3 - 0 " " yard
Packing	-----	5 - 0 " " "
Flitching	-----	11 " " "
Tonnage -- in narrow work	-----	1 - 0 ³ / ₄ " " ton
Tonnage -- in drifts, & breastings	-----	6 per ton extra.
Chocks	-----	11 each.
Collier working daywork	-----	4 - 11 per day
Loader -- " " "	-----	4 - 9 " " "
Waggoning on the level -- first 80 yards	-----	Nil
over that distance	-----	7 per ton extra
Waggoning, including braking to --		
-Dips or Jigs	-----	first 60 yards -- Nil
over that distance	-----	7 per ton extra
Ridding Coal -- 10 yards upbank	-----	not to be paid for
exceeding 10 yards	-----	to be paid for
3 yards downbank	-----	not to be paid for
exceeding 3 yards	-----	to be paid for

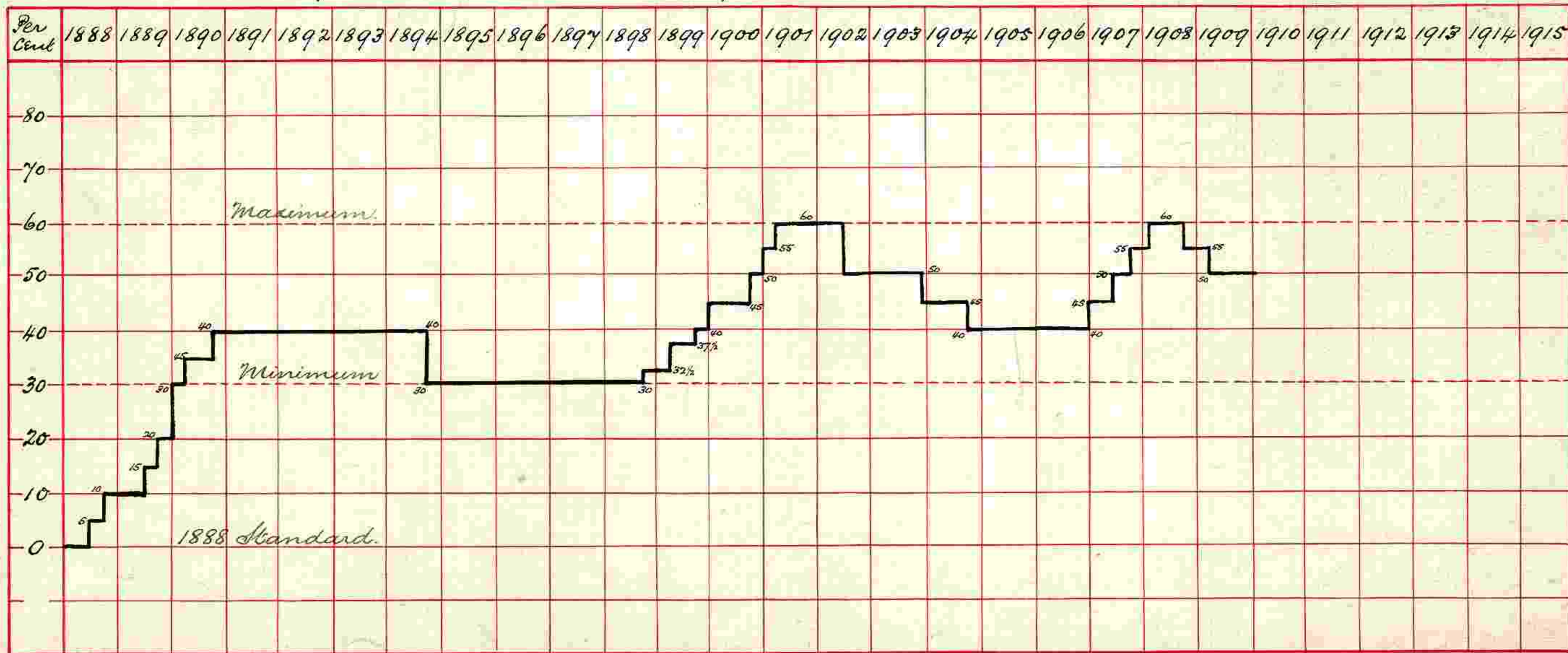
Extent of Working:- To the rise of the present pits this seam is practically exhausted as far as the Bathpool Fault. At the Harecastle pit it was found by cutting from the Birchenwood seam but drew off a considerable volume of water from the Old Colley pits necessitating a Dam being built in the cut and the recovery abandoned in

Recent Work:- In the 10 feet seam was struck in the main South cut yards from 16-18 pit, and levels driven East & West

to the Oldcote, and Stonebank faults. From these levels districts were worked to the rise & exhausted about up to a barrier below the old workings from No. 4 pit. No development was made whilst this coal was being worked out & nothing was done in the seam between and when the seam was struck in Lacey's Brut:- Levels have been driven from this Brut back East to the Stonebank Fault, and are now proceeding West to the Tunnel barrier. Some drifting work was opened out above these levels, but owing to the large volume of water, and steep gradient drifting could not be successfully continued. Headings have therefore been started to the rise, and later the coal will be worked by the Heading, and Drifting method.

Report for March 1910:- The Output from Lacey's Brut district varies from 350 tons to 400 tons per week, but the cost is excessive varying from 4/10 to 6/7, normally about 6/. This is due to the cost of yardage which alone is per ton. The timber cost is also high due to bad wet roof. The conditions may improve later as the ground is drained by narrow work in opening out:

Miners Wages in The Federated Area, namely Lancashire, Cheshire, North Wales, Staffordshire, Yorkshire, Derbyshire, Nottinghamshire, Leicestershire, & Warwickshire. Settlements by the Conciliation Board of the Federated districts:-



No 7.

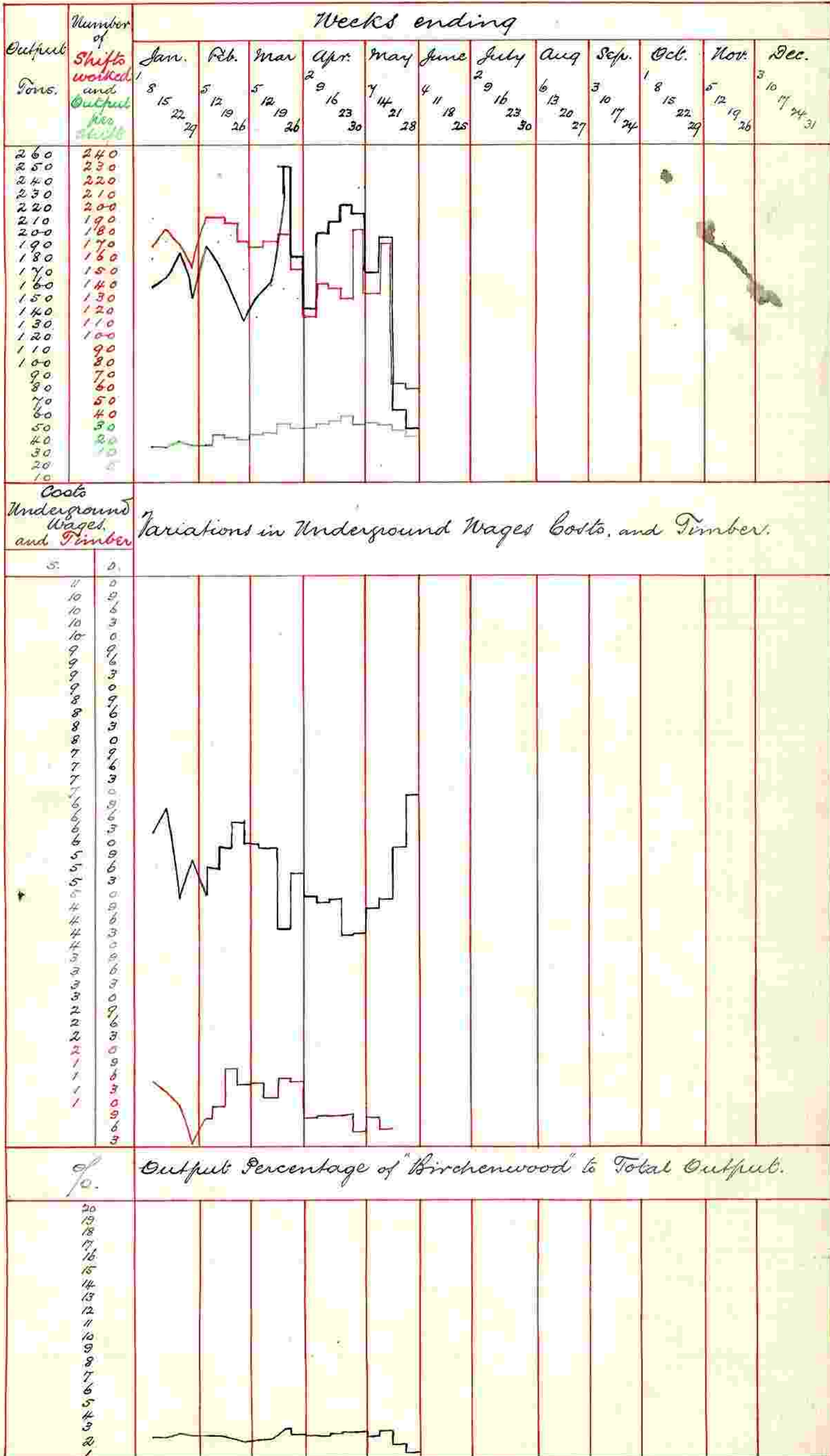
Birchemwood Seam

Graphical Statement of Output, Shifts worked
and Output per shift, each week during the
Year 1910.

Output	Weeks ending											
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Tons	8 15 22 29	5 12 19 26	5 12 19 26	2 9 16 23 30	6 13 20 27	4 11 18 25	2 9 16 23 30	6 13 20 27	3 10 17 24	1 8 15 22 29	5 12 19 26	3 10 17 24 31
100 99 98 97 96 95 94 93 92 91 90 89 88 87 86 85 84 83 82 81 80 79 78 77 76 75 74 73 72 71 70 69 68 67 66 65 64 63 62 61 60 59 58 57 56 55 54 53 52 51 50 49 48 47 46 45 44 43 42 41 40 39 38 37 36 35 34 33 32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15												
30 25 20 15 10 5	Output per shift											

Birchenwood Seam.

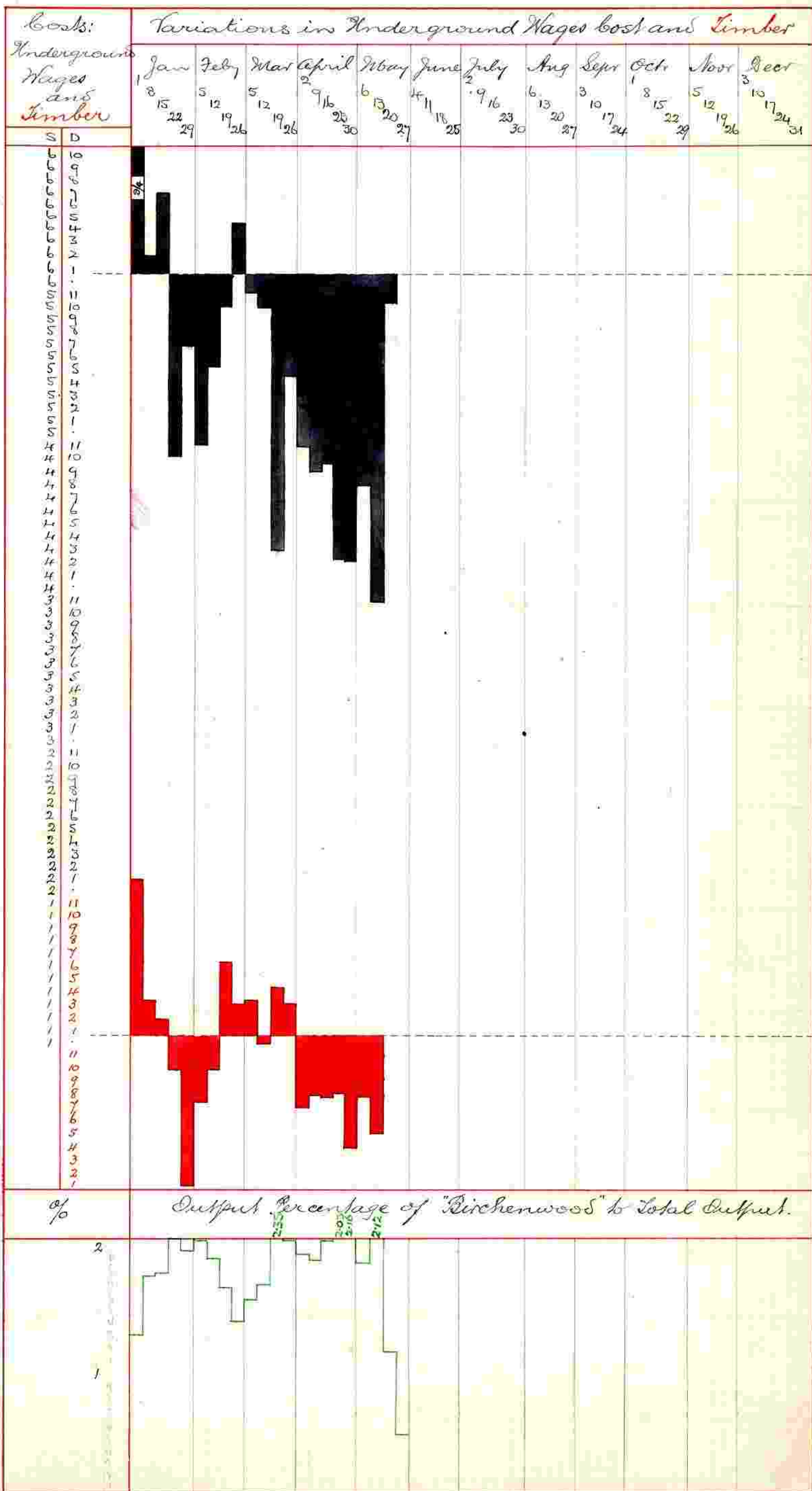
Graphical Statement of Output, Shifts worked, and Output per shift, each Week during 1910.



The East District beyond the Oldcote fault off 76-78 Main
Crest finished on Saturday May 28th 1910.

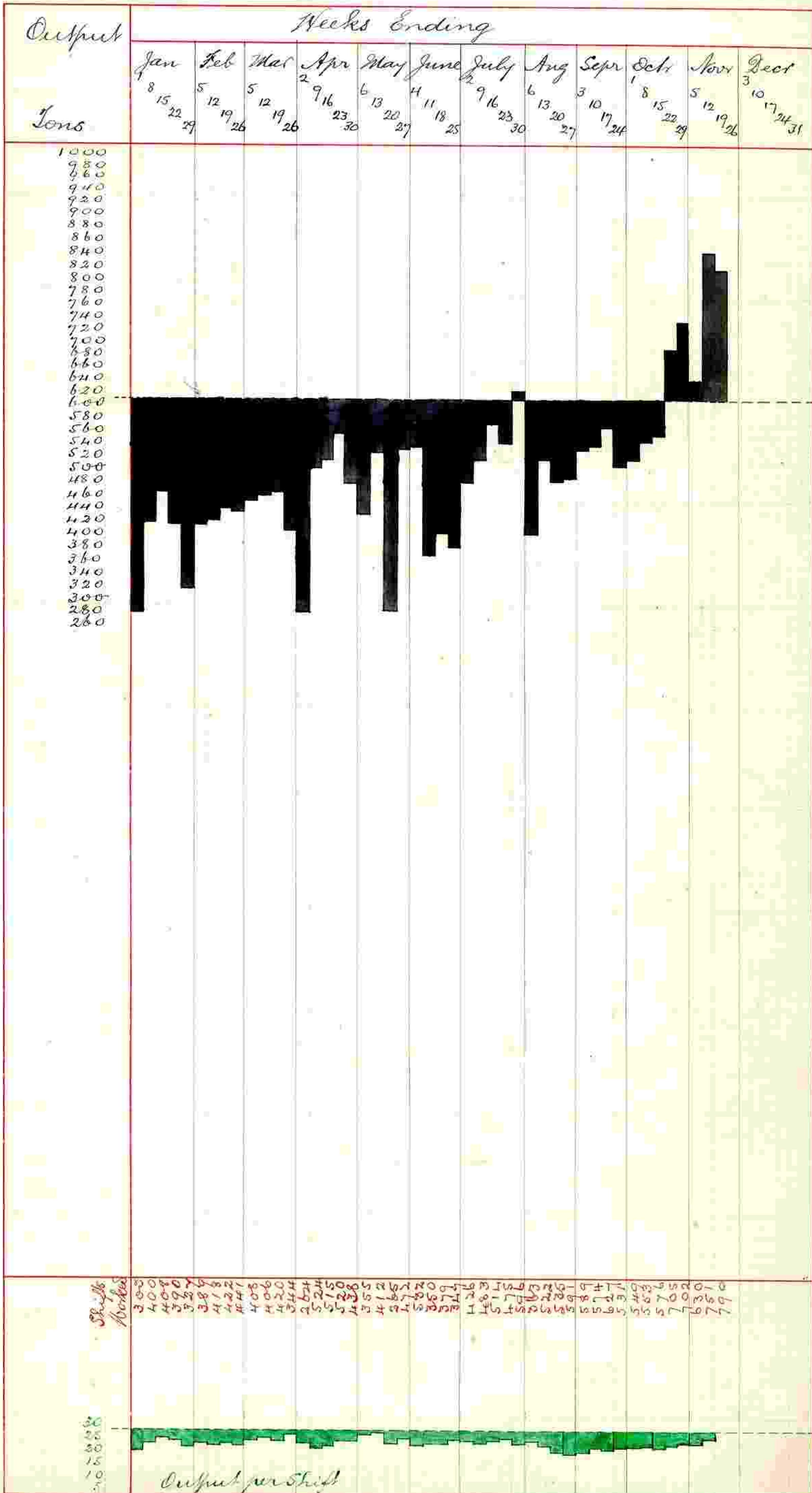
Birchenwood Seam.

Graphical Statement of Underground Wages and Timber costs, also Output Percentage of Birchenwood to Total Output



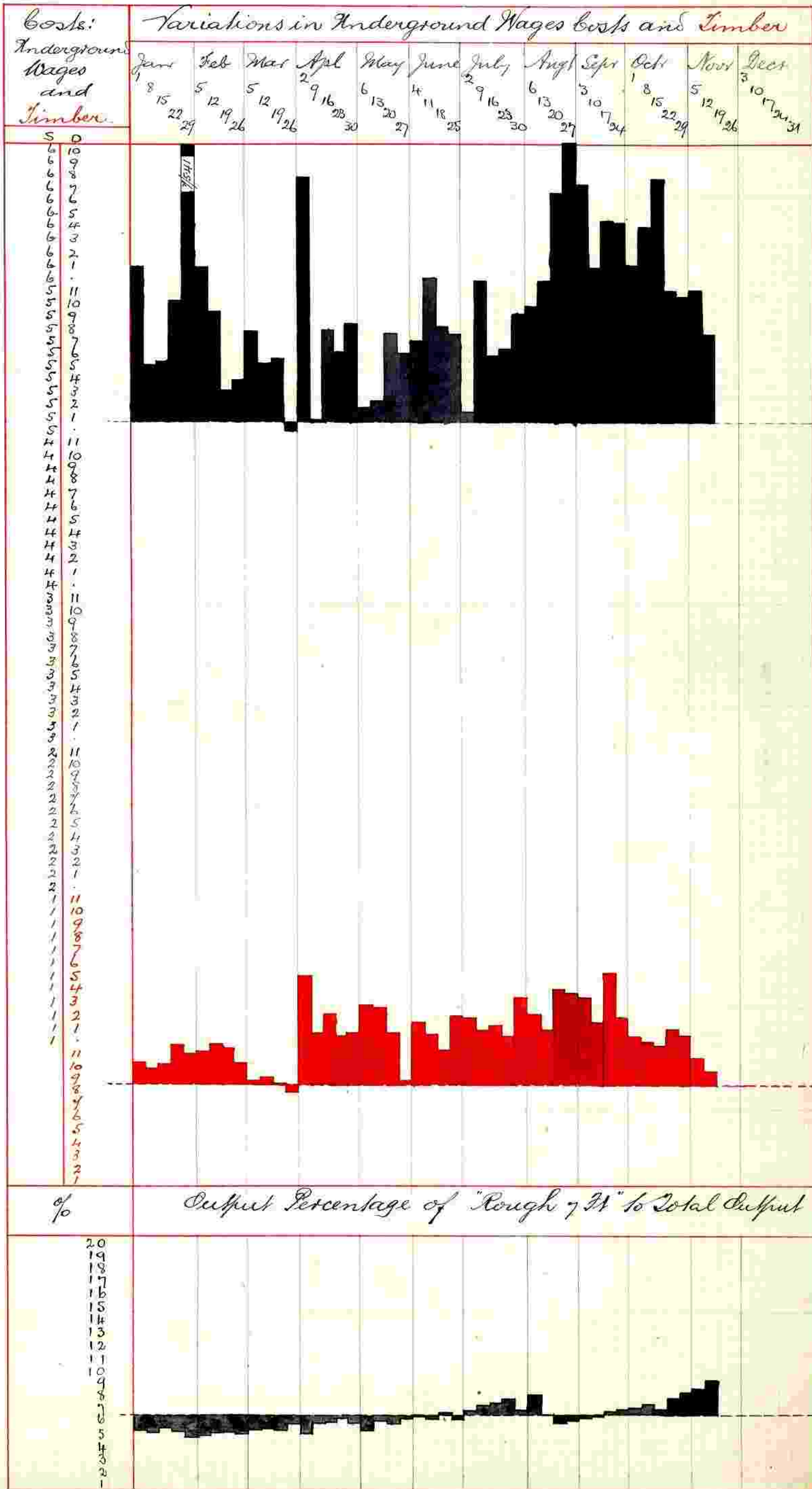
Rough Seven Feet Seam

Graphical Statement of Output, Shifts worked
and Output per Shift, each week during the
Year 1910.



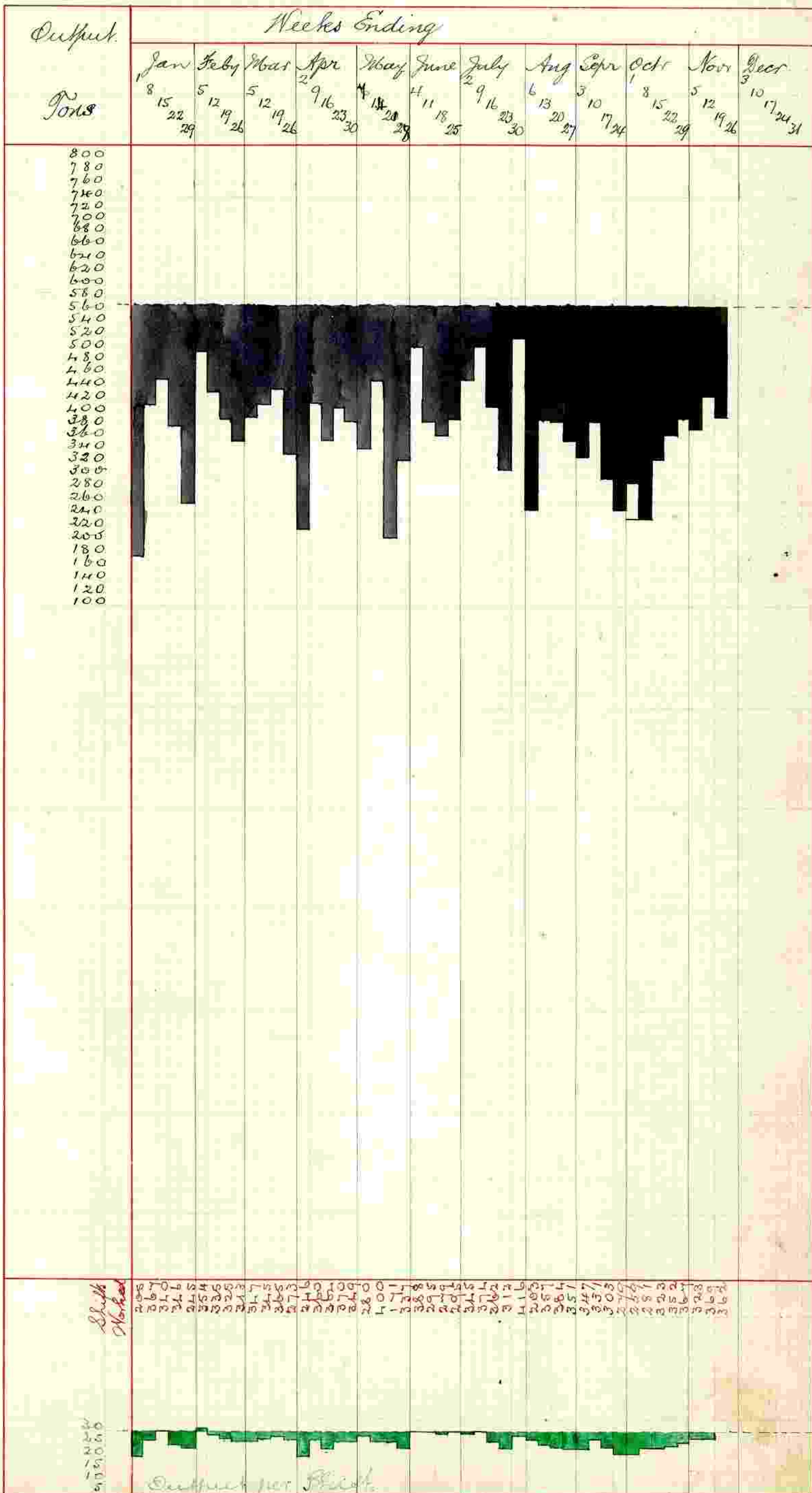
Rough Seven Feet Seam

Graphical Statement of Underground Wages and Timber costs, also Output Percentage of "Rough 7 Ft" to Total Output



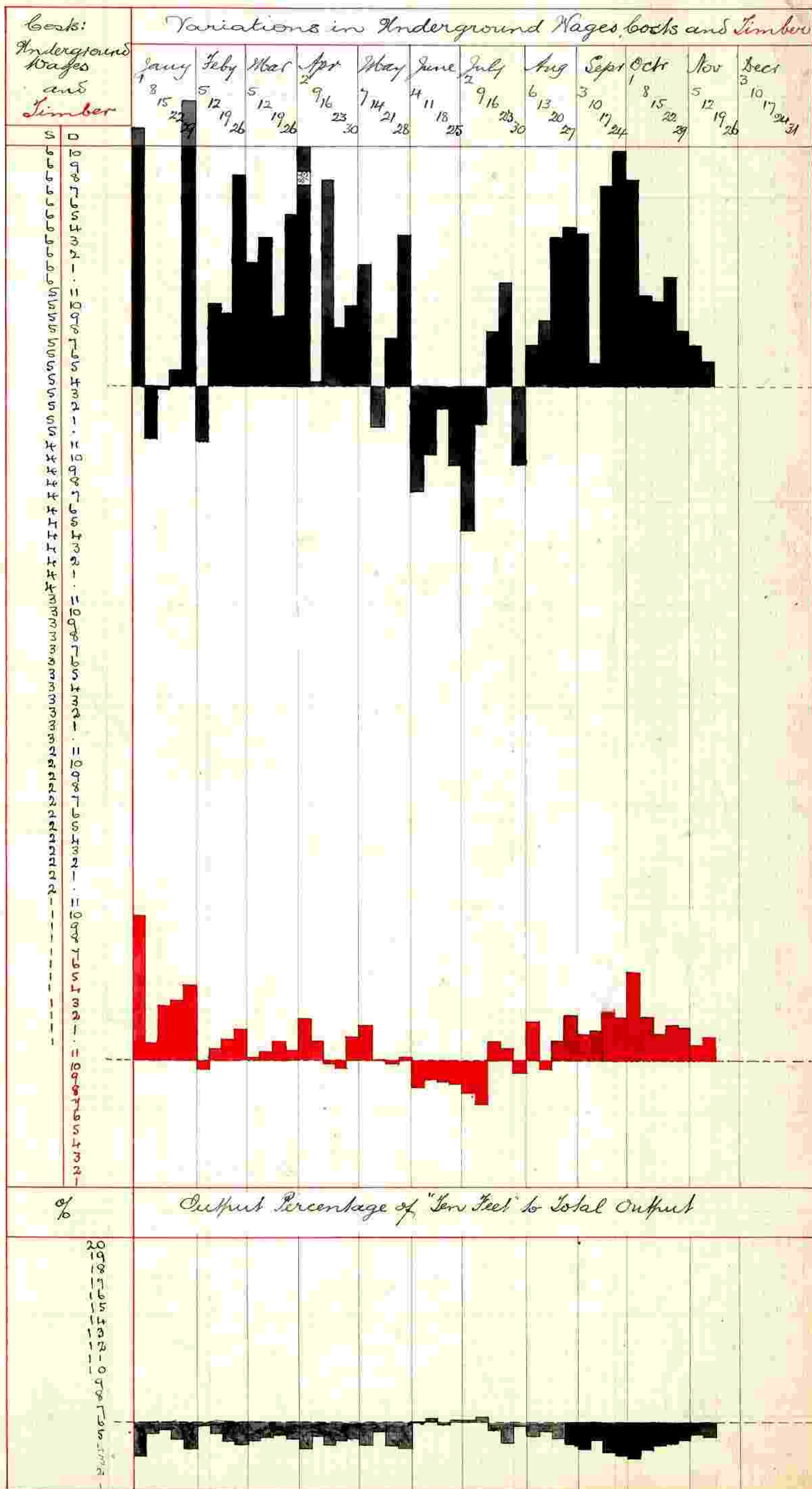
Ten Feet Seam

Graphical Statement of Output, Shifts worked,
and Output per shift, each week during the
Year 1910.



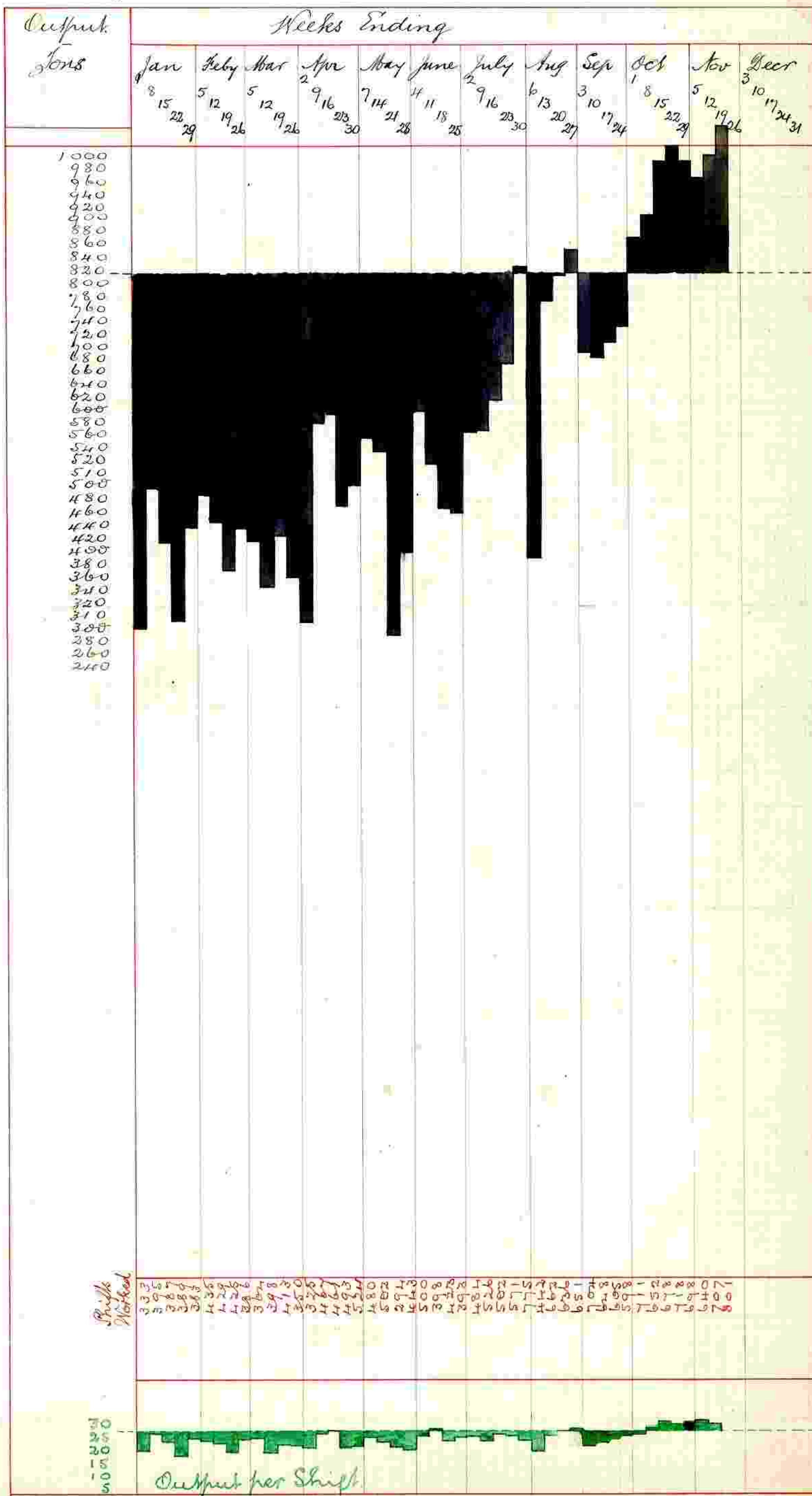
Ten Feet Seam

Graphical Statement of Underground Wages and Timber Costs, also Output Percentage of "Ten Feet" to Total Output



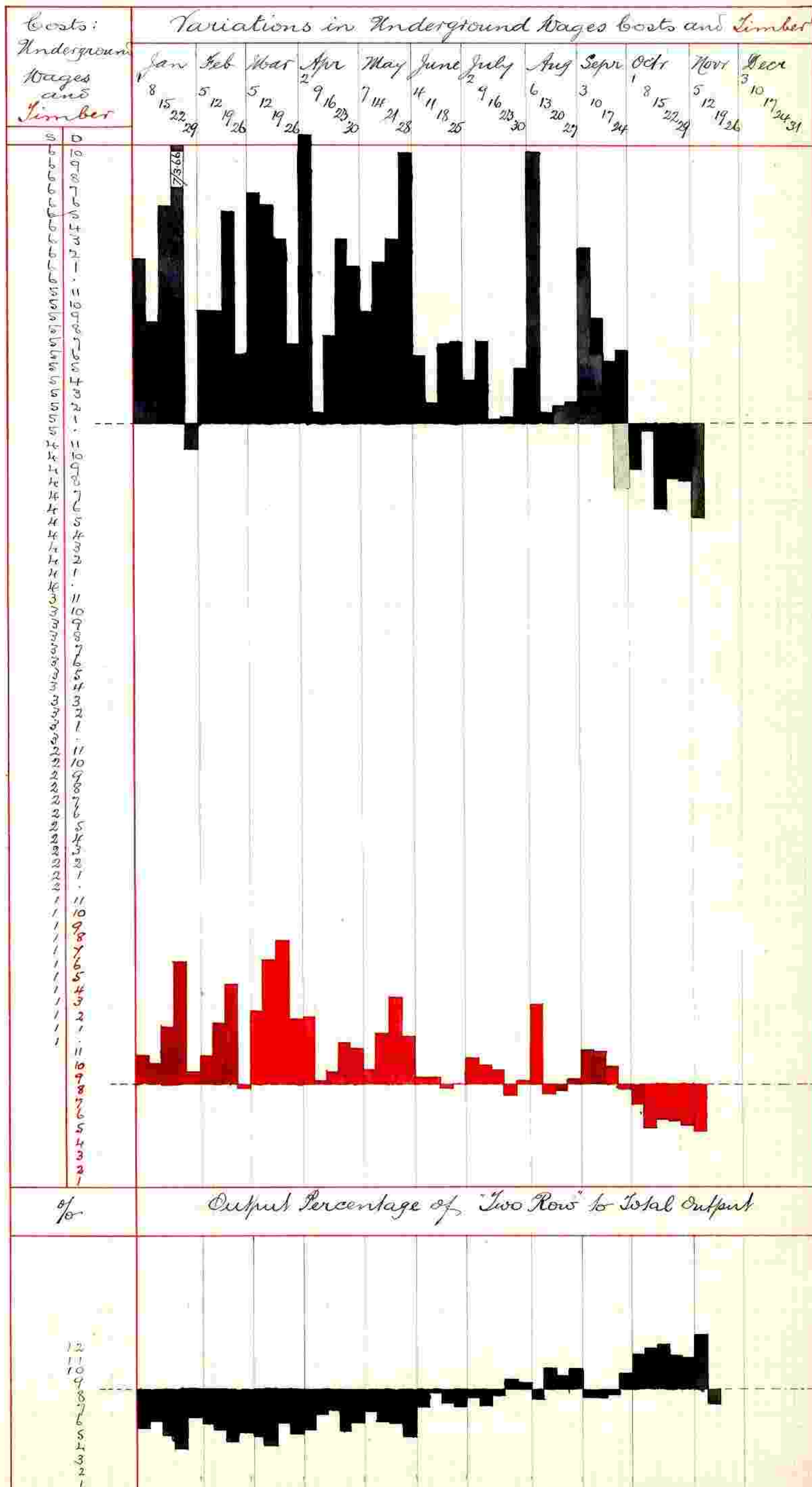
Two Row Seams

Graphical Statement of Output, Shifts worked
and Output per Shift, each week during the
year 1910.



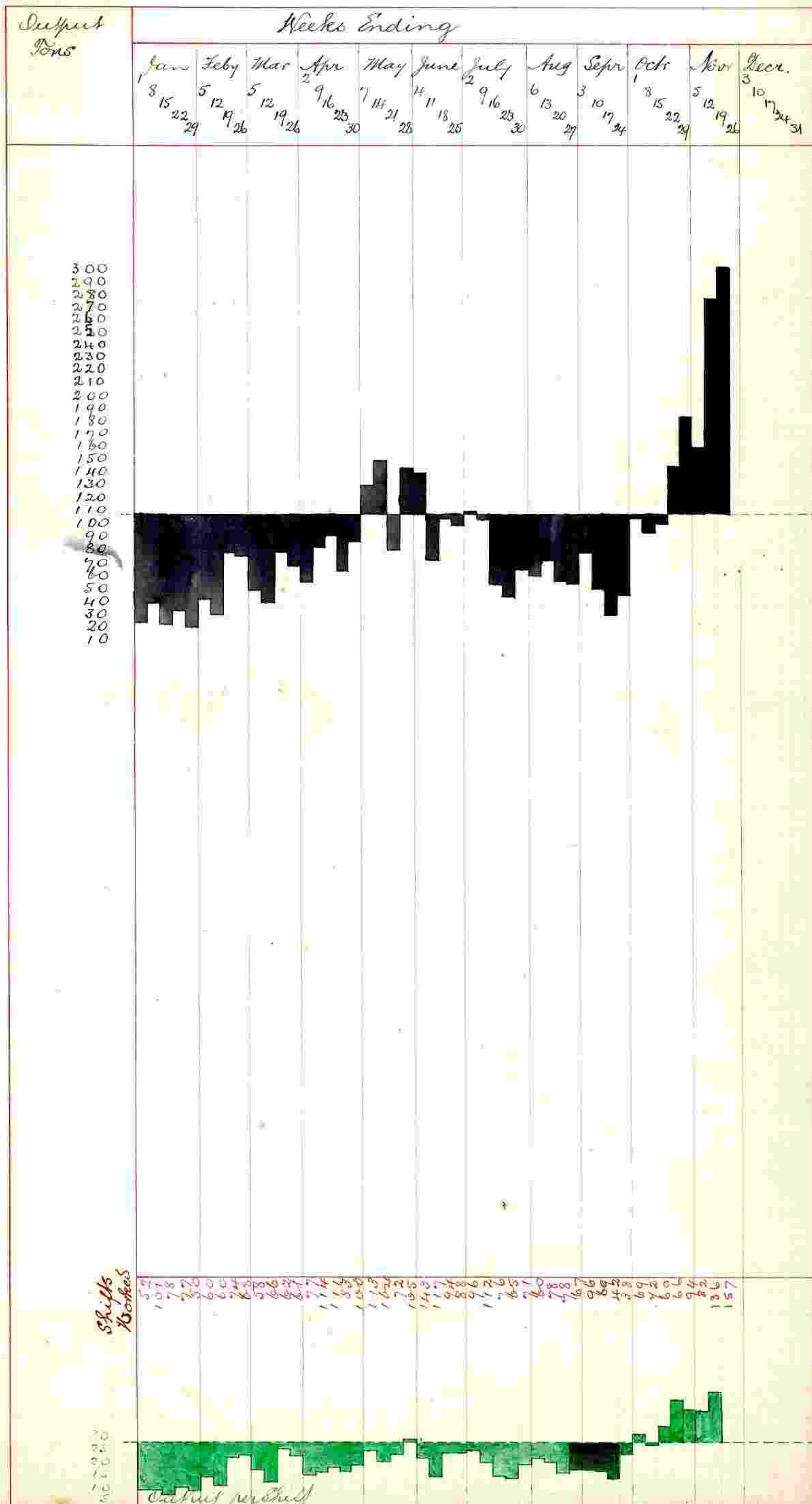
Two Row Seams

Graphical Statement of Underground Wages and Timber Costs also Output Percentage of "Two Rows" to Total Output.



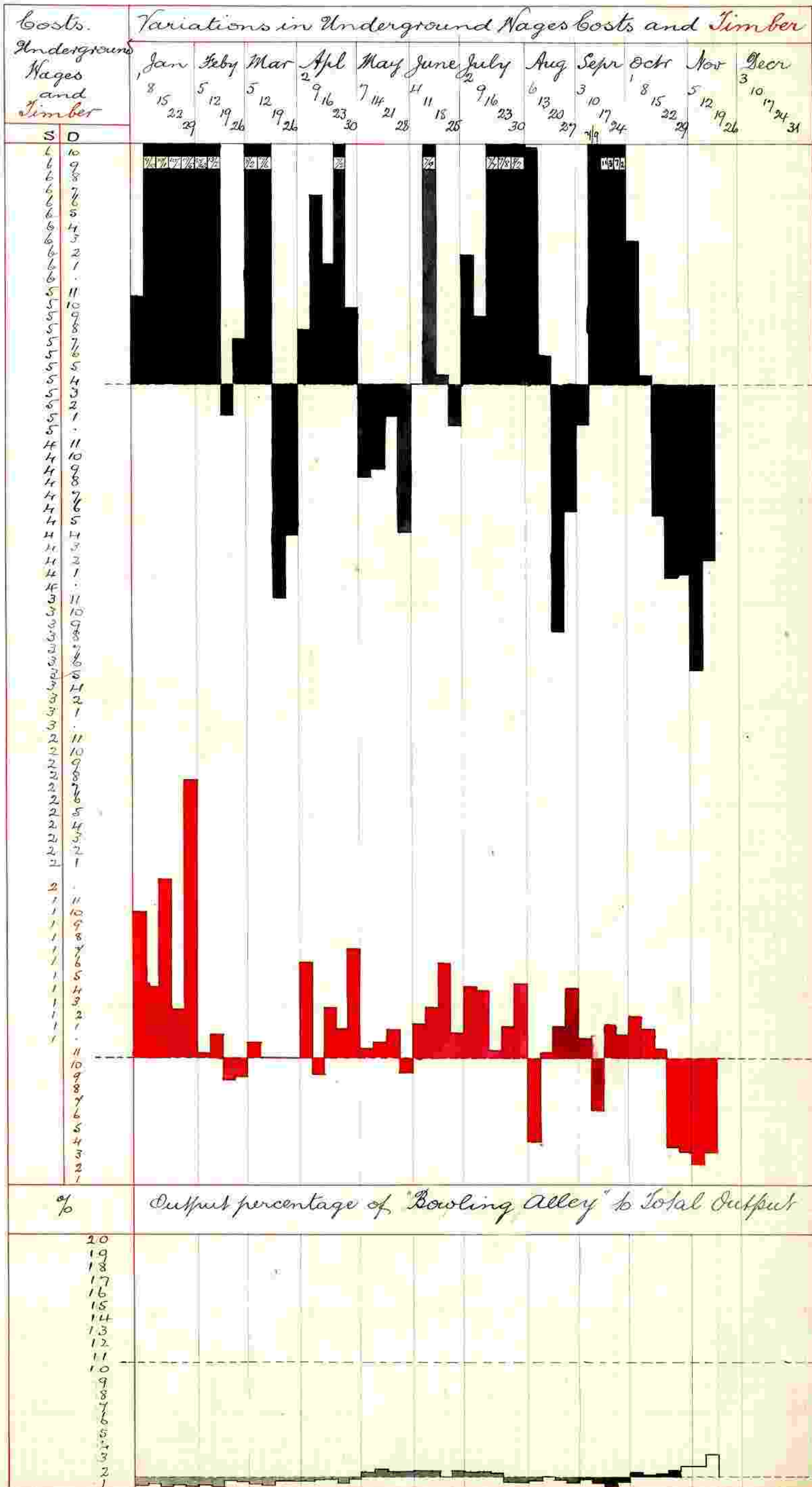
Bowling Alley Seam

Graphical Statement of Output, Shifts worked and Output per Shift each week during the Year 1910.



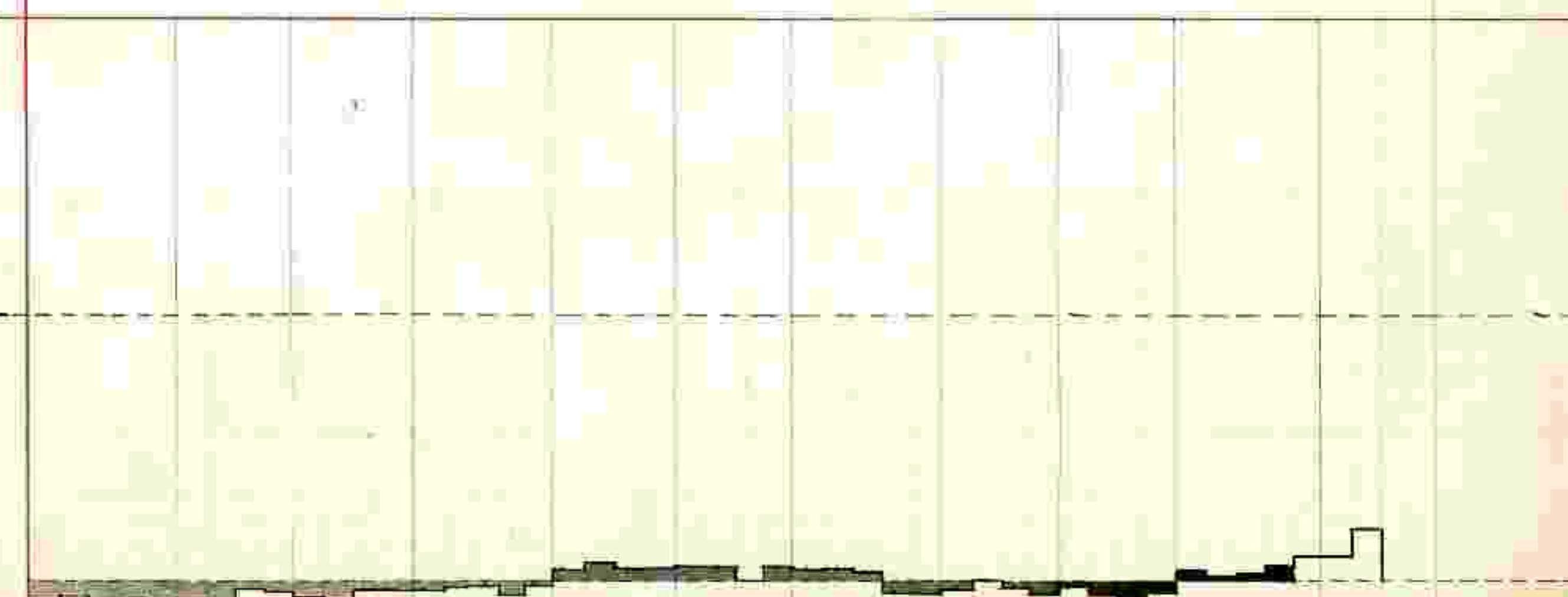
Bowling Alley Seam

Graphical Statement of Underground Wages and Timber Costs, also Output Percentage of Bowling Alley to Total Output.



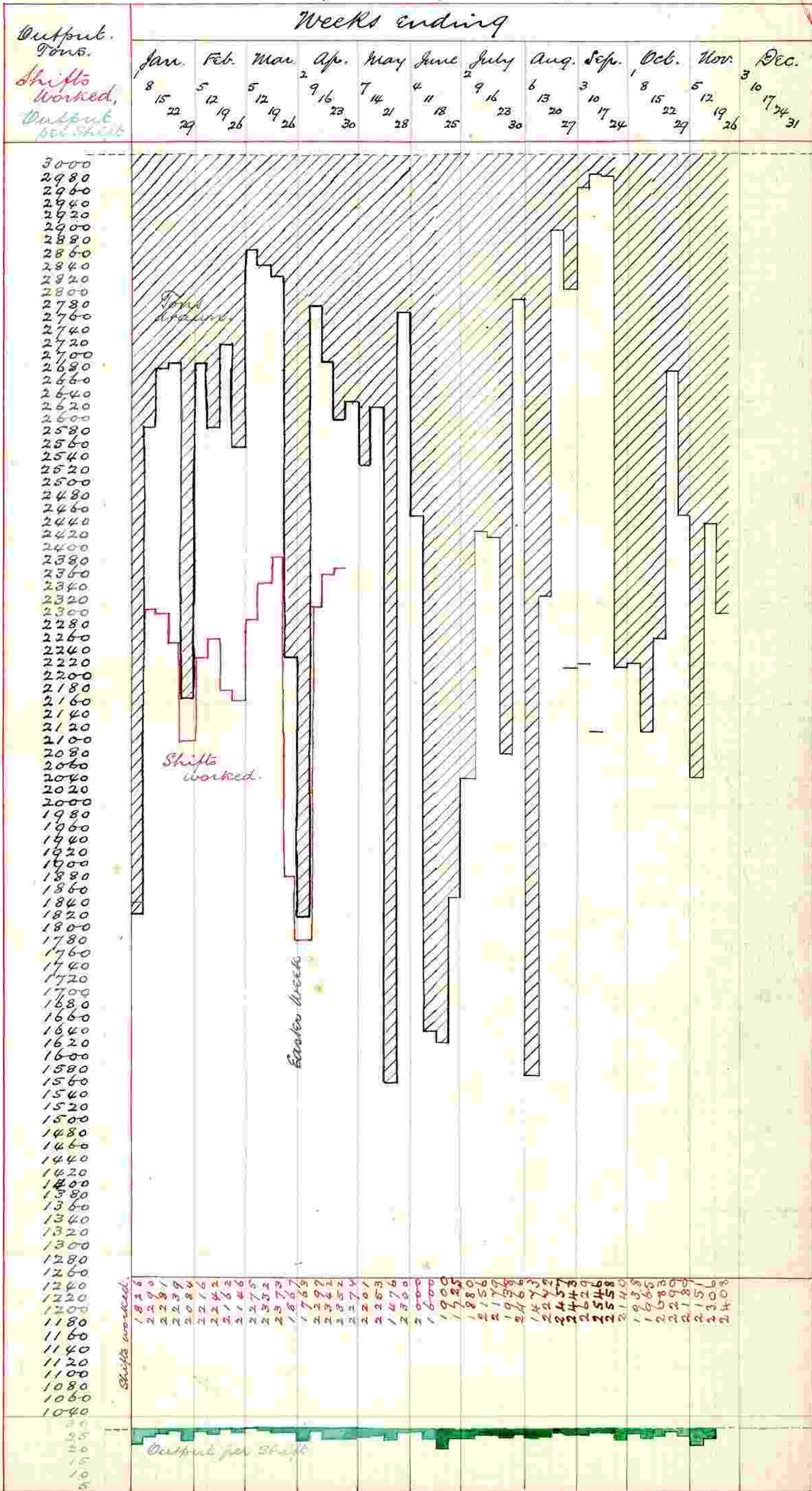
Output percentage of "Bowling Alley" to Total Output

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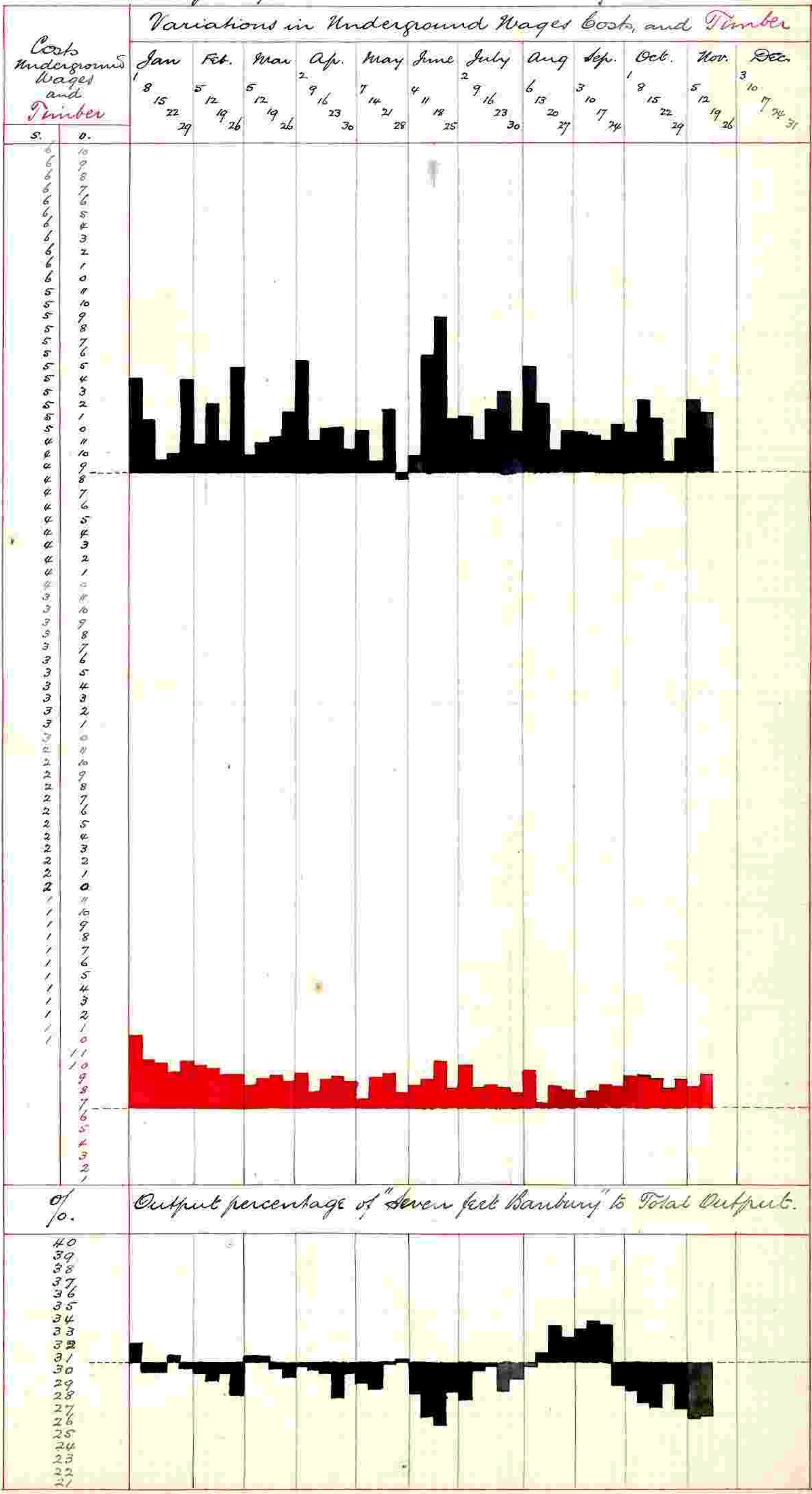
Seven Feet Banbury Seam.

Graphical Statement of Output, Shifts Worked, and Output per Shift, each Week during the Year 1910:-



Seven Feet Banbury Seam.

Graphical Statement of Underground Wages, and Timber Costs, also Output Percentage of Seven feet Banbury to Total Output.



Eight Feet Banbury Seam

Graphical Statement of Output, Shifts worked and Output per Shift, each week during the year 1910.

Output Tons.	Weeks ending											
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
	8 15 22 29	5 12 19 26	5 12 19 26	2 9 16 23 30	7 14 21 28	14 11 18 25	9 16 23 30	6 13 20 27	3 10 17 24	8 15 22 29	5 12 19 26	3 10 17 24 31
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760												
740												
720												
700												
680												
660												
640												
620												
600												
580												
560												
540												
520												
500												
480												
460												
440												
420												
400												
380												
360												
340												
320												
300												
280												
260												
240												
220												
200												
180												
160												
140												
120												
100												
80												
60												
40												
20												
0												

Shifts Worked

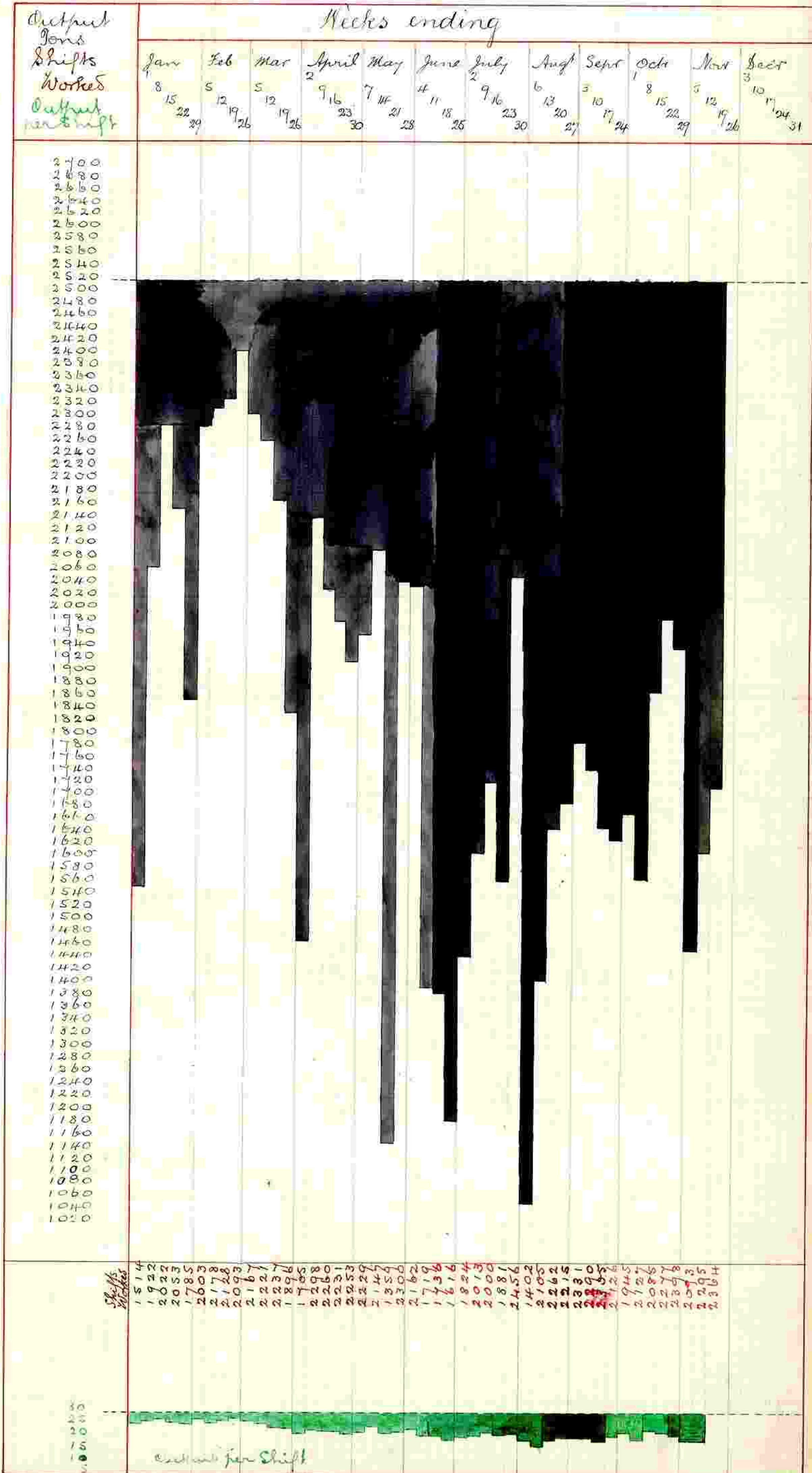
982	1372	1424	1397	1495	1442	1393	1351	1318	1261	870	1420	1364	1334	1358	1366	1279	823	1420	1300	1056	1259	1145	1227	1375	1343	1180	1541	884	1339	1547	1707	1797	1558	1730	1469	1544	1521	1511	1682	1570	1686	1891
-----	------	------	------	------	------	------	------	------	------	-----	------	------	------	------	------	------	-----	------	------	------	------	------	------	------	------	------	------	-----	------	------	------	------	------	------	------	------	------	------	------	------	------	------

Output per Shift



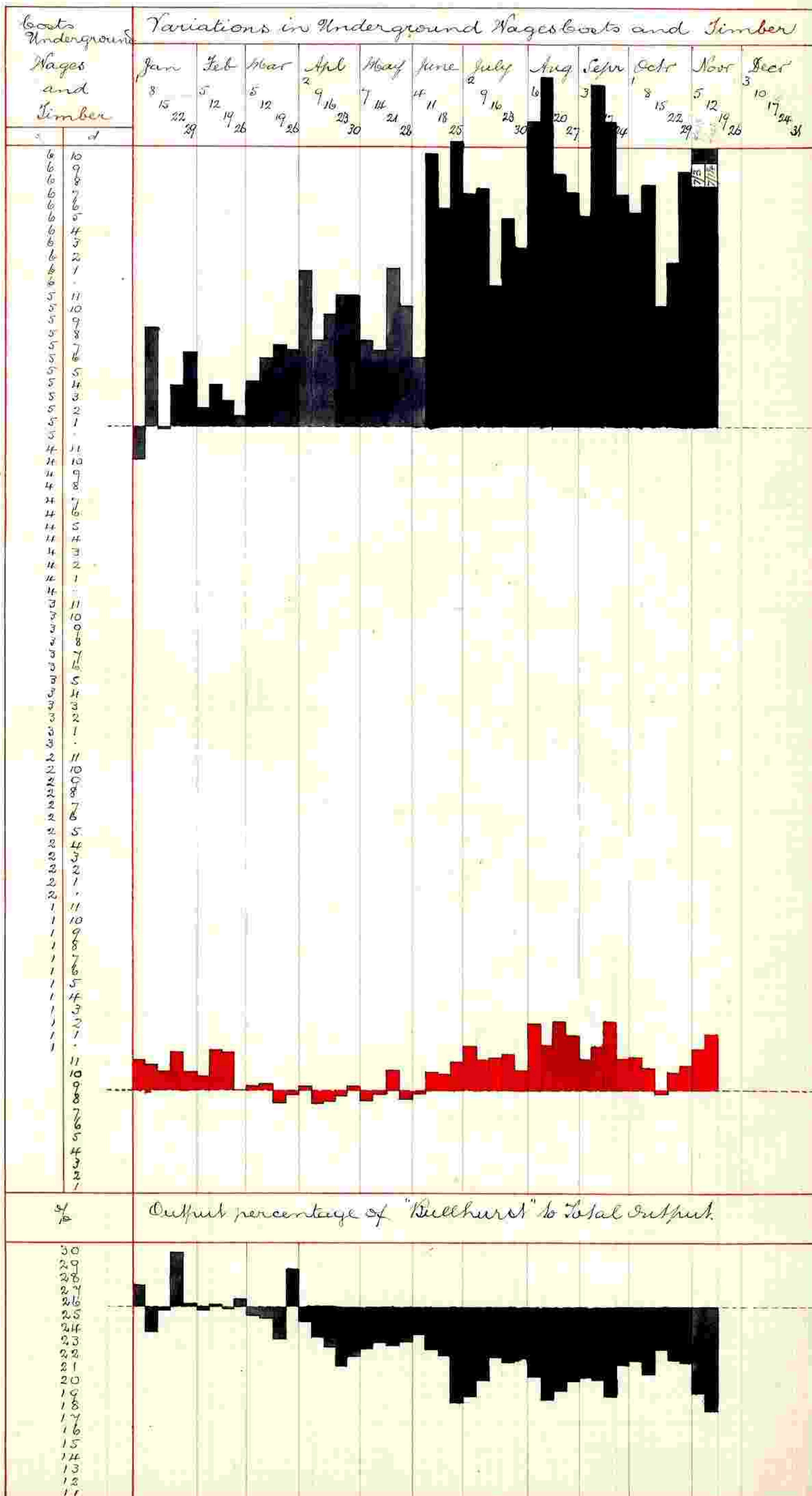
Bullhurst Seam

Graphical Statement of Output, Shifts worked and Output per Shift, each Week during the year 1910.



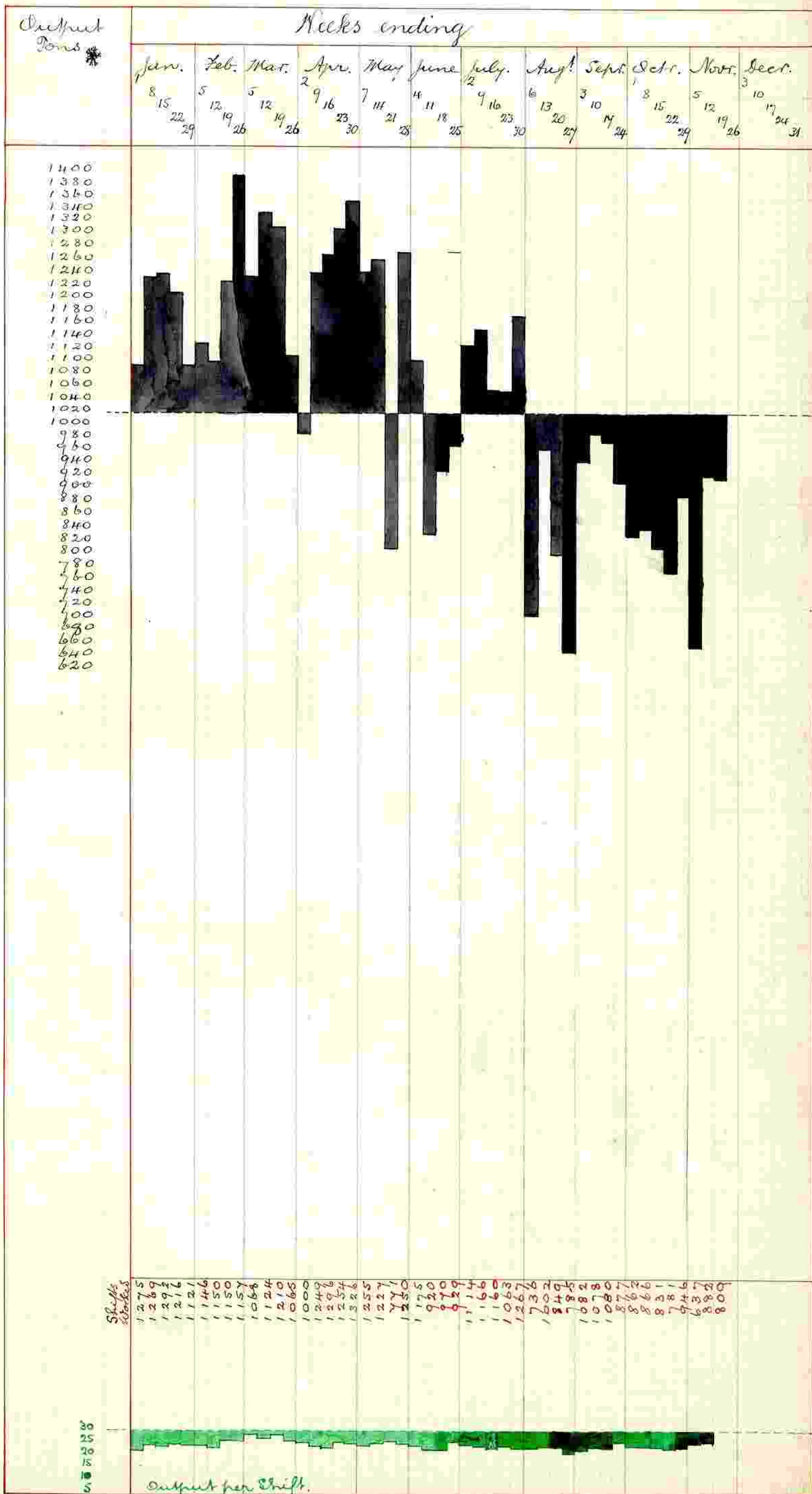
Bullhurst Seam

Graphical Statement of Underground Wages and Timber costs also Output Percentage of Bullhurst to Total Output.



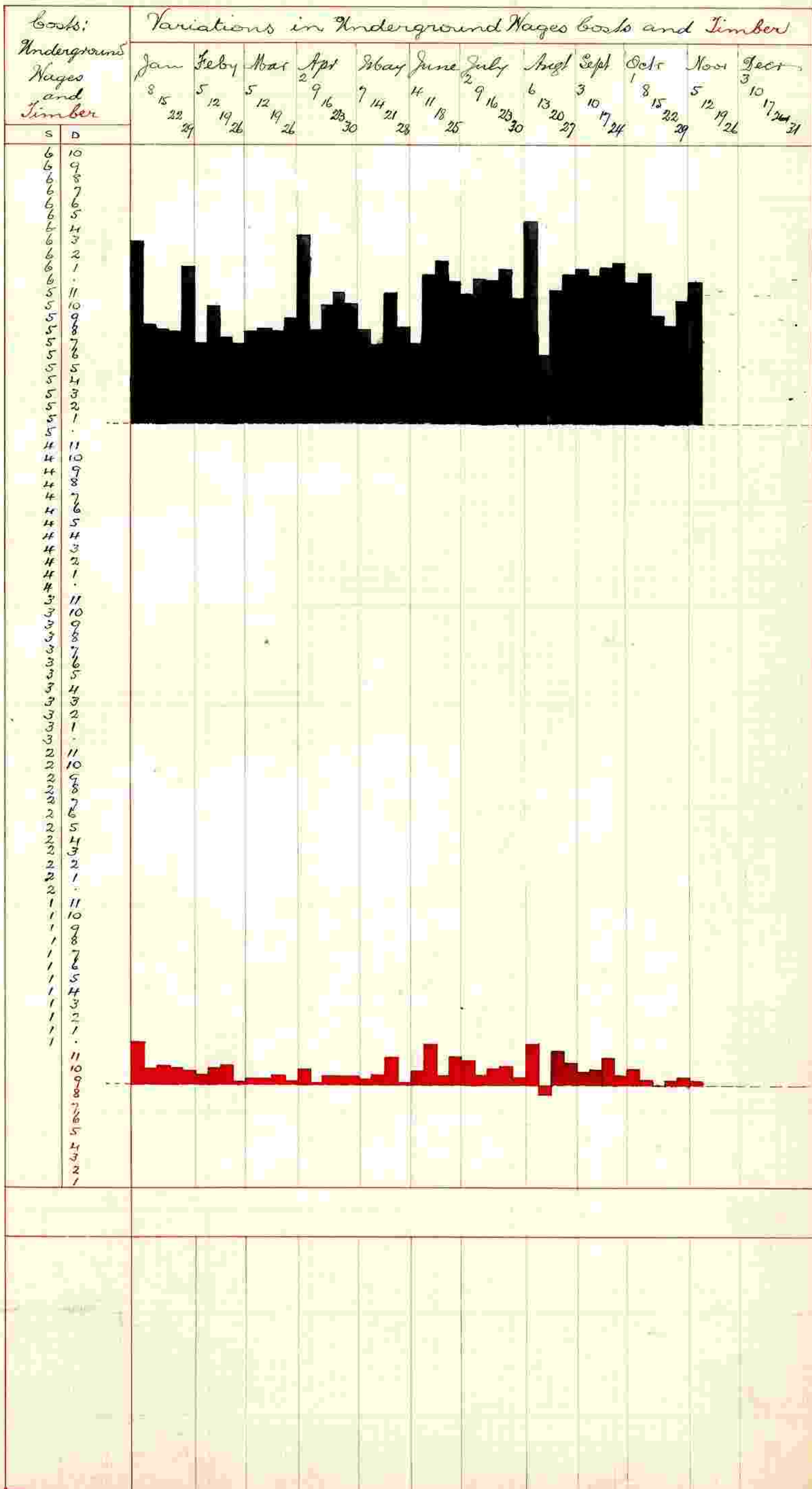
Winpenny Seam

Graphical Statement of Output, Shifts worked
and Output per Shift, each Week during the
year 1910.



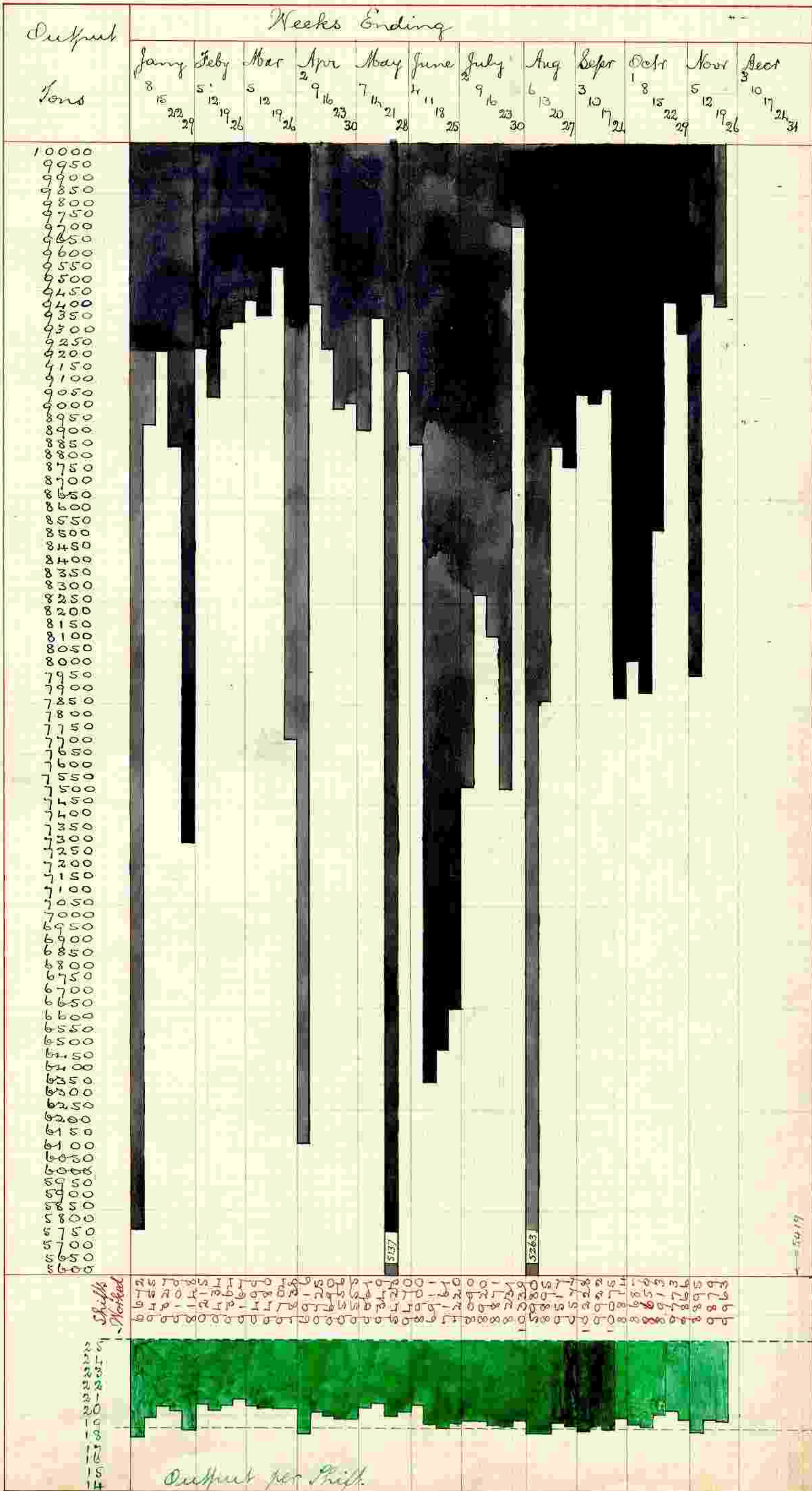
Total Amounts

Graphical Statement of Underground Wages and Timber Costs . 1910



Total Output

Graphical Statement of Output, Shifts worked and Output per shift each week during the Year 1910.



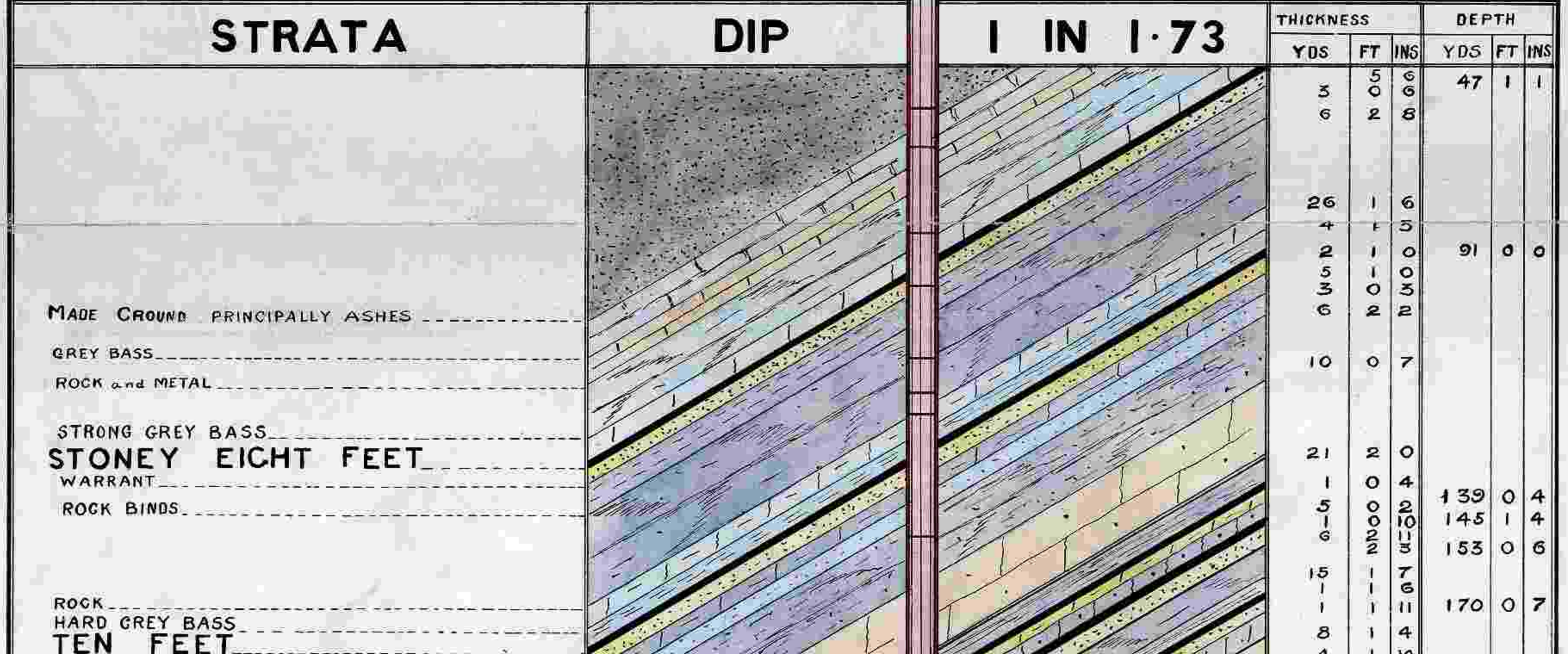
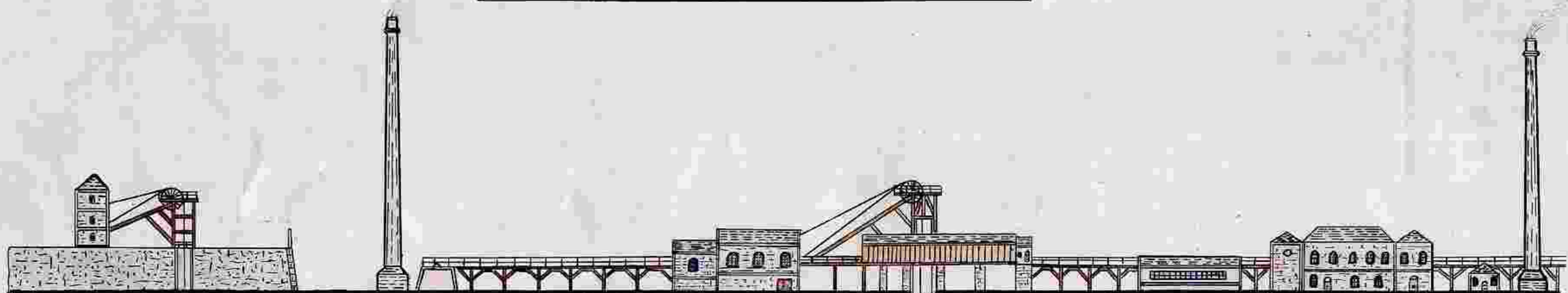
— SECTION —
— OF —
— N^o 18 SHAFT —

I

Section of the Strata

sunk through in

N^o 18 SHAFT



MADE GROUND PRINCIPALLY ASHES

GREY BASS

ROCK and METAL

STRONG GREY BASS

STONEY EIGHT FEET

WARRANT

ROCK BINDS

ROCK

HARD GREY BASS

TEN FEET

WARRANT

ROCK BINDS BLUE

Do Do RED

ROCK RED and STREAKED

SOFT BLUE METAL

TOP TWO ROW

MILD CLUNCH

BOTTOM TWO ROW

YARD COAL

ROCK BINDS

BOWLING ALLEY

WARRANT

ROCK BINDS

MARL YELLOW

CLOD WITH IRONSTONE BANDS

ROCK

METAL WITH STONE BANDS

COAL

CLUNCH

COAL

CLOD

COAL

ROCK BINDS WITH METAL BANDS

ROCK

SEVEN FEET BANBURY

WARRANT

ROCK VERY JOINTED

METAL WITH STONE BANDS

DARK BASS

EIGHT FEET BANBURY

HARD WARRANT

ROCK BINDS

METAL

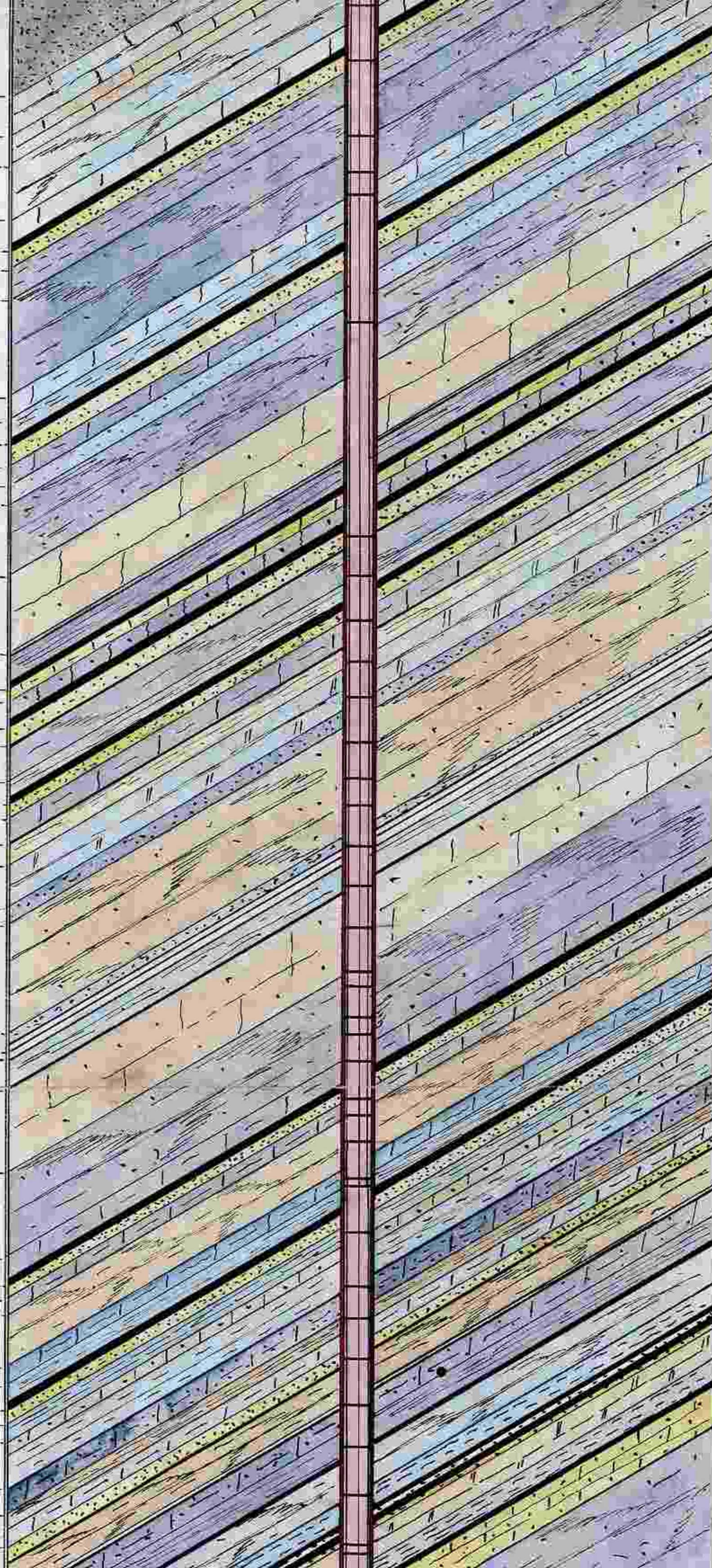
BLACK BASS

ROCK BINDS and STONE

METAL

BLACK BASS

WARRANT



2	1	0	91	0	0
5	1	0			
3	0	0			
6	2	2			
10	0	7			
21	2	0			
1	0	4	139	0	4
5	0	2	145	1	4
6	0	10	153	0	6
15	1	7			
1	1	11	170	0	7
8	1	4			
4	1	10			
11	0	4			
3	0	3			
26	2	8	226	0	7
1	0	0			
9	0	7			
12	2	11			
26	2	11	279	0	9
4	1	8			
11	1	4			
5	1	5	306	1	7
2	3	3			
5	2	11			
10	0	4			
5	1	4			
9	1	6			
1	1	8			
9	1	11			
9	2	10	364	1	1
1	0	2			
4	0	7			
3	0	0	369	0	8
3	0	0	373	1	9
15	1	9			
2	2	0	391	1	0

SOFT BLUE METAL

TOP TWO ROW

MILD CLUNCH

BOTTOM TWO ROW

YARD COAL

ROCK BINDS

BOWLING ALLEY

WARRANT

ROCK BINDS

MARL YELLOW

CLOD WITH IRONSTONE BANDS

ROCK

METAL WITH STONE BANDS

COAL

CLUNCH

COAL

CLOD

COAL

ROCK BINDS WITH METAL BANDS

ROCK

SEVEN FEET BANBURY

WARRANT

ROCK VERY JOINTED

METAL WITH STONE BANDS

DARK BASS

EIGHT FEET BANBURY

HARD WARRANT

ROCK BINDS

METAL

BLACK BASS

ROCK BINDS AND STONE

METAL

BLACK BASS

WARRANT

METAL

ROCK WITH IRONSTONE NODULES

COAL (JOHNNY GALLEY)

BASS

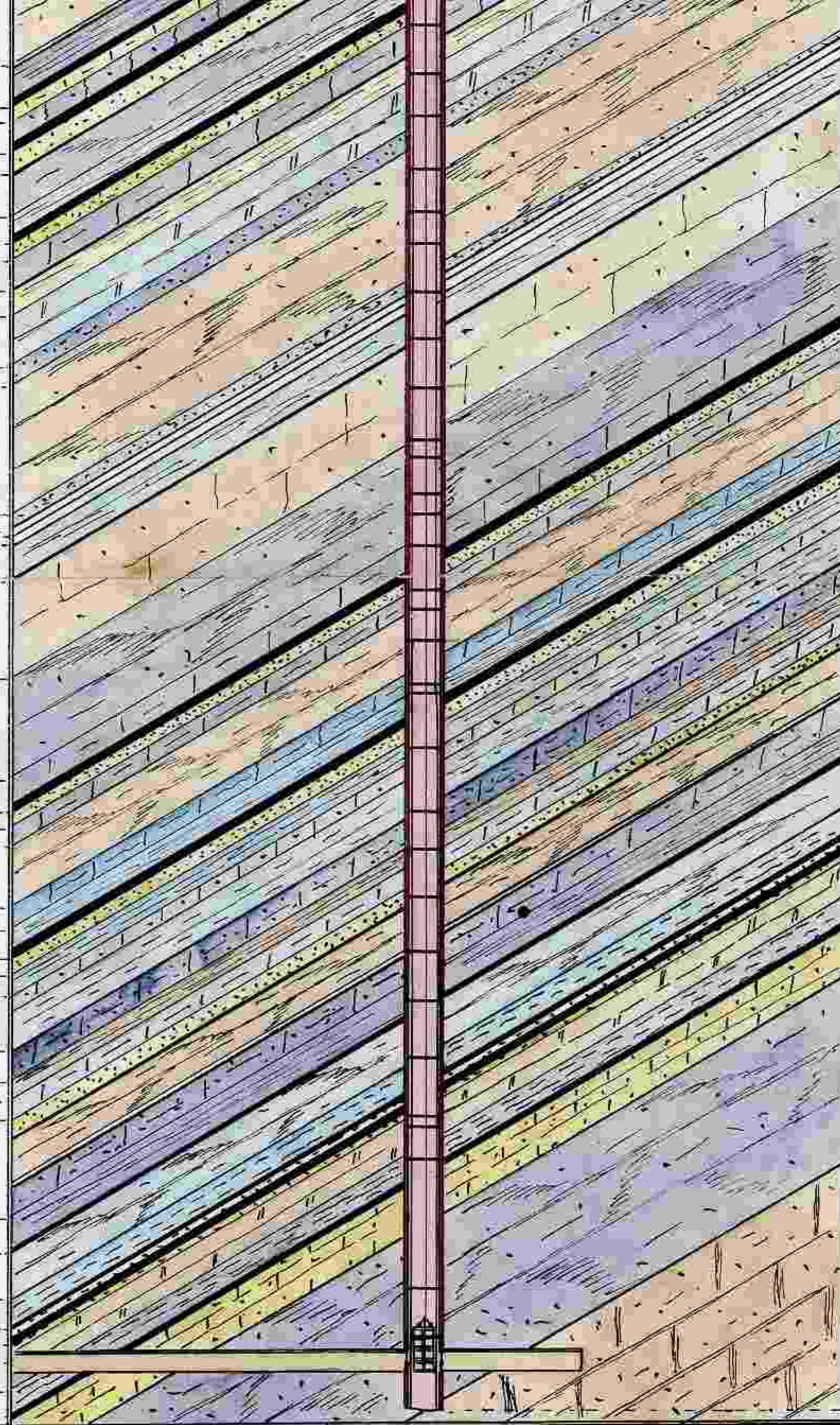
RIDER COAL

BULLHURST

WARRANT

ROCK BINDS

WINPENNY



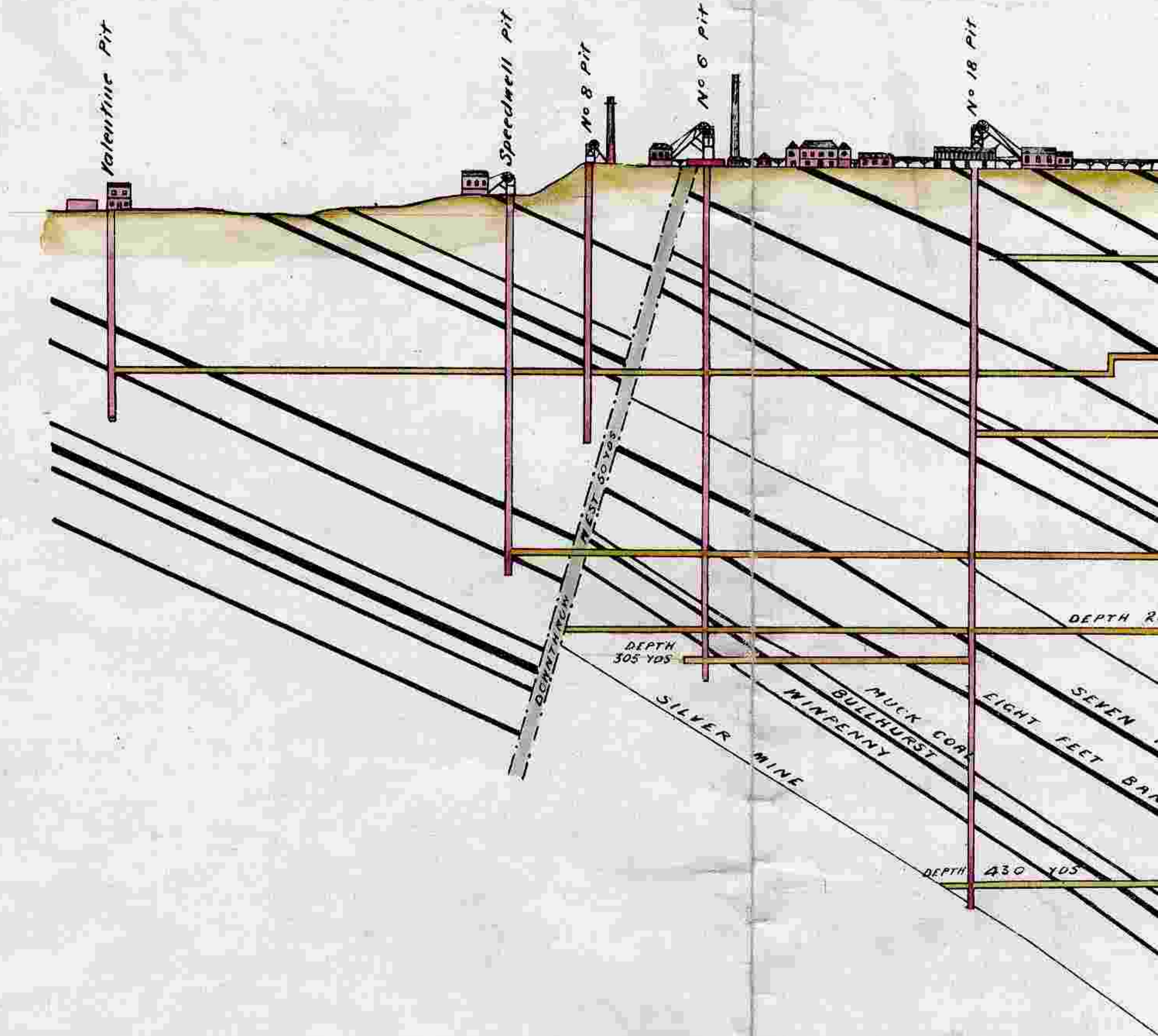
26	2	8	226	0	7
1	0	0			
9	0	1			
12	2	11			
2	2	11	279	0	9
4	1	8			
11	1	4			
5	1	5	306	1	7
2	3	3			
5	2	11			
10	0	4			
5	1	4			
9	1	6			
1	0	8			
9	1	11			
9	2	10	364	1	1
1	0	2			
4	0	7	369	0	8
1	0	0	373	1	9
3	0	4			
15	2	9	391	1	0
2	0	0			
15	2	9			
MAIN INSET			430	0	0
TOTAL DEPTH			440	0	5

SCALE 30 YARDS TO ONE INCH

SECTION OF MINES

2

SECTION



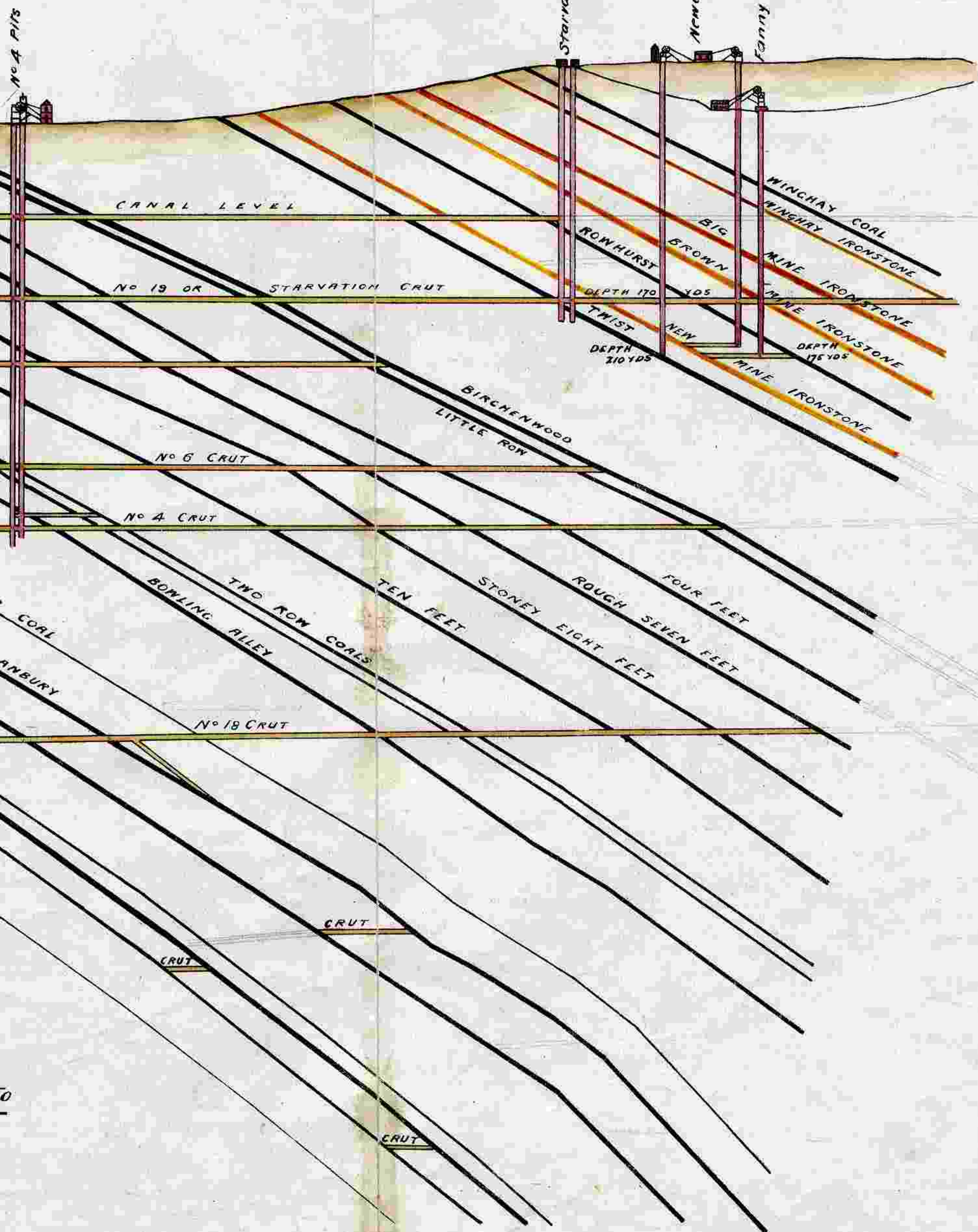
Scale

SECTION OF MINES



Scale $\frac{1}{2500}$

OF MINES

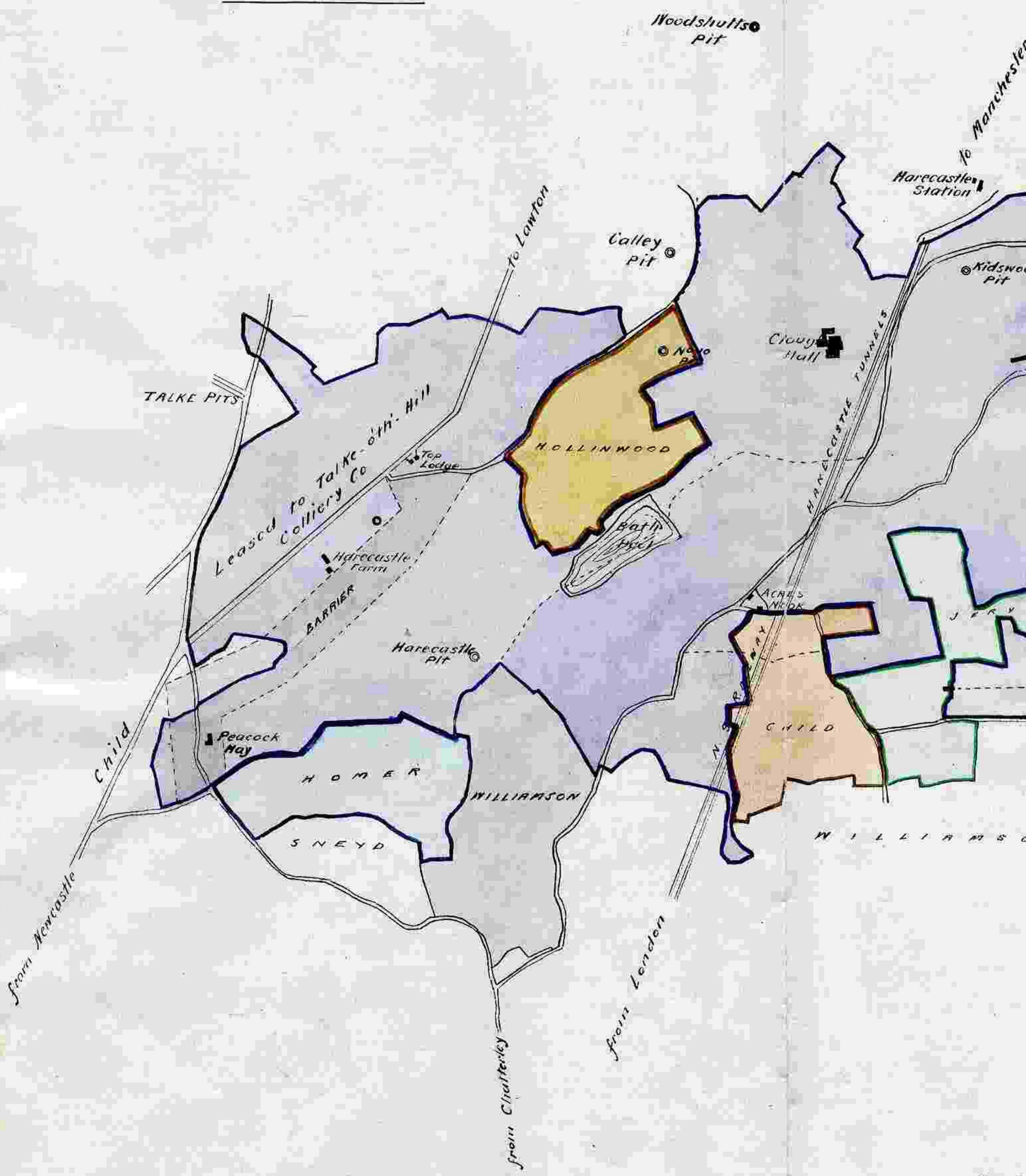


ESTATE PLAN

3

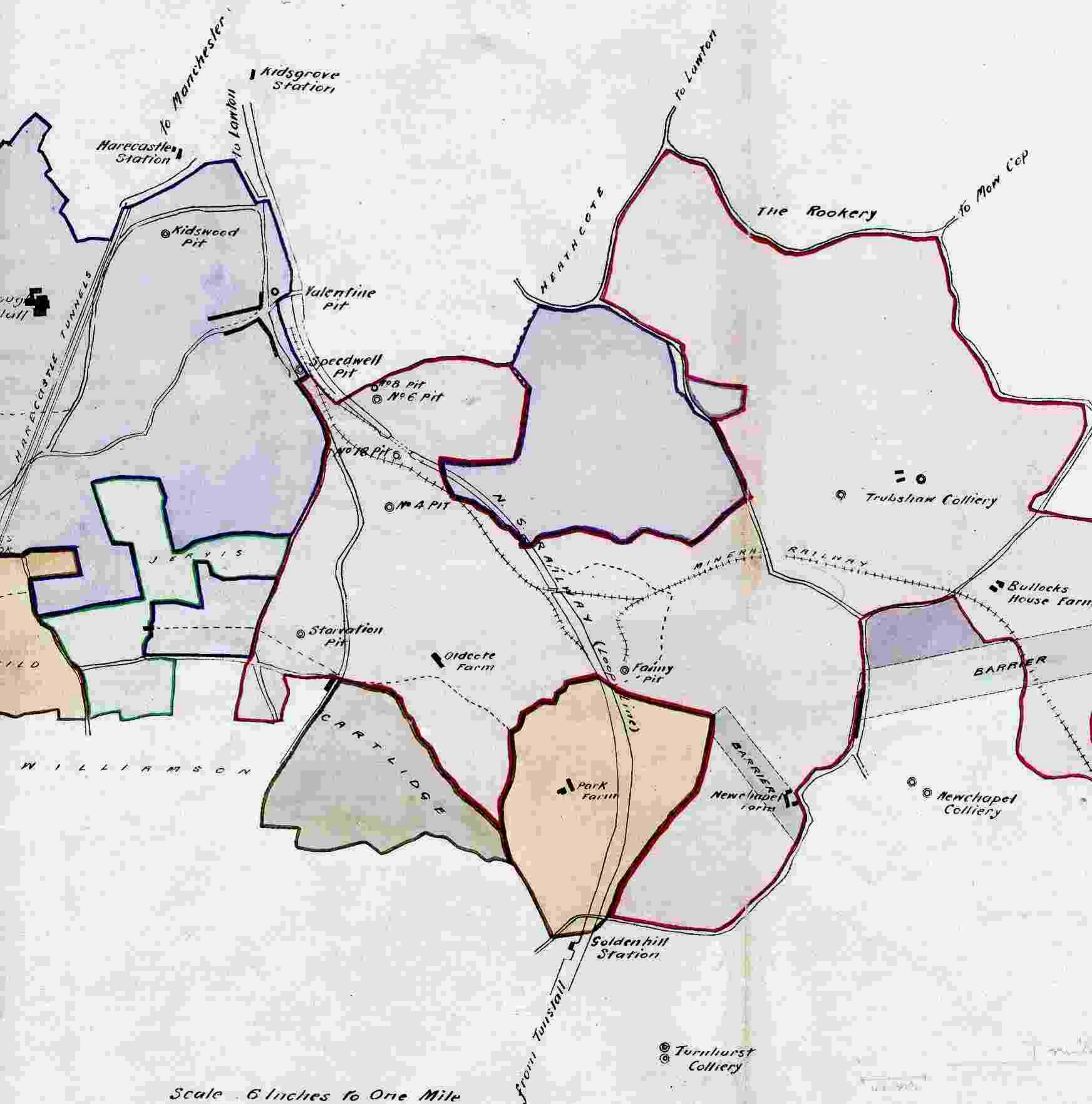


ONE ACRE



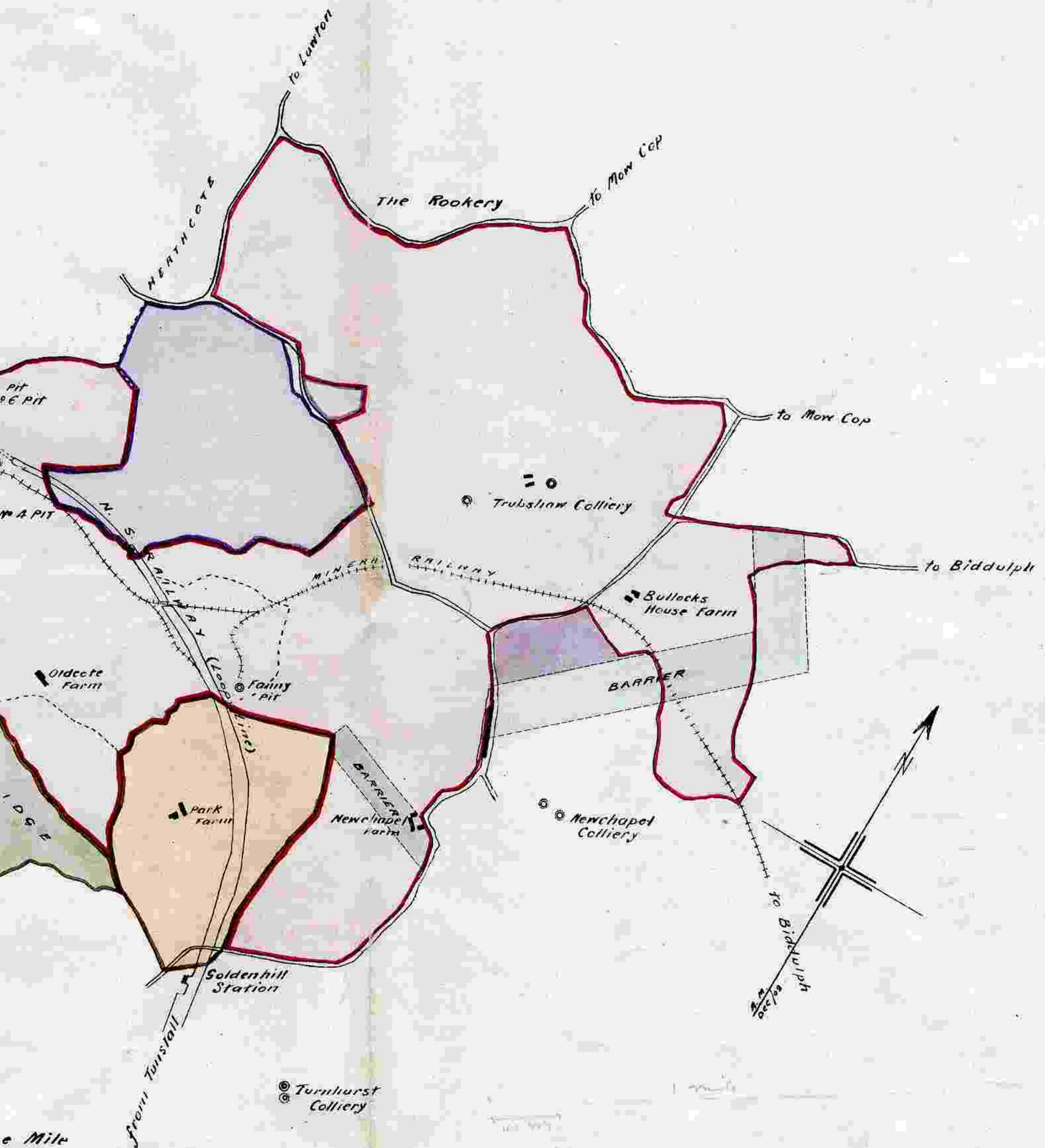
Scale

ESTATE PLAN



Scale 6 Inches to One Mile

PLAN



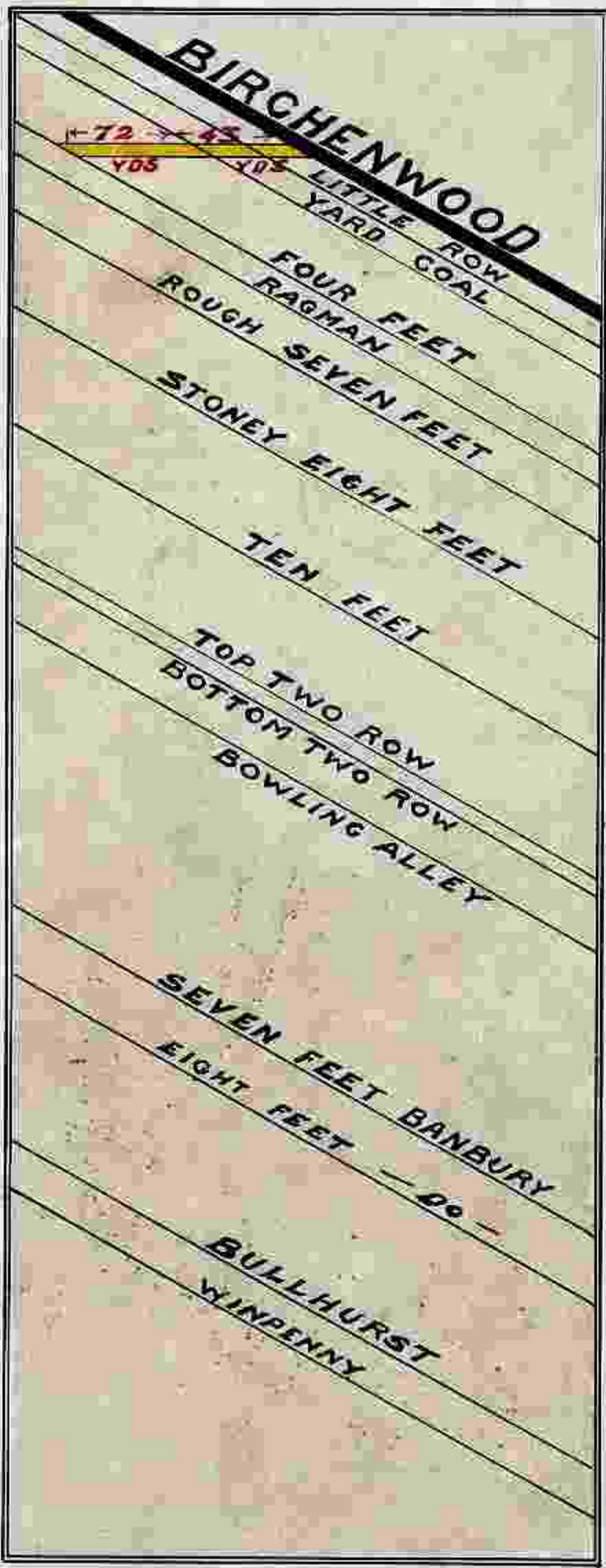
1 Mile

100 Yds

HOUSE

BIRCHENWOOD SEAM

8

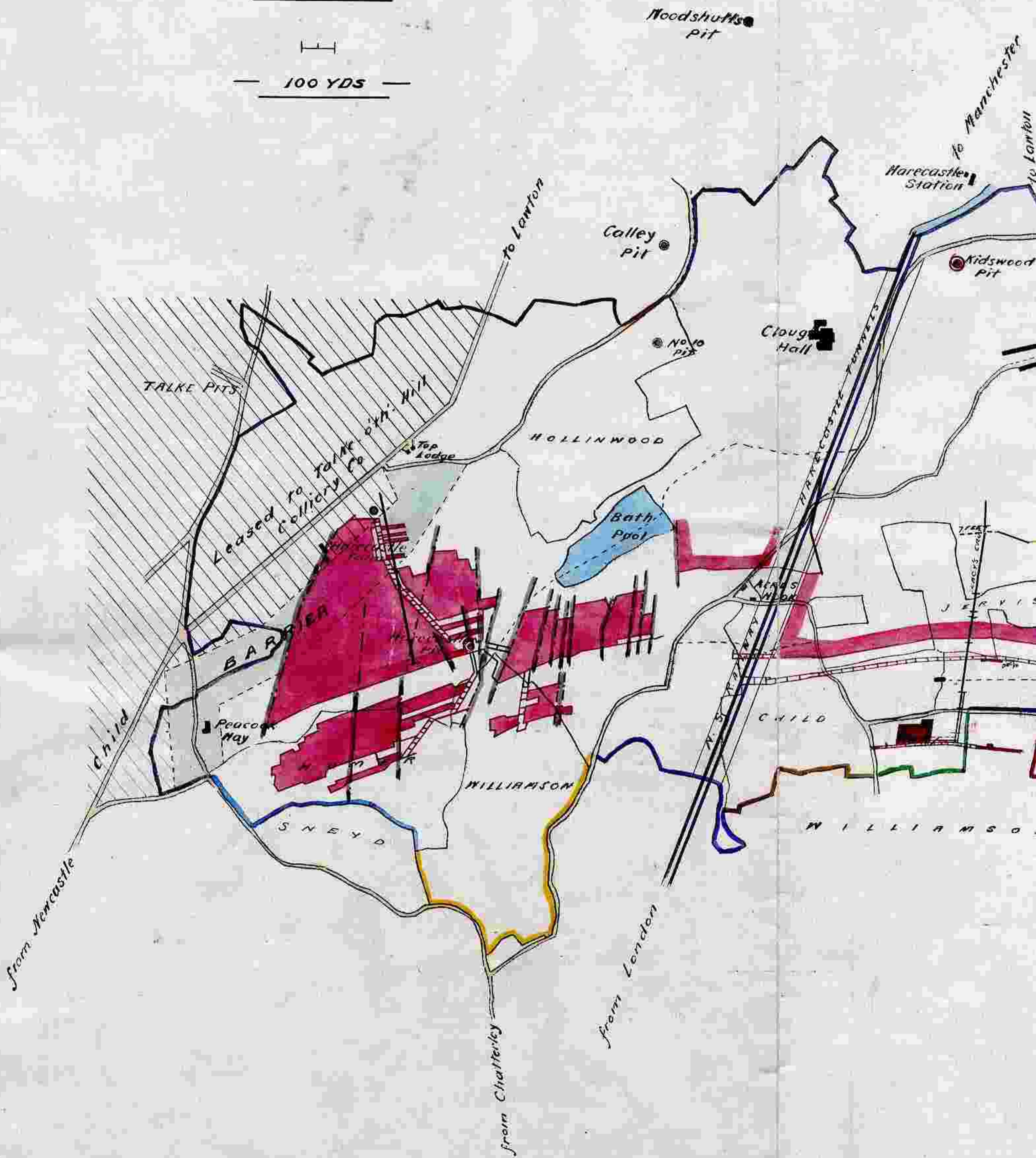


BIRCHEN

— ONE ACRE. —

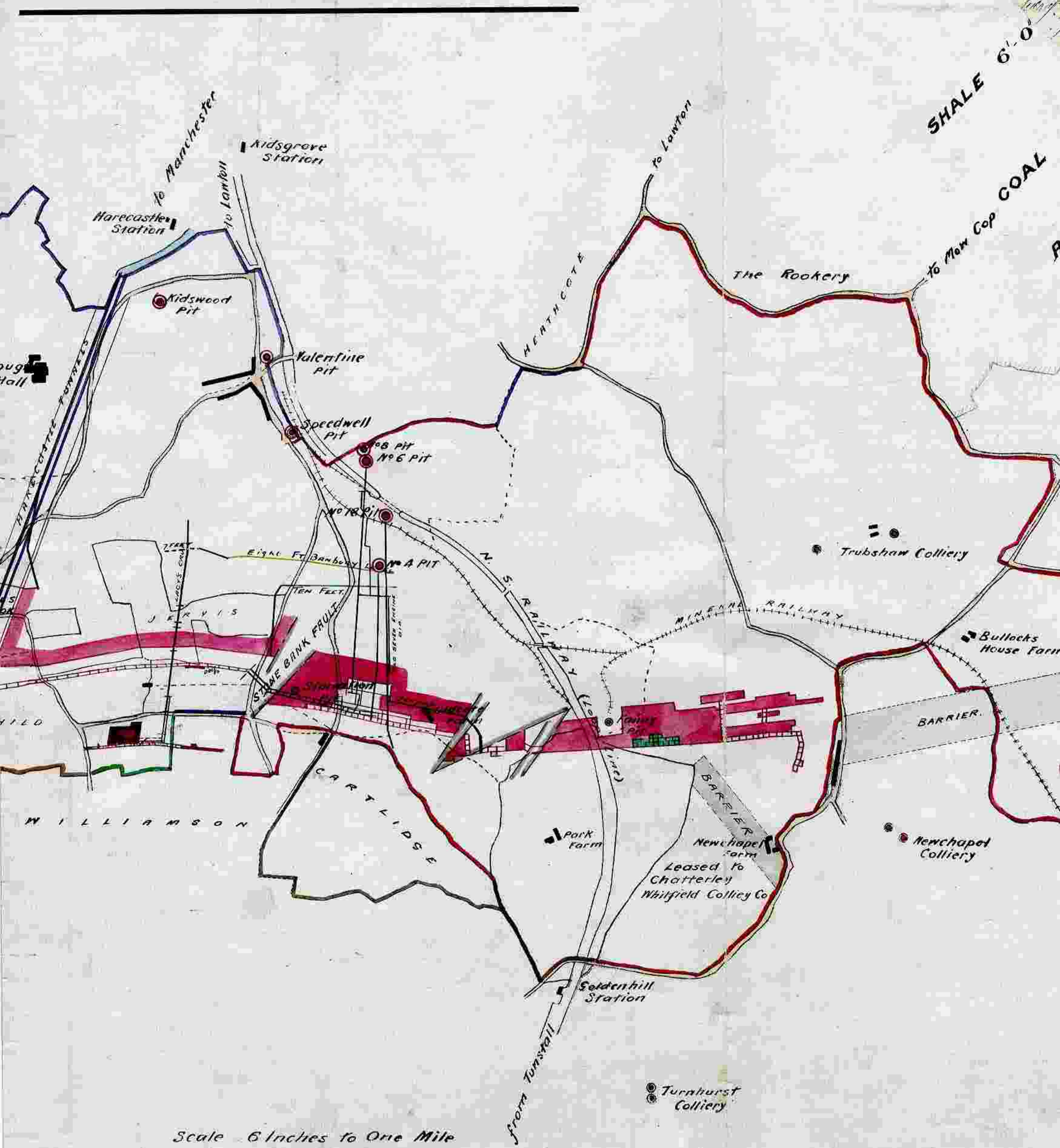


— 100 YDS —

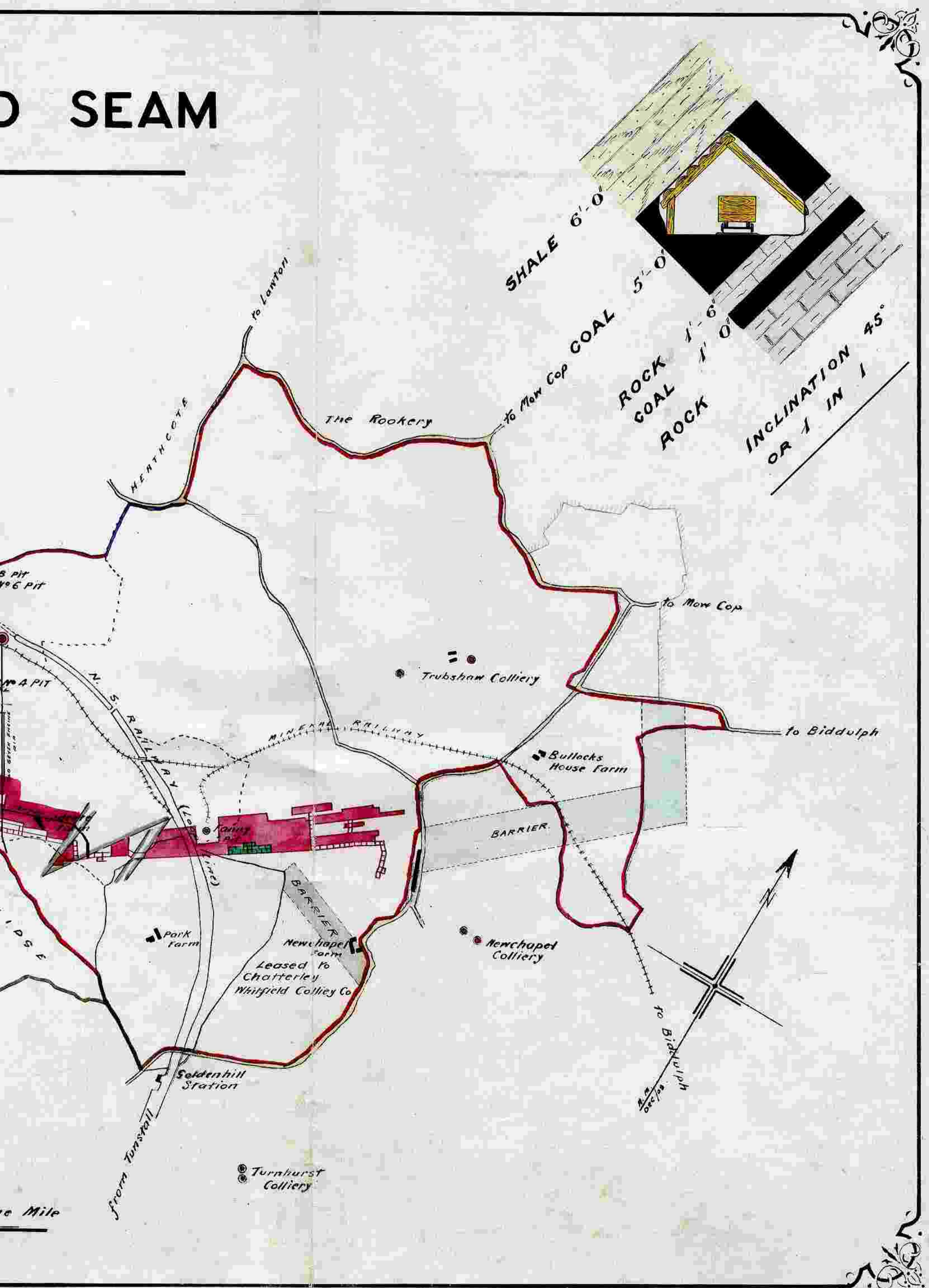


Scale

BIRCHENWOOD SEAM

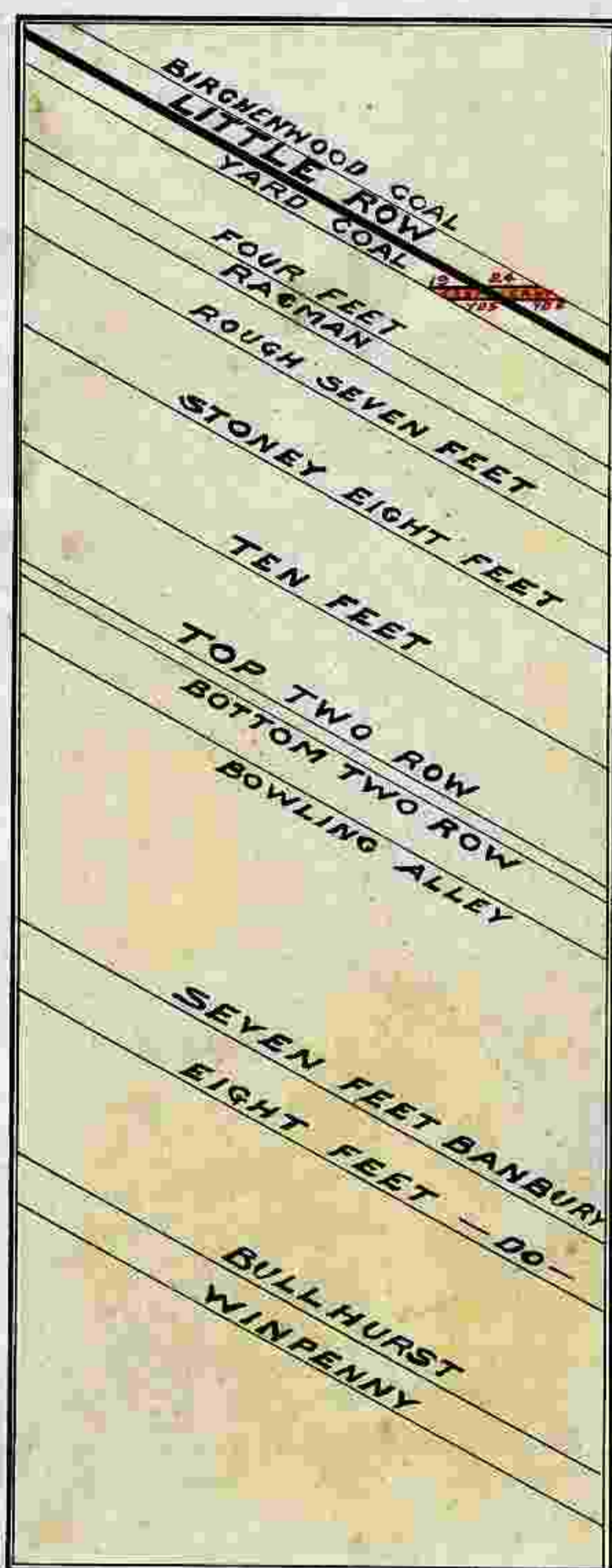


D SEAM



LITTLE ROW

9



LIT



ONE ACRE



100 YDS

Hoodshuffs Pit

to Manchester
to Lawton

Harecastle Station

Calley Pit

Kidswood Pit

Clough Hall

TALKE PITS

to Lawton

OWN HILL

HOLLINWOOD

Leased to TALKE COLLIERY CO

Top Lodge

Harecastle Farm



Harecastle Pit

BIRCHENWOOD WORKING

CHILD

Peacock Way

HOMER

WILLIAMSON

CHILD

WILLIAMSON

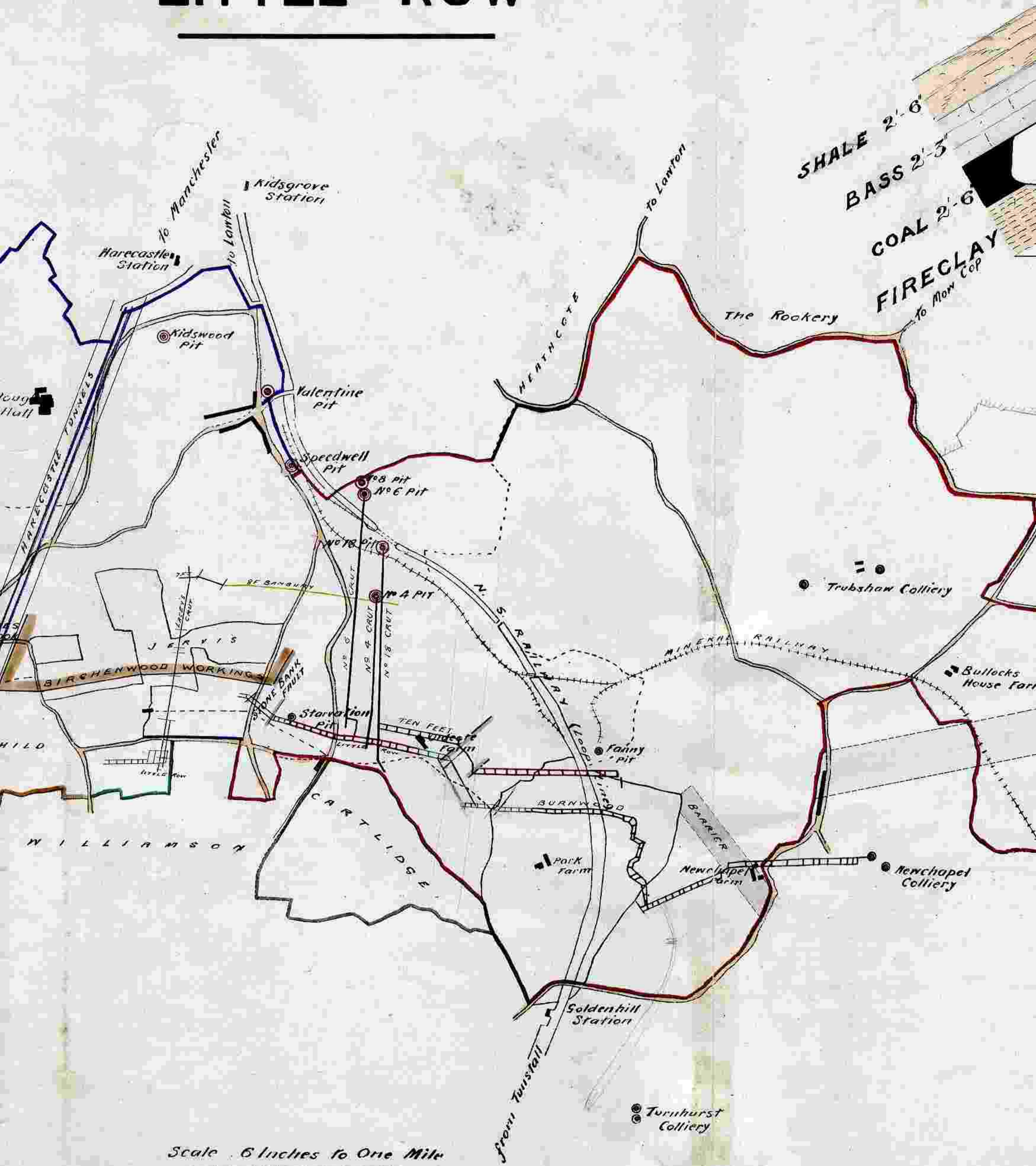
from Newcastle

from Chatterley

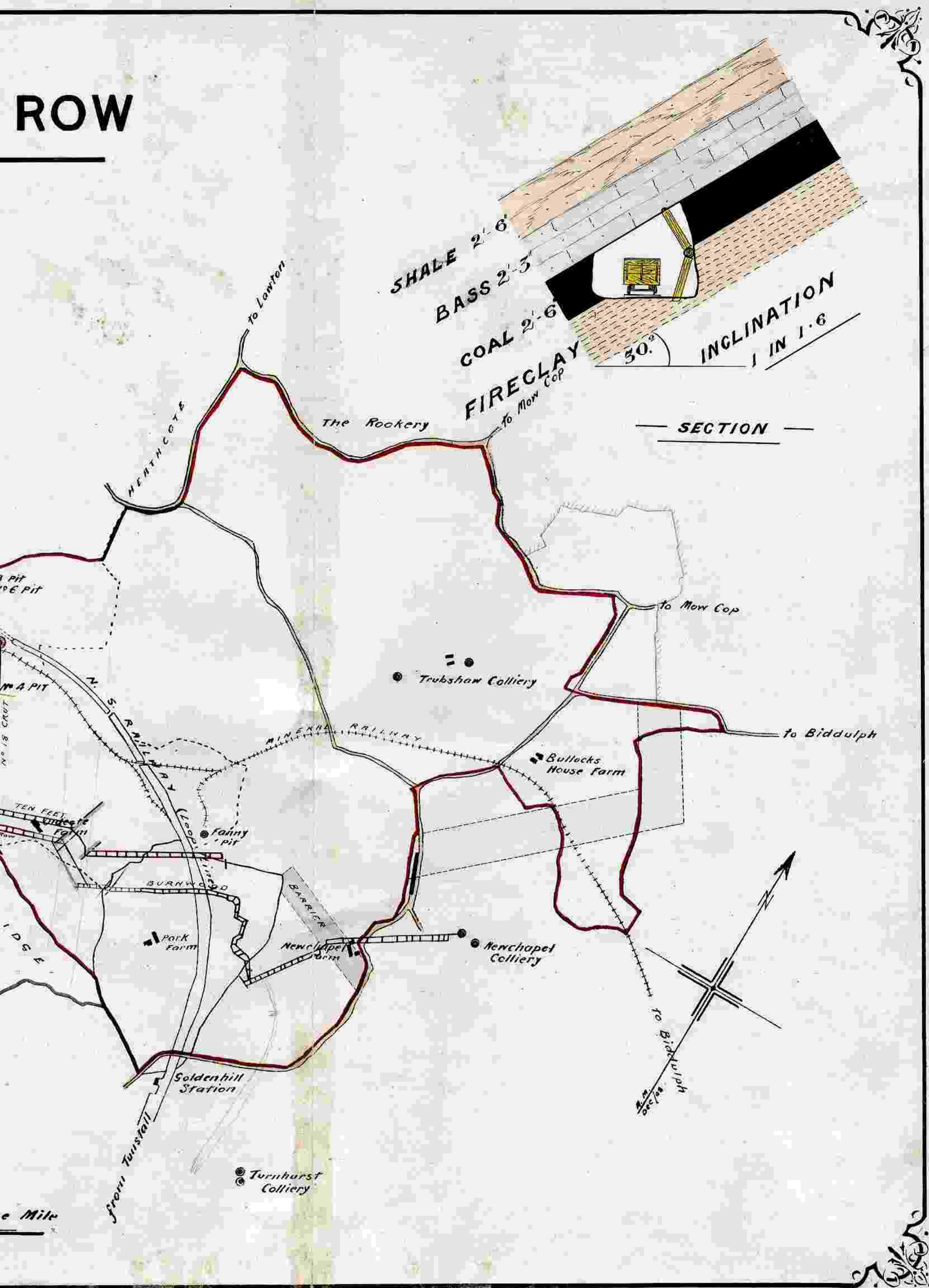
from London

Scale

LITTLE ROW



ROW



FOUR FEET

10

BIRCHENWOOD
LITTLE ROW
YARD COAL
FOUR FEET
RAGMAN
ROUGH SEVEN FEET
STONEY EIGHT FEET
TEN FEET
TOP TWO ROW
BOTTOM TWO ROW
BOWLING ALLEY
SEVEN FEET
EIGHT FEET
BULLHURST
WINPENNY

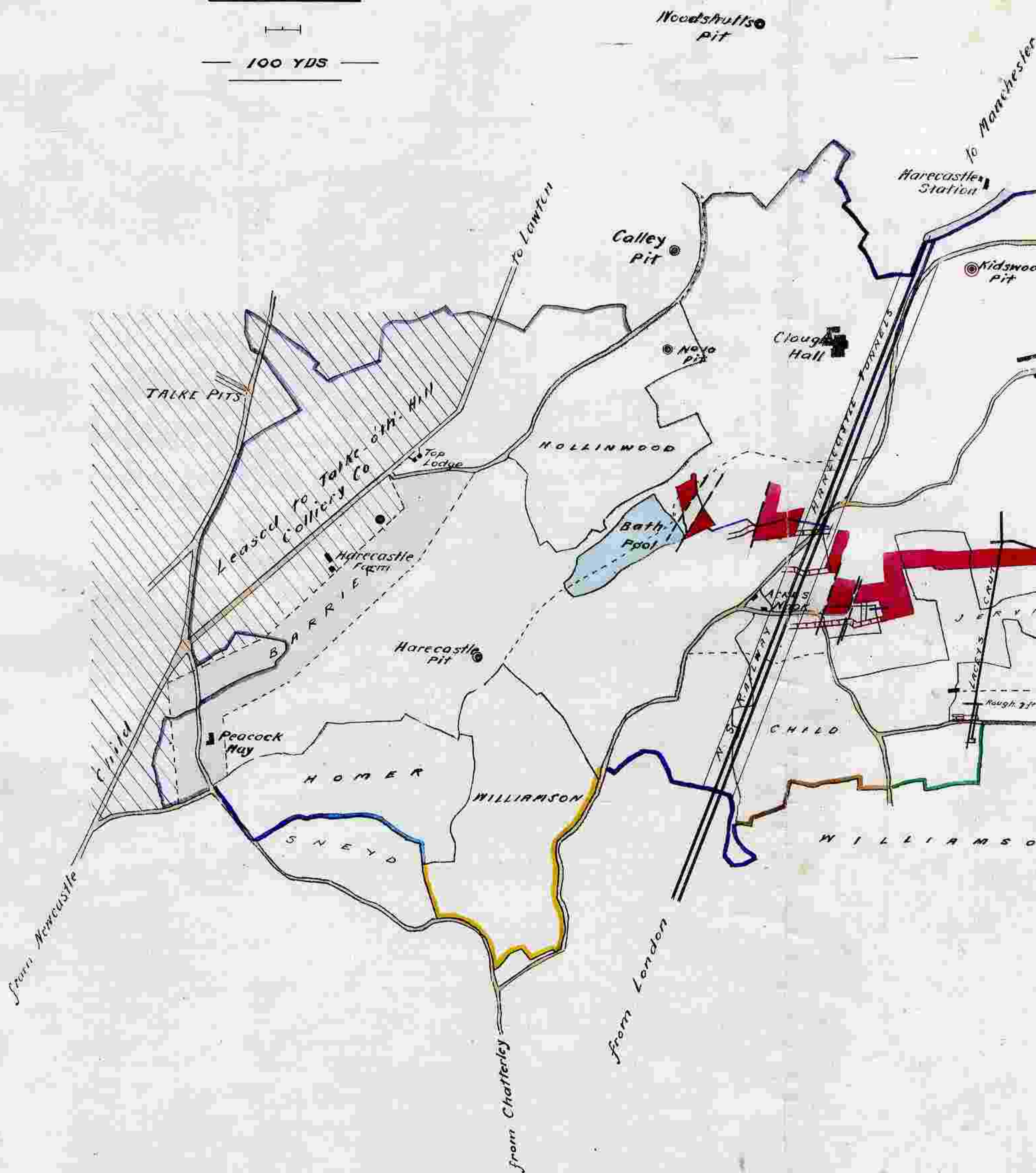
FO



— ONE ACRE. —

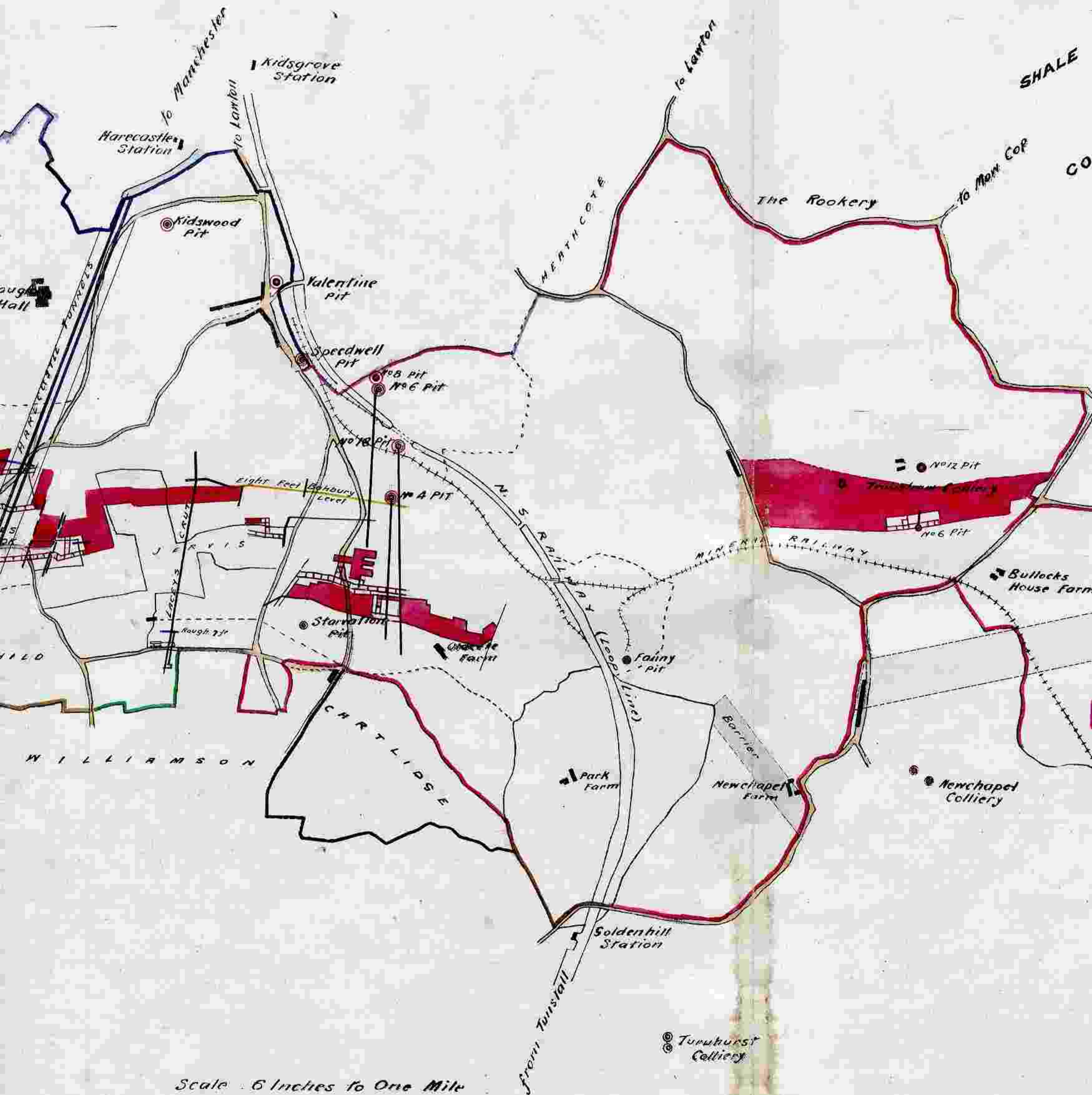


— 100 YDS —

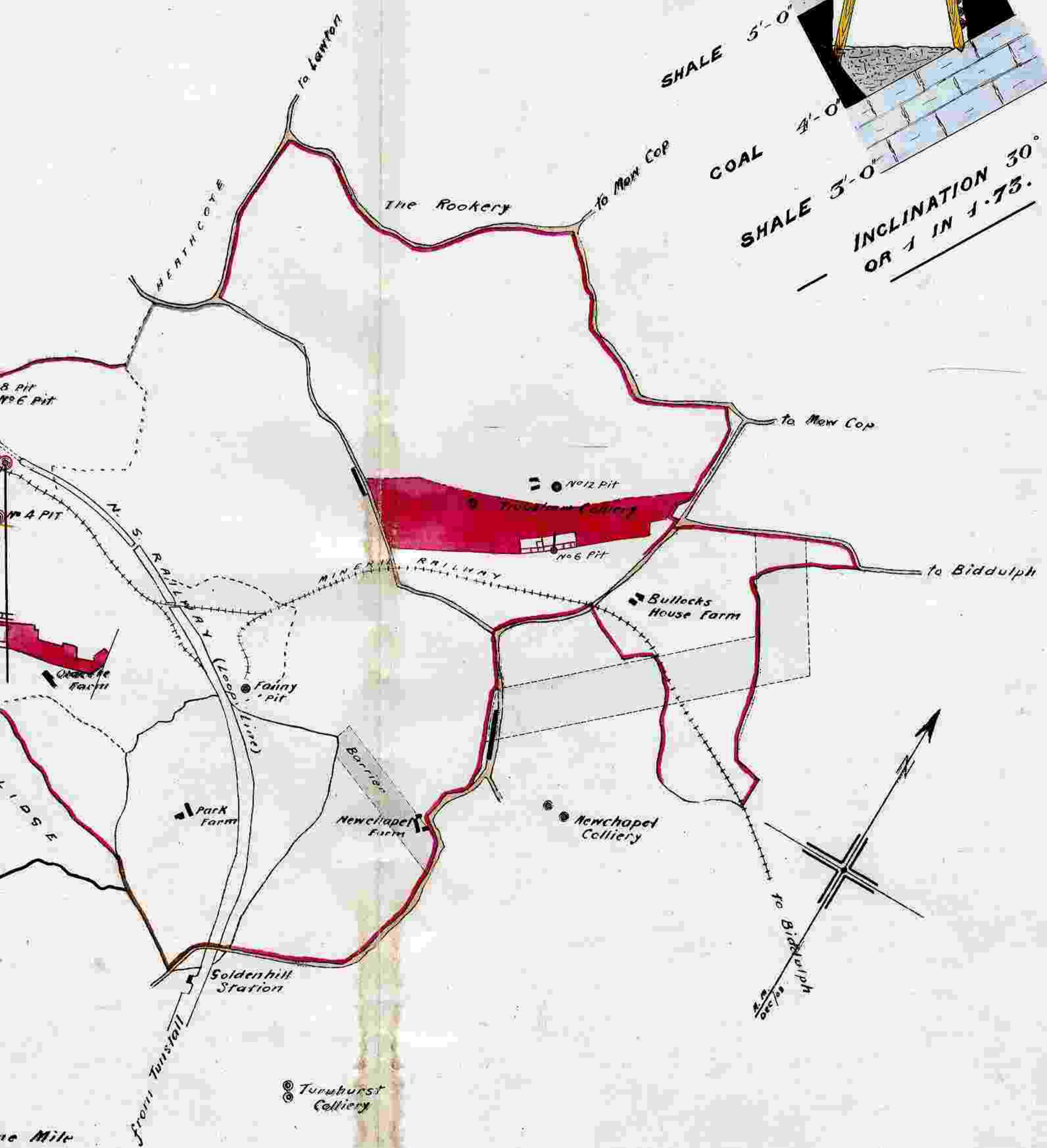


Scale

FOUR FEET



LET

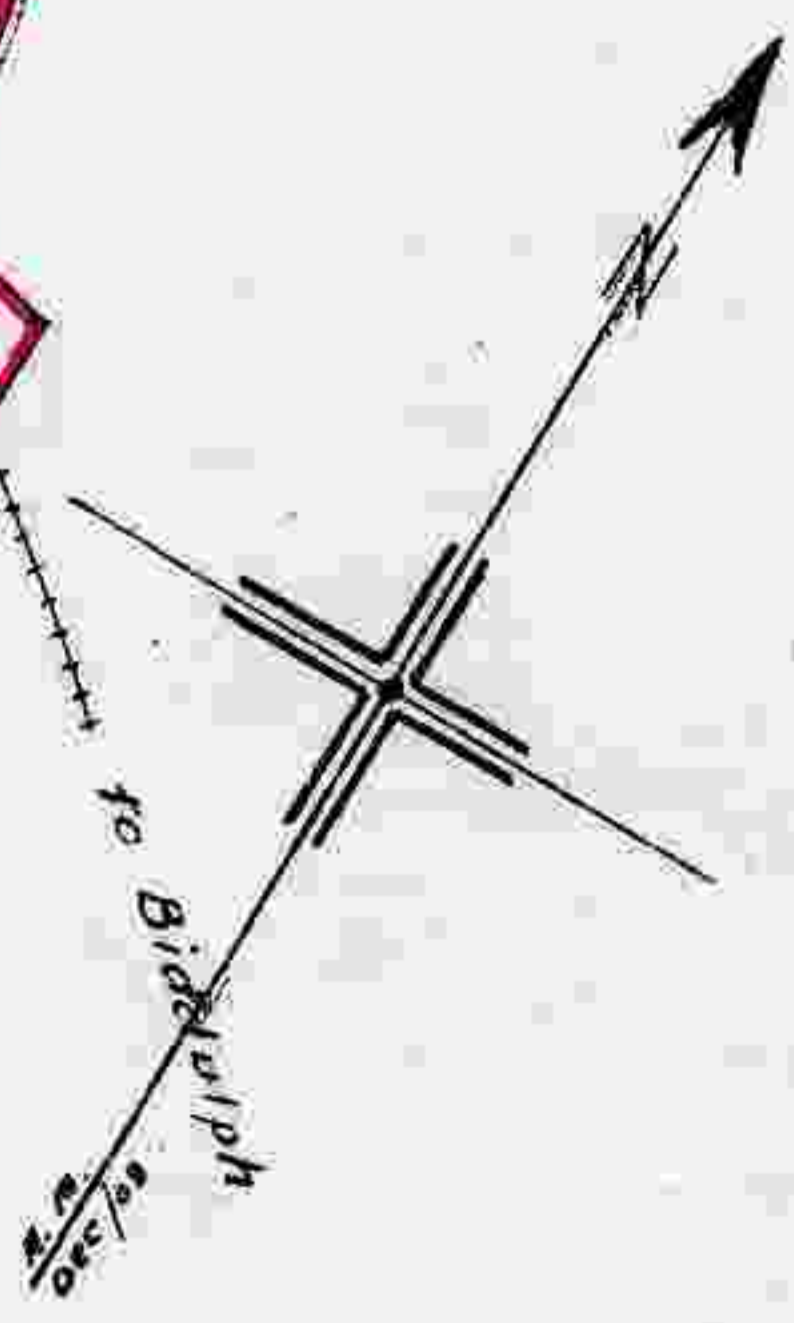
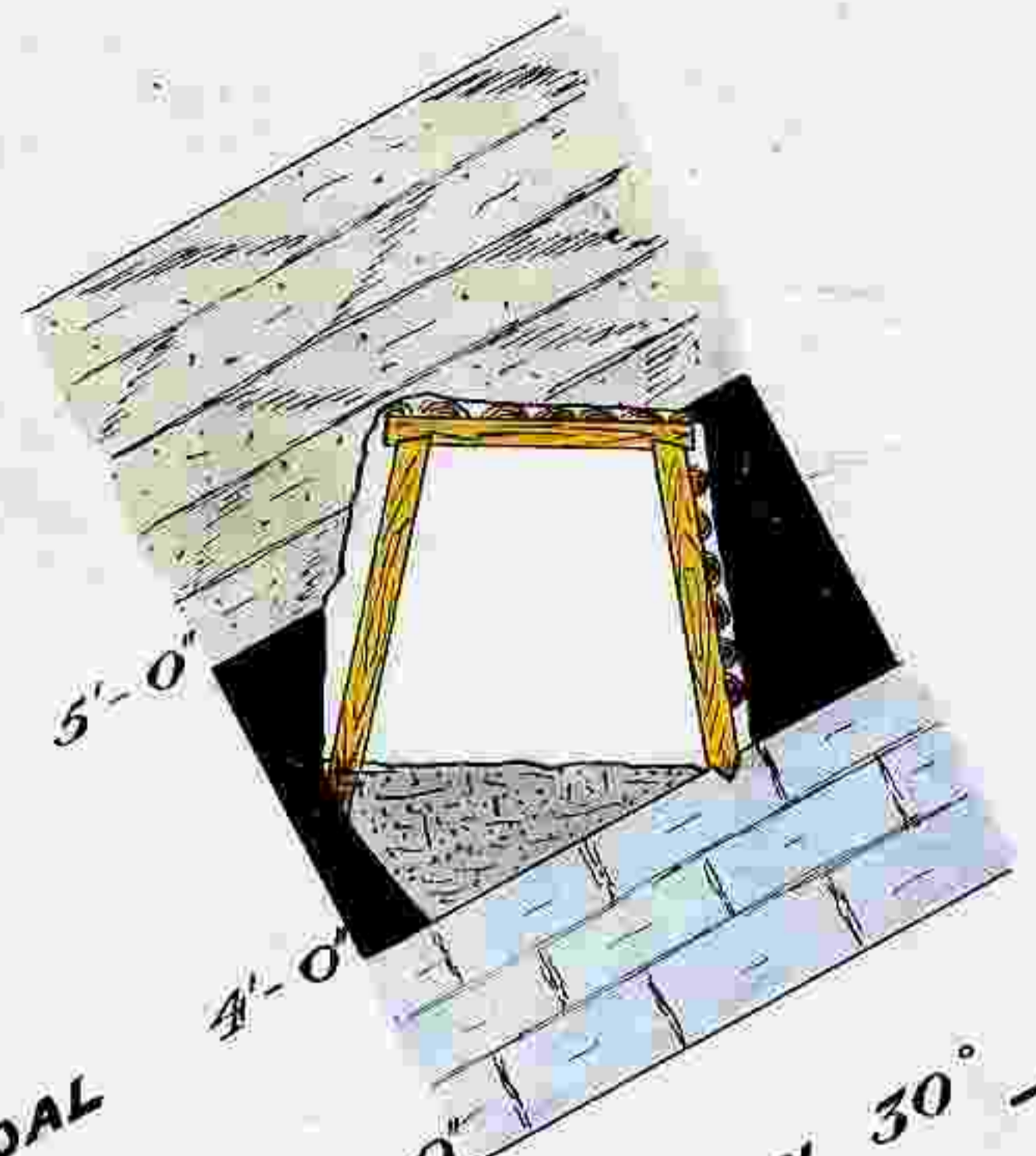


SHALE 5'-0"

COAL 4'-0"

SHALE 3'-0"

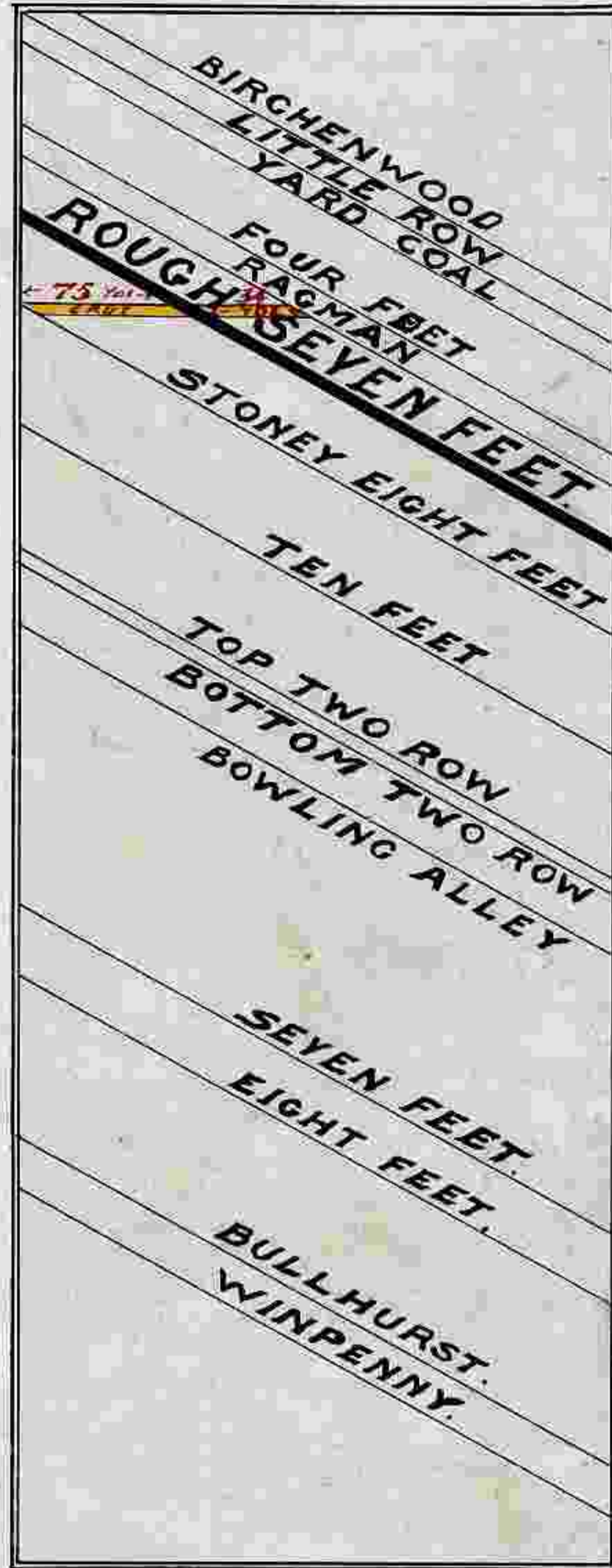
INCLINATION 30°
OR 1 IN 1.73.



one Mile

ROUGH SEVEN FEET

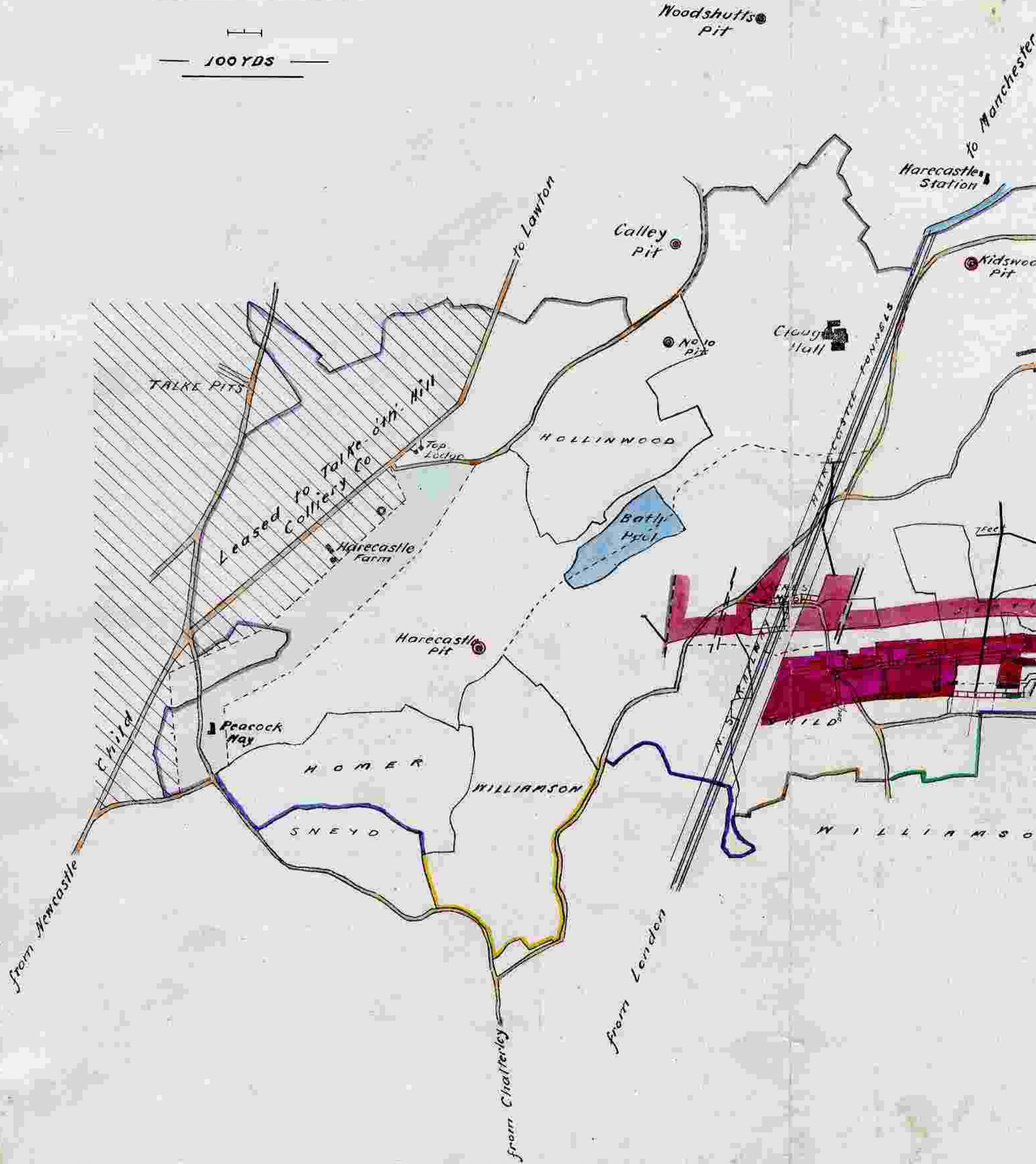
II



ROUCH

— ONE ACRE —

— 100 YDS —



Scale

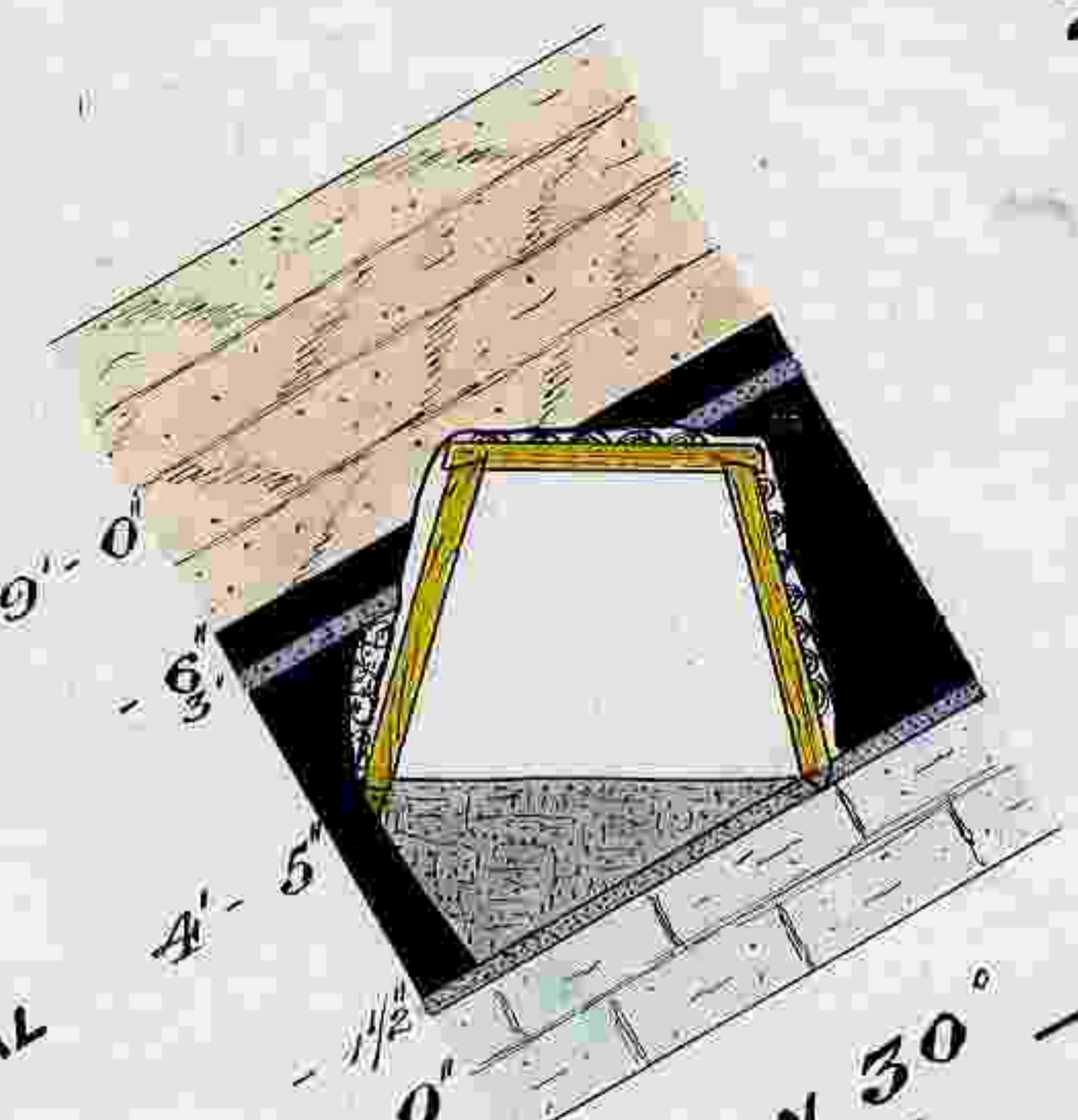
ROUGH SEVEN FEET



N FEET



BASS 9'-0"
 COAL 6"
 DIRT 4'-5"
 COAL 1/2"
 DIRT 3'-0"
 ROCK

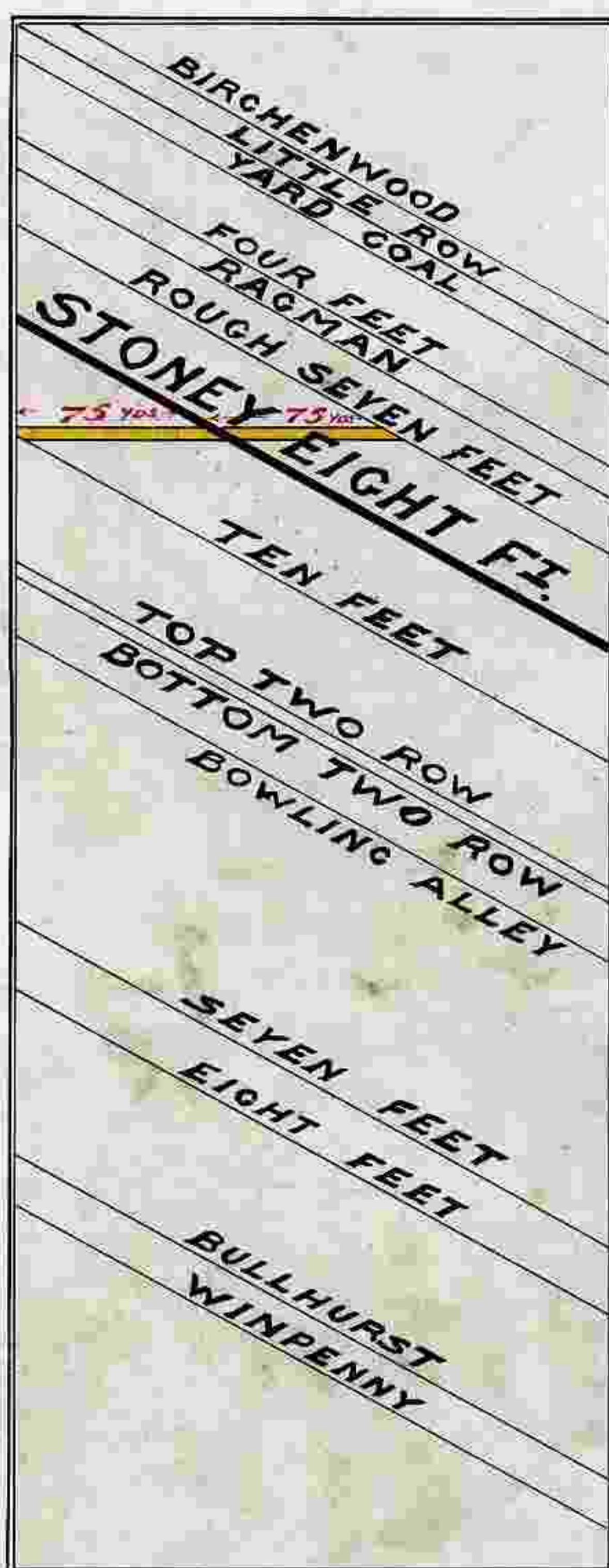


INCLINATION 30°
 OR 1 IN 1.7

1/2 Mile

STONEY EIGHT FEET

12



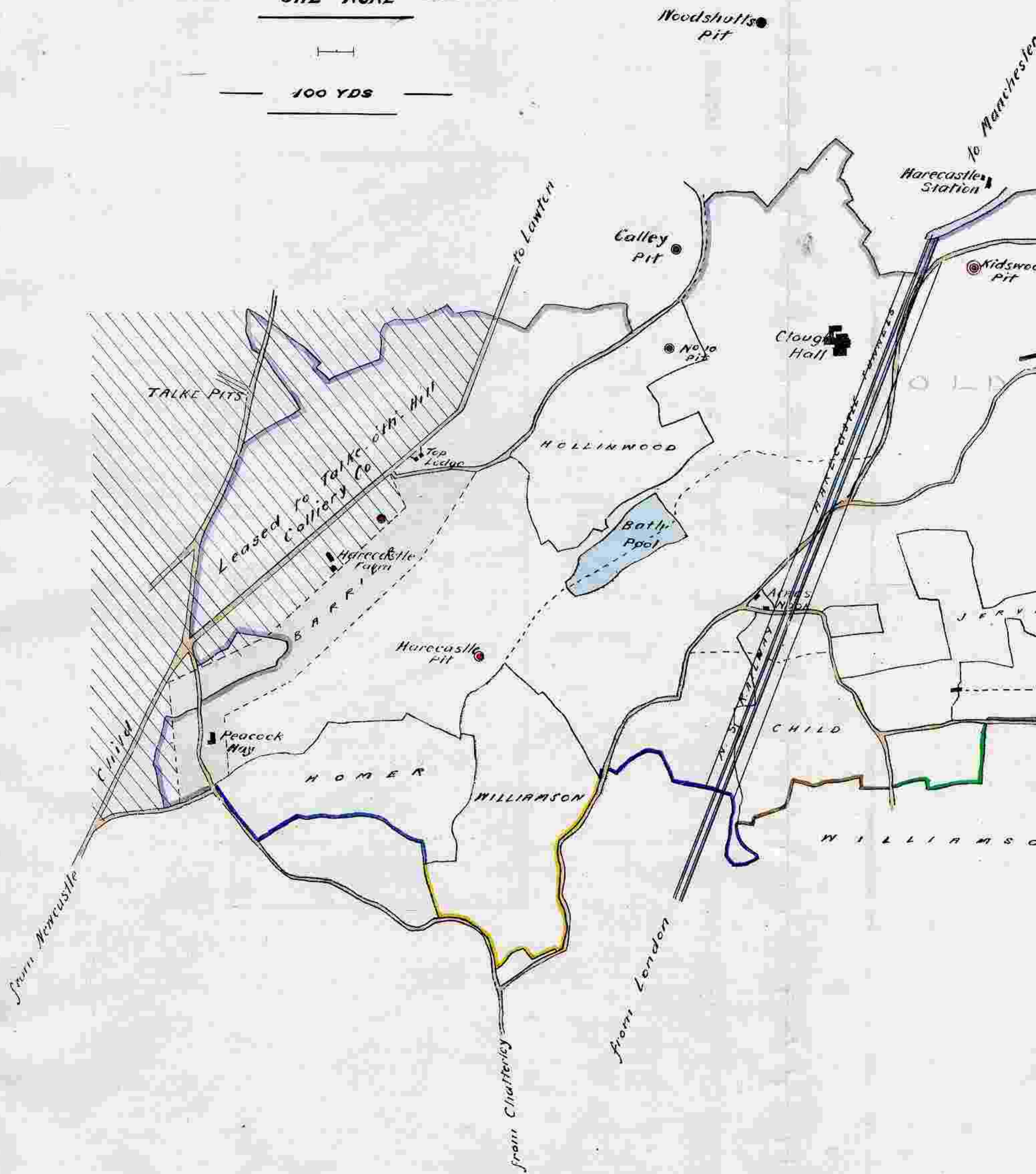
STONE



ONE ACRE

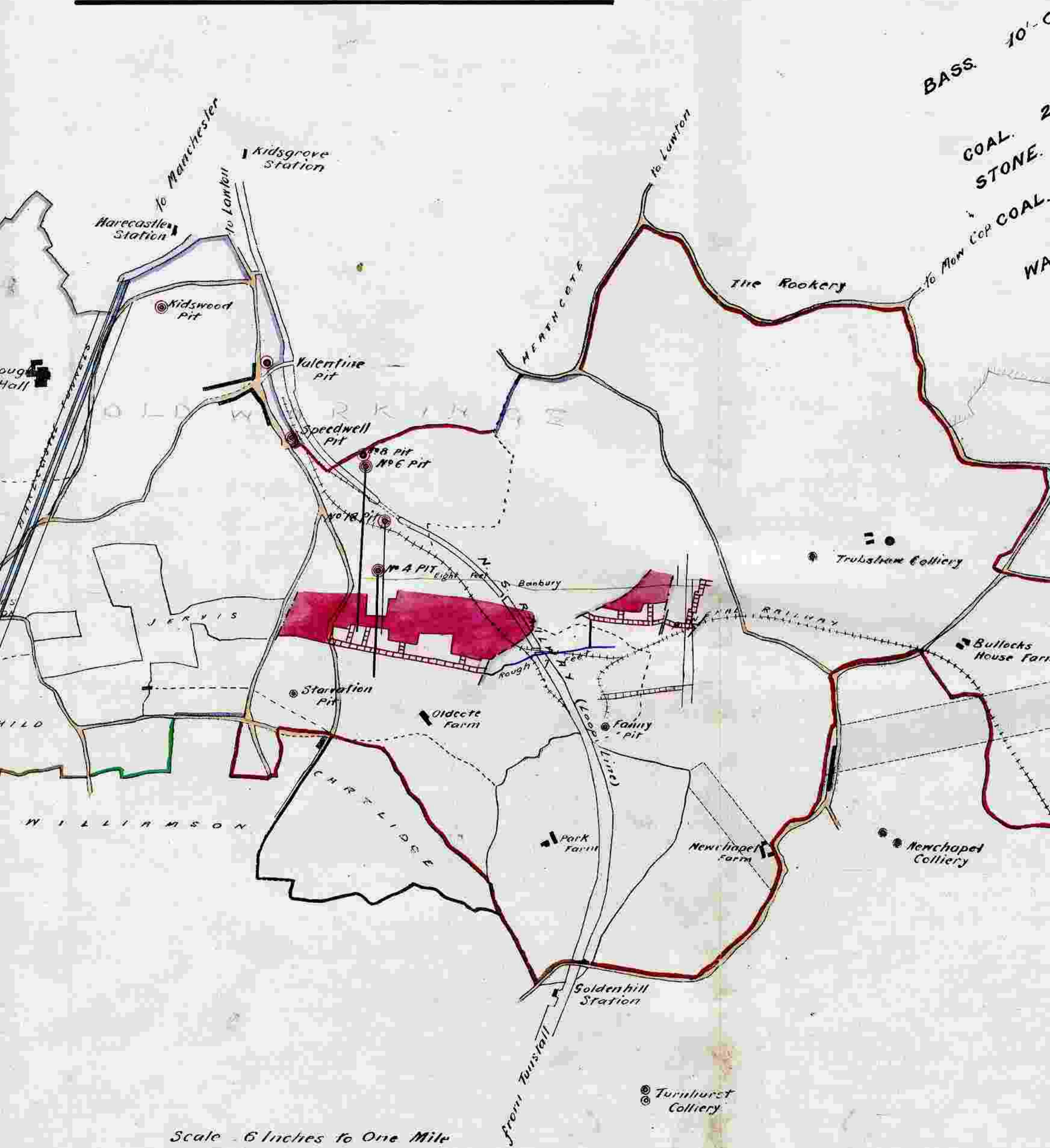


100 YDS

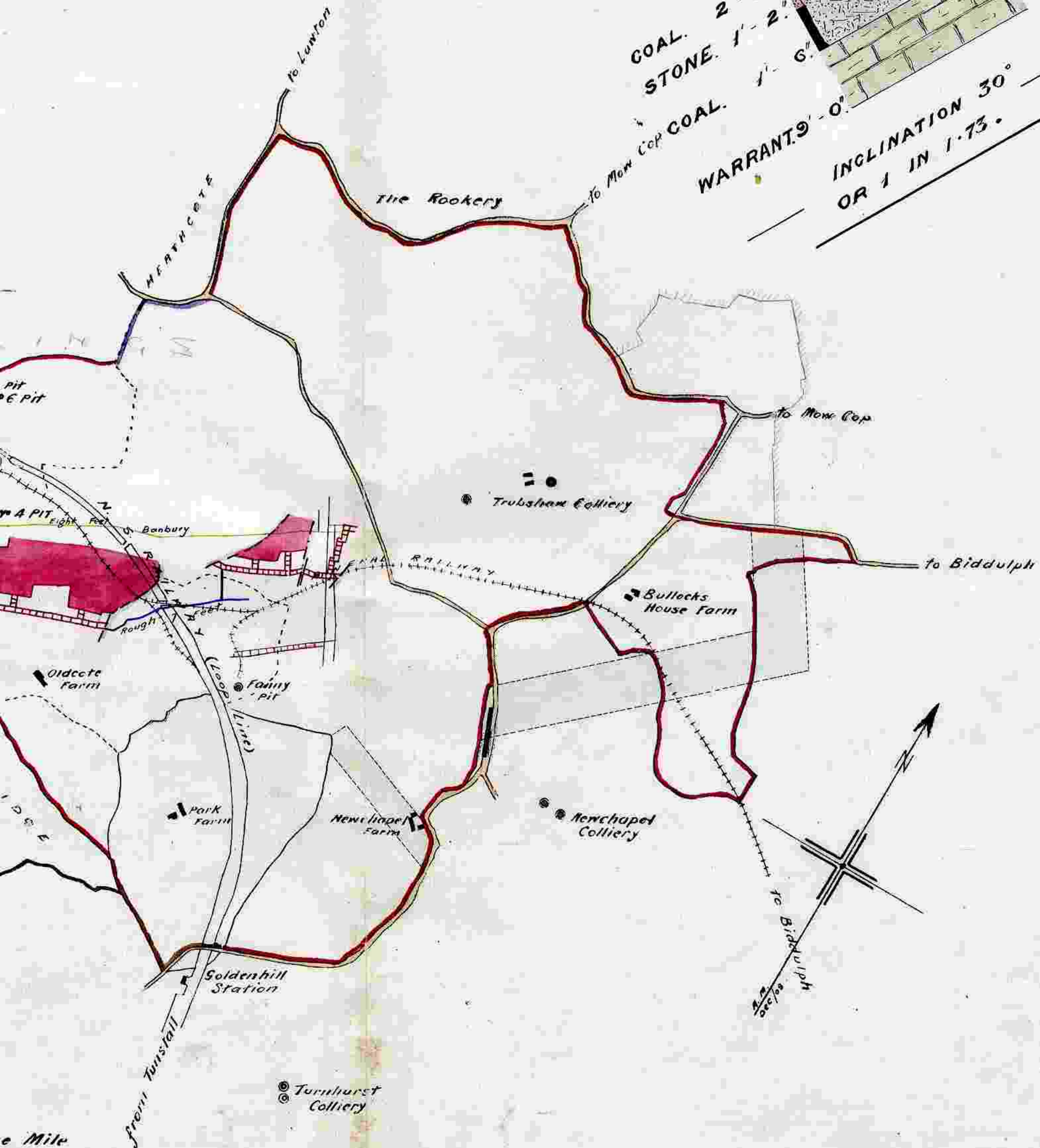


Scale

STONE EIGHT FEET



HT FEET



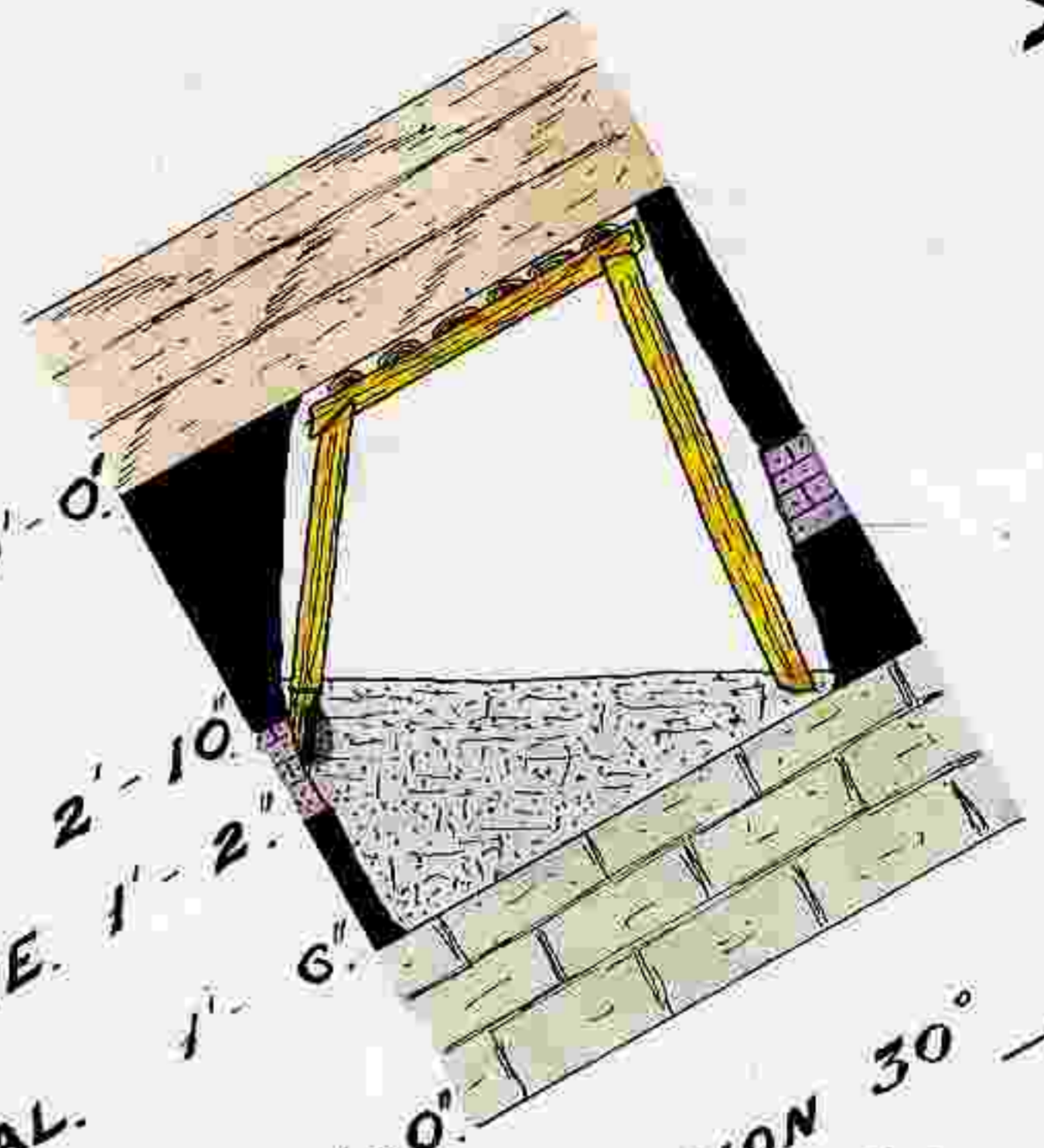
BASS. 10'-0"

GOAL. 2'-10"

STONE. 1'-2"

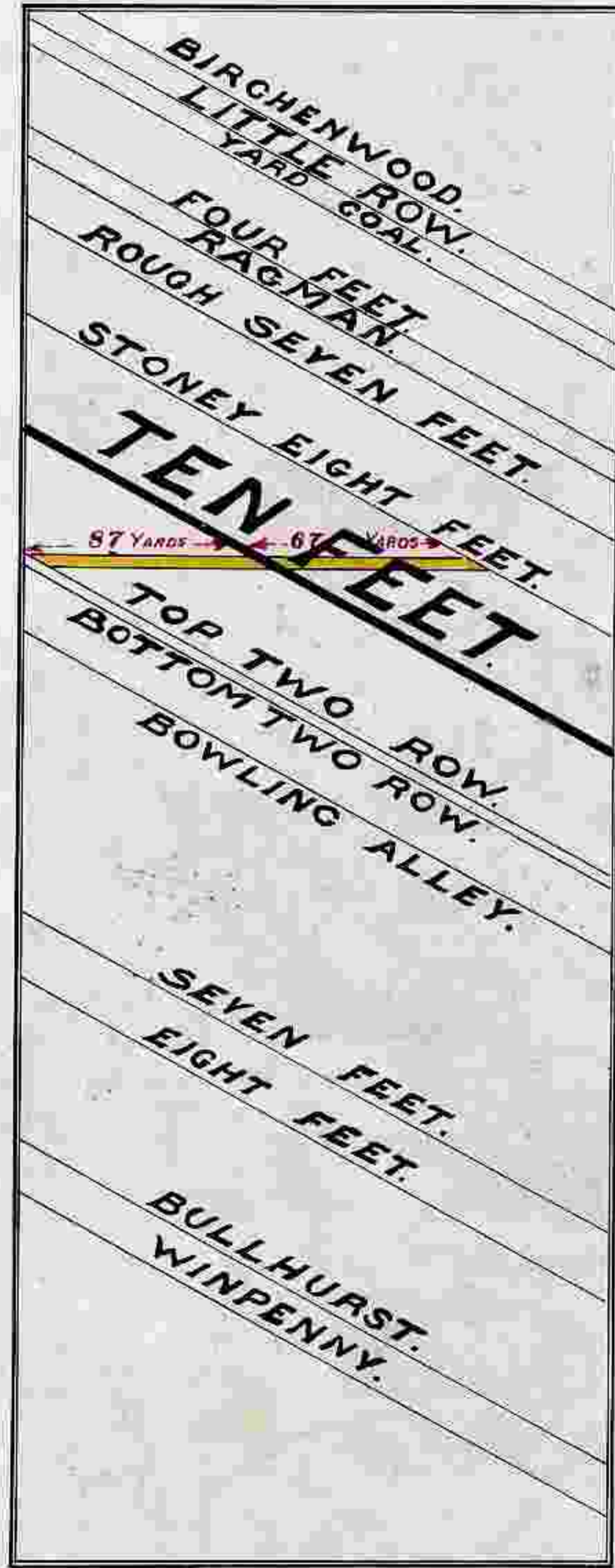
WARRANT. 9'-0"

INCLINATION 30°
OR 1 IN 1.73.



TEN FEET

13



337 MET

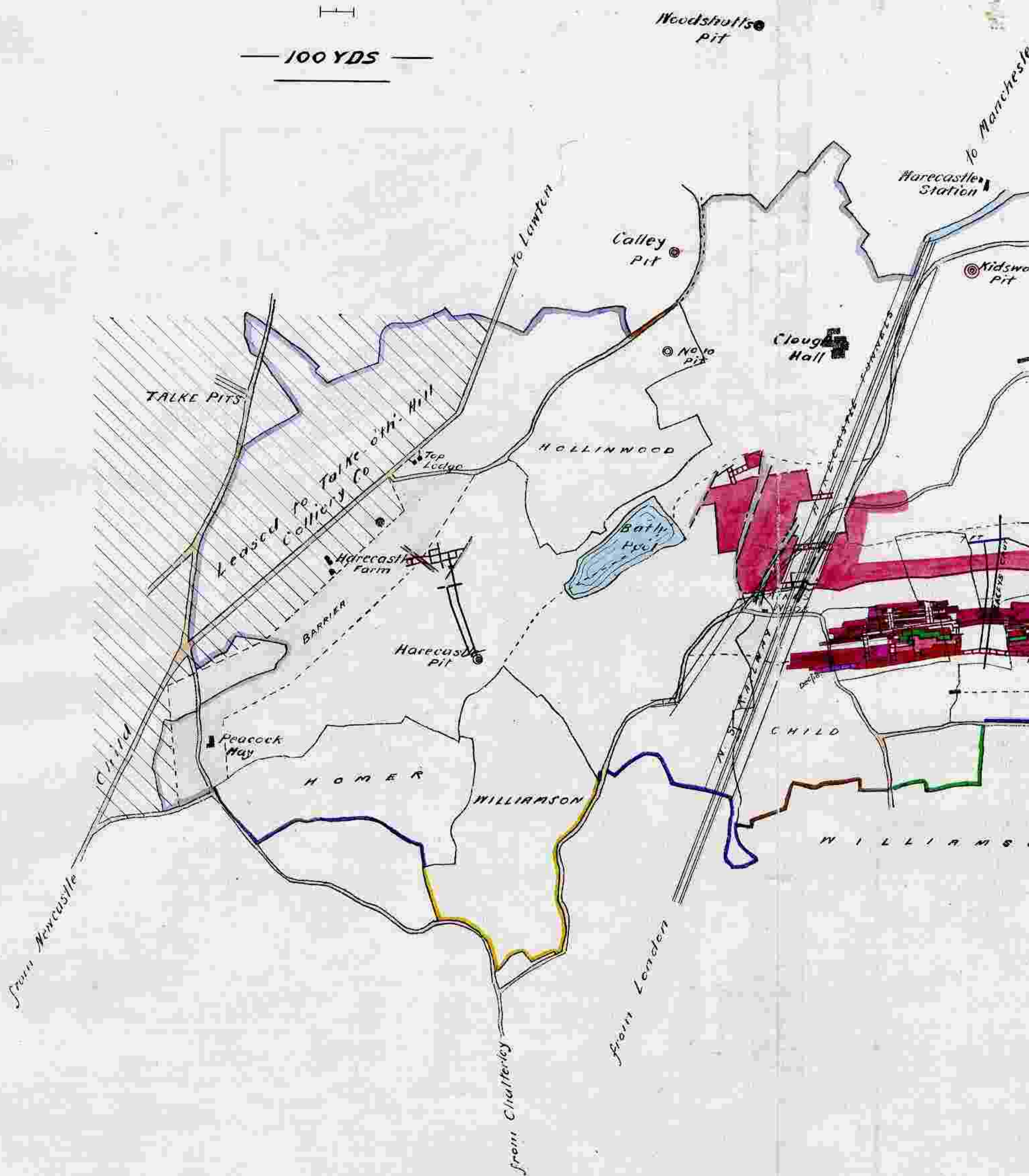
TE



ONE ACRE

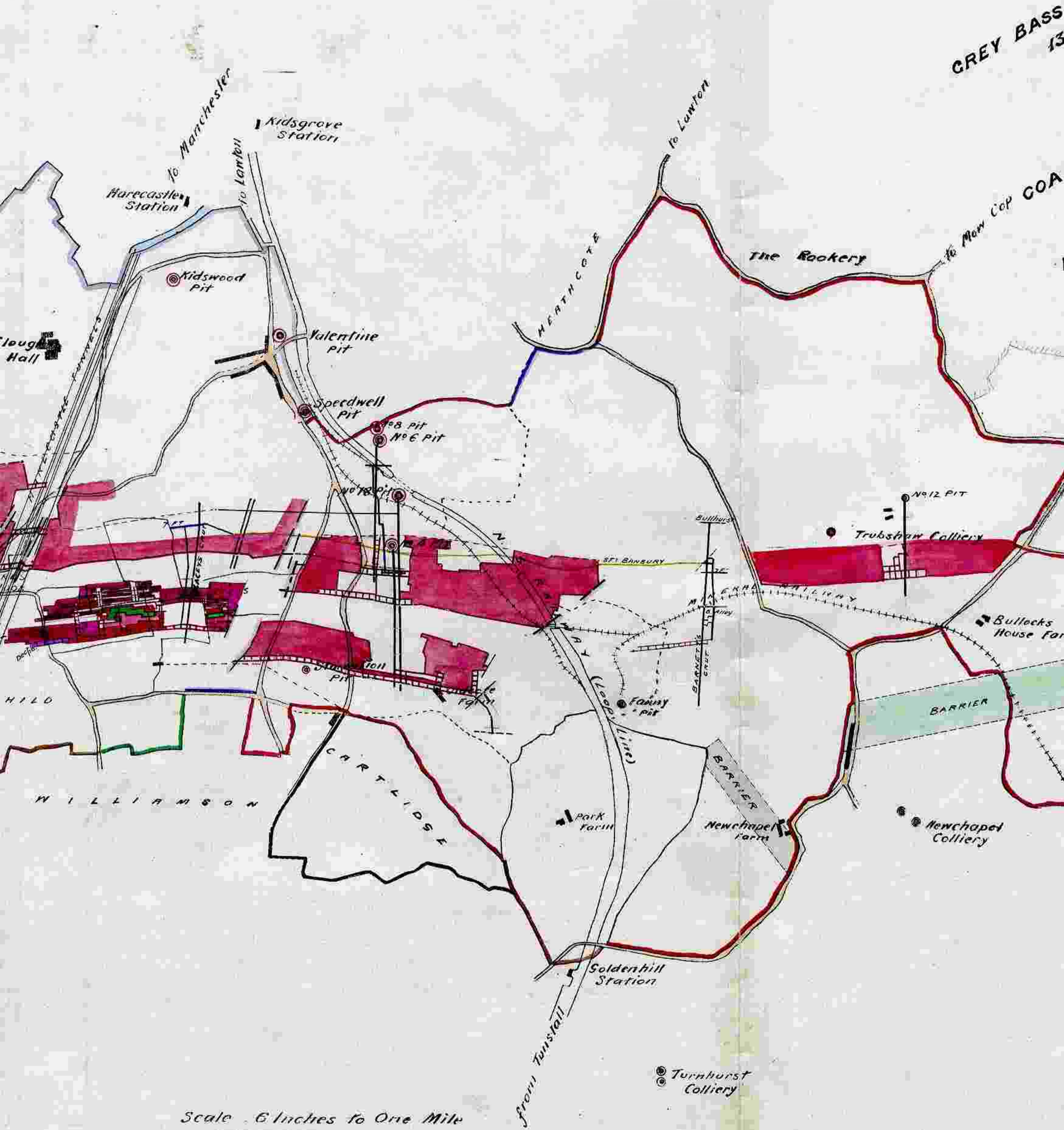


100 YDS



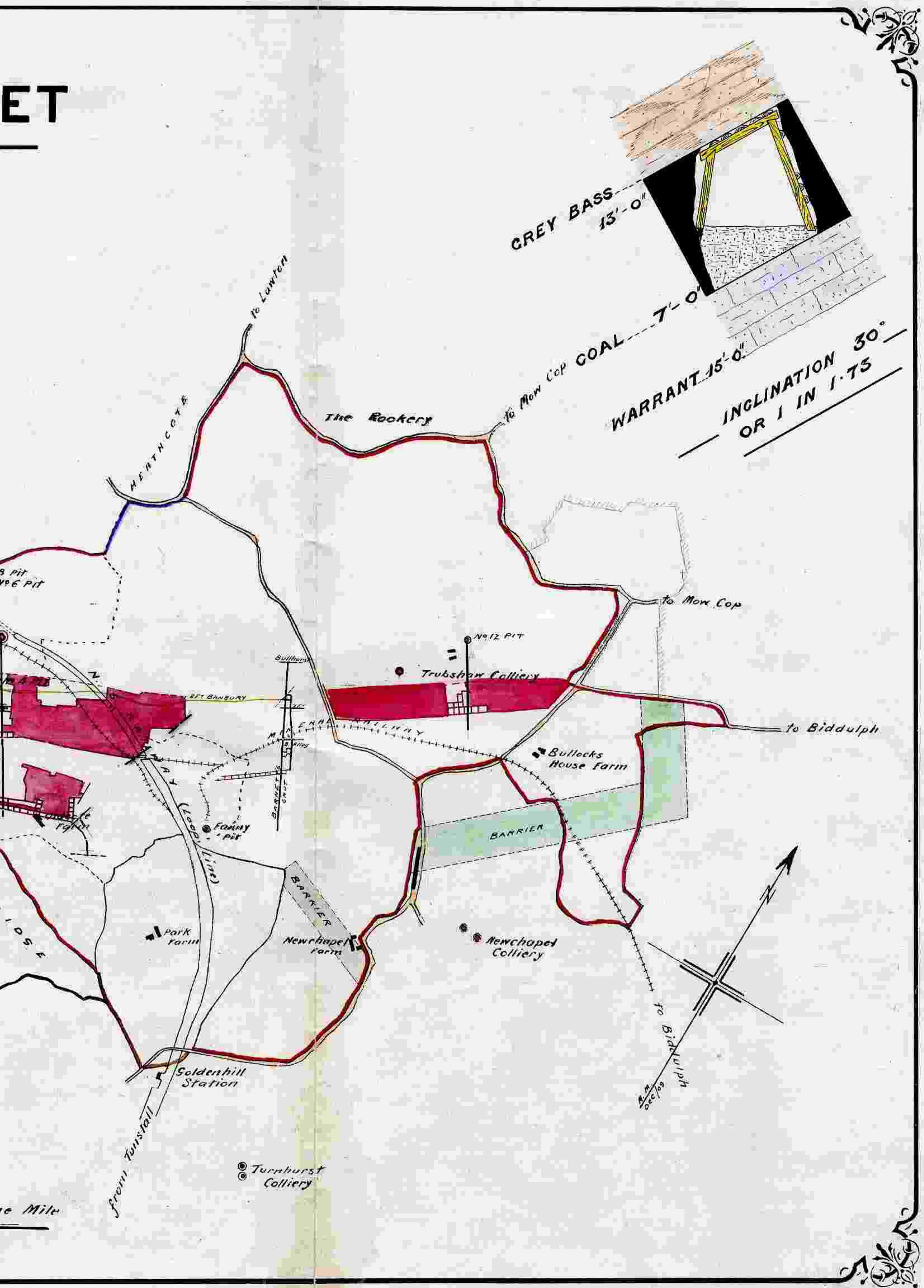
Scale

TEN FEET



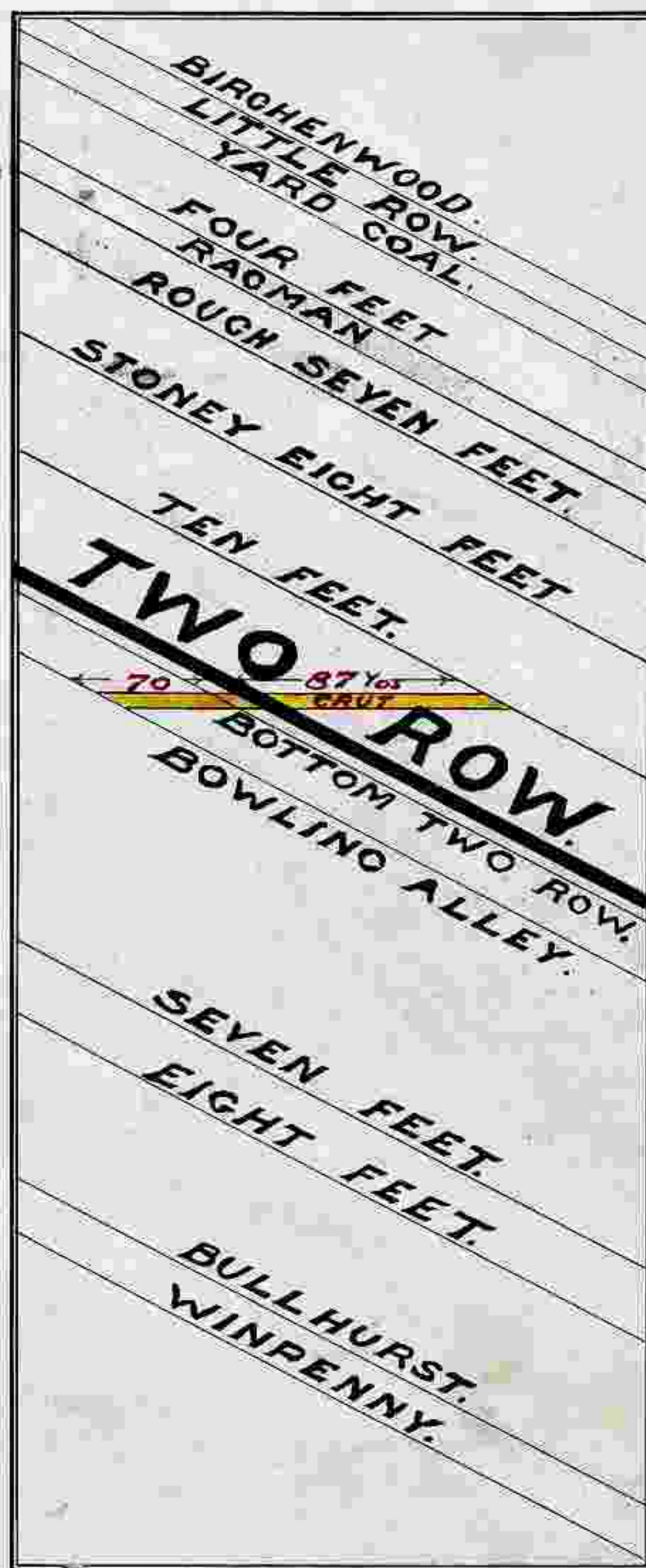
Scale 6 Inches to One Mile

ET

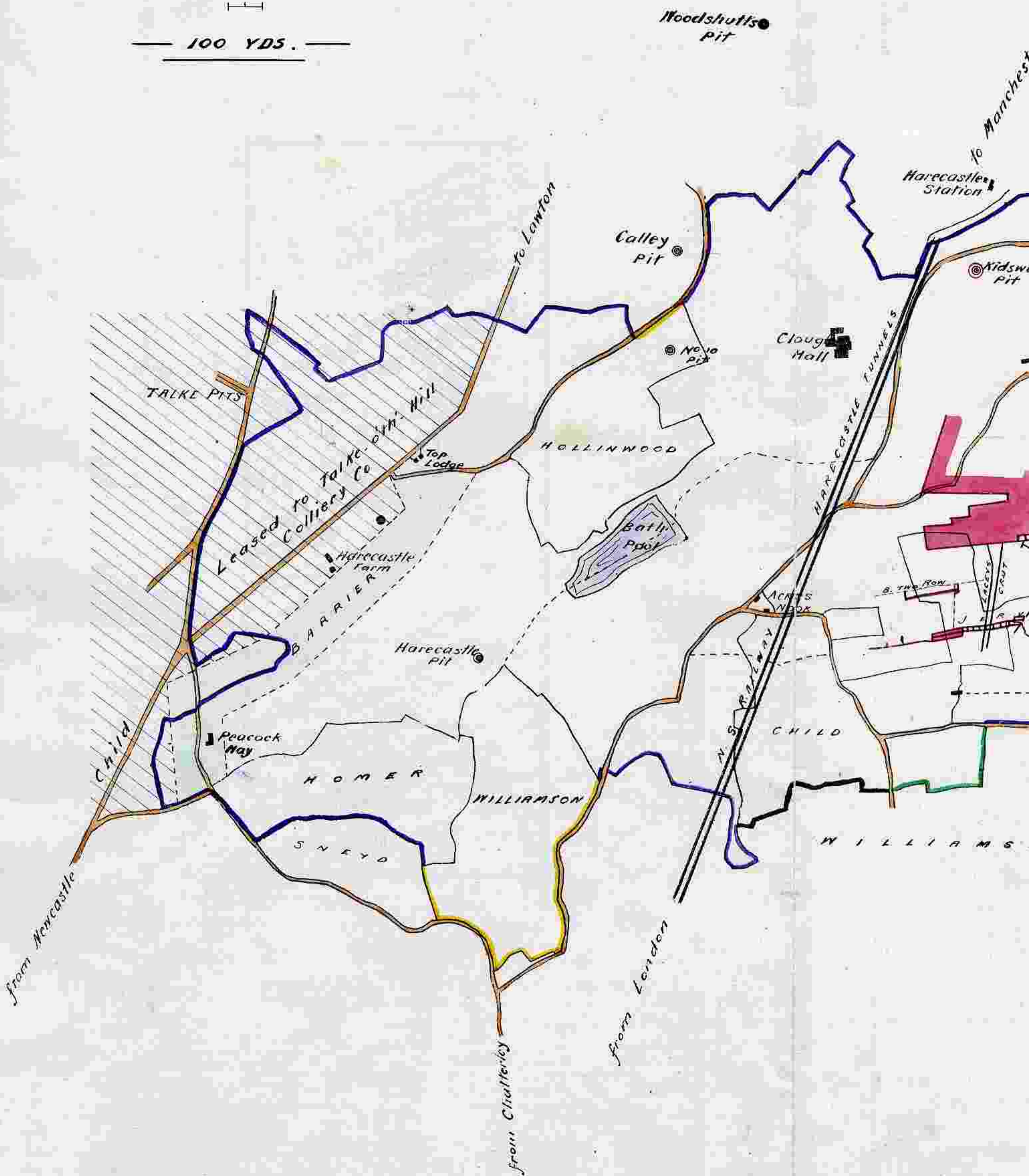
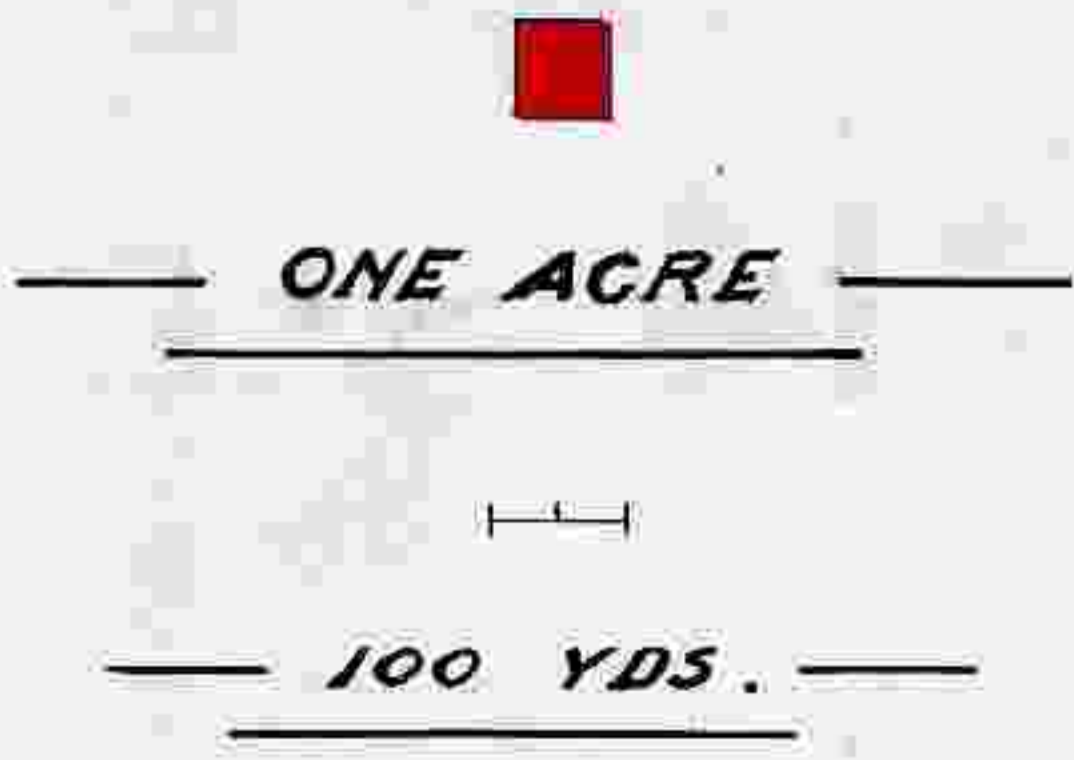


TOP TWO ROW

14

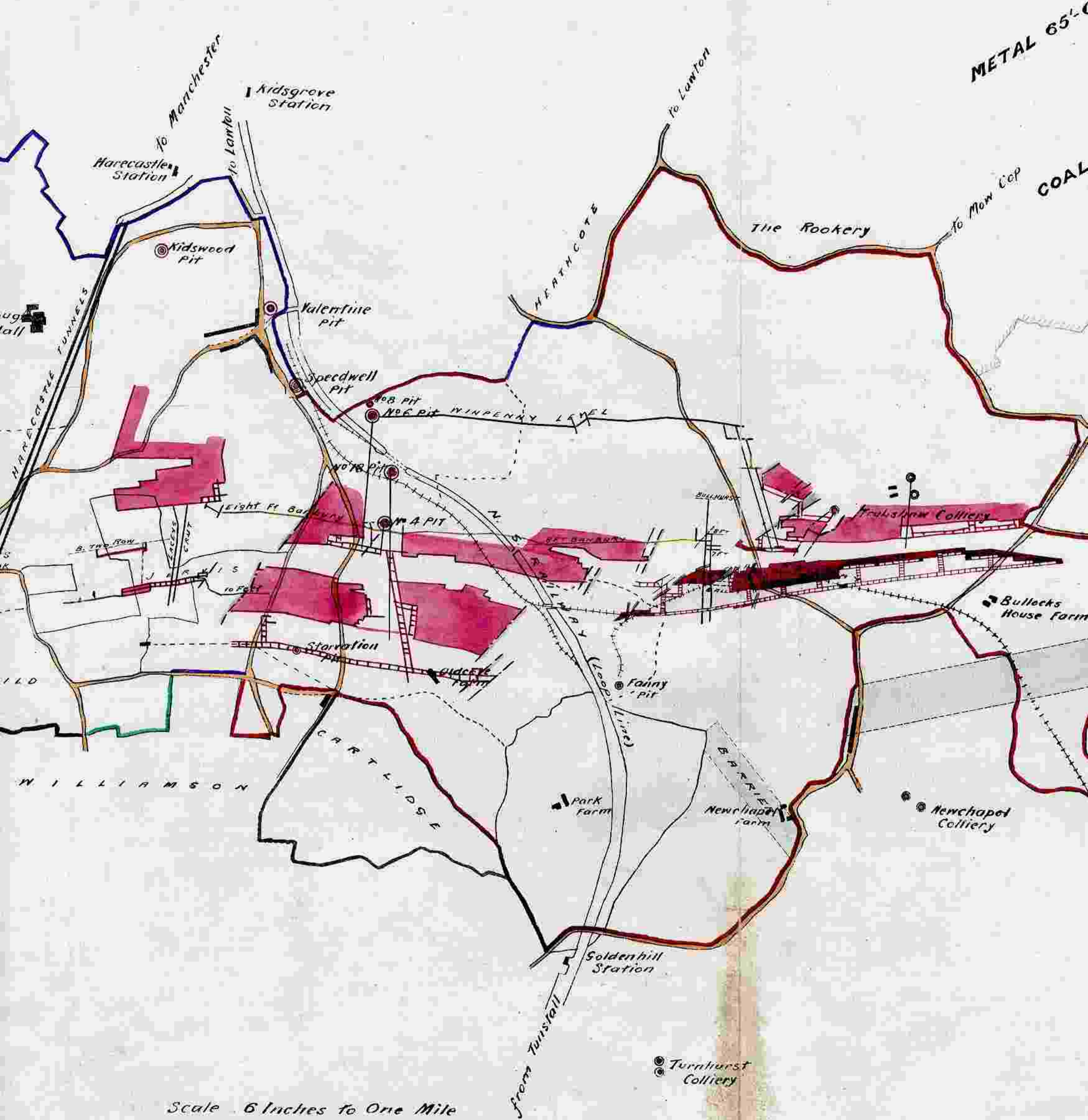


TOP



Scale

TOP TWO ROW



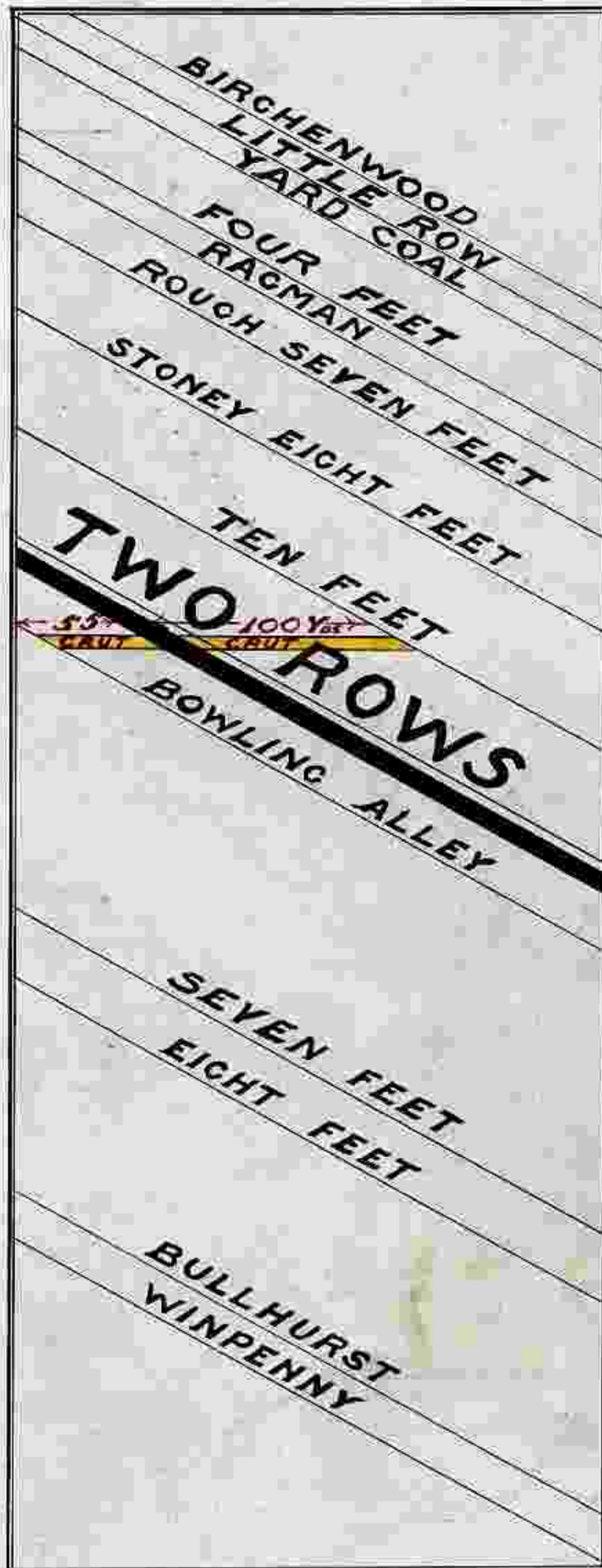
Scale 6 Inches to One Mile

ROW



BOTTOM TWO ROW

15

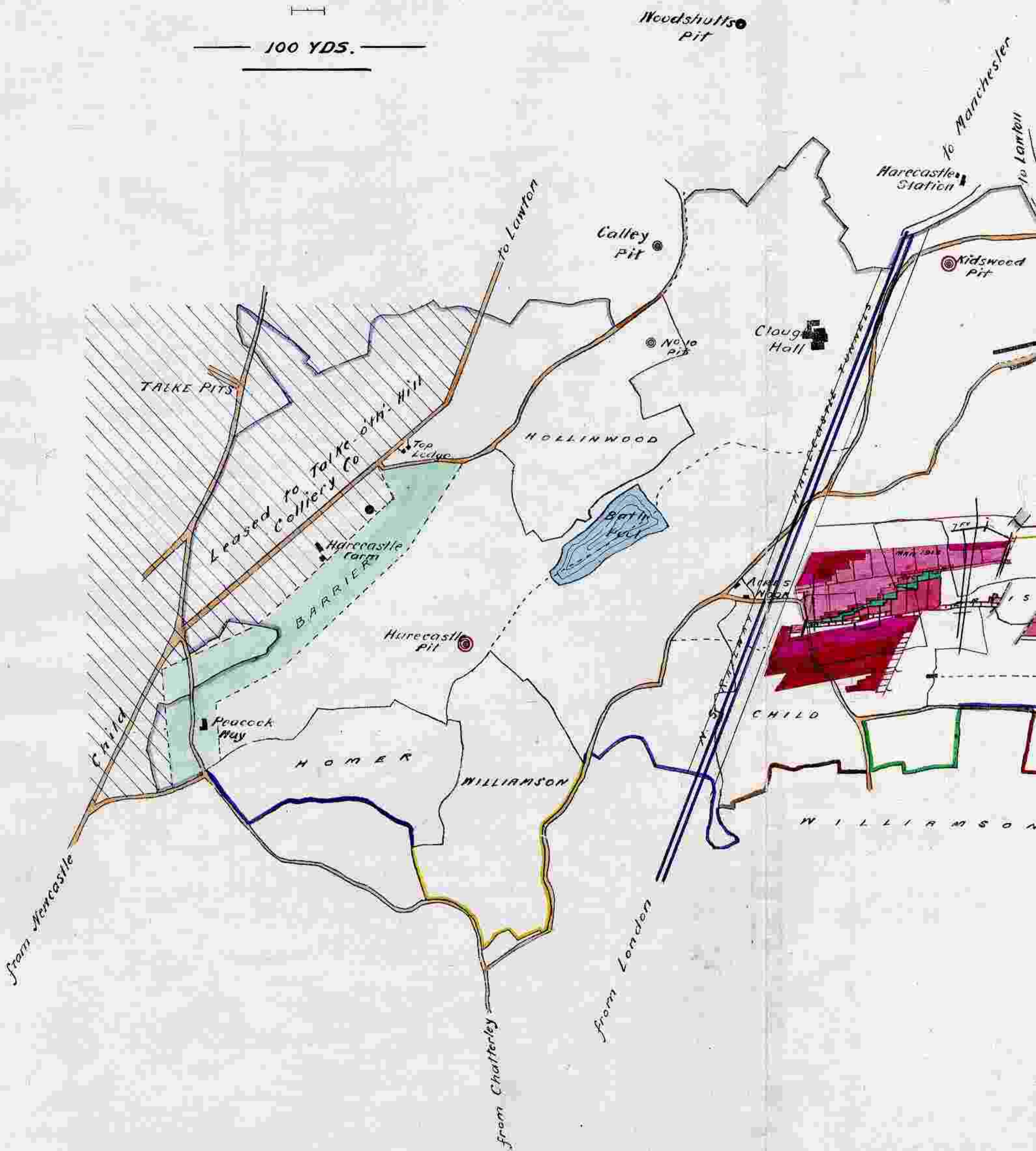


BOTTOM



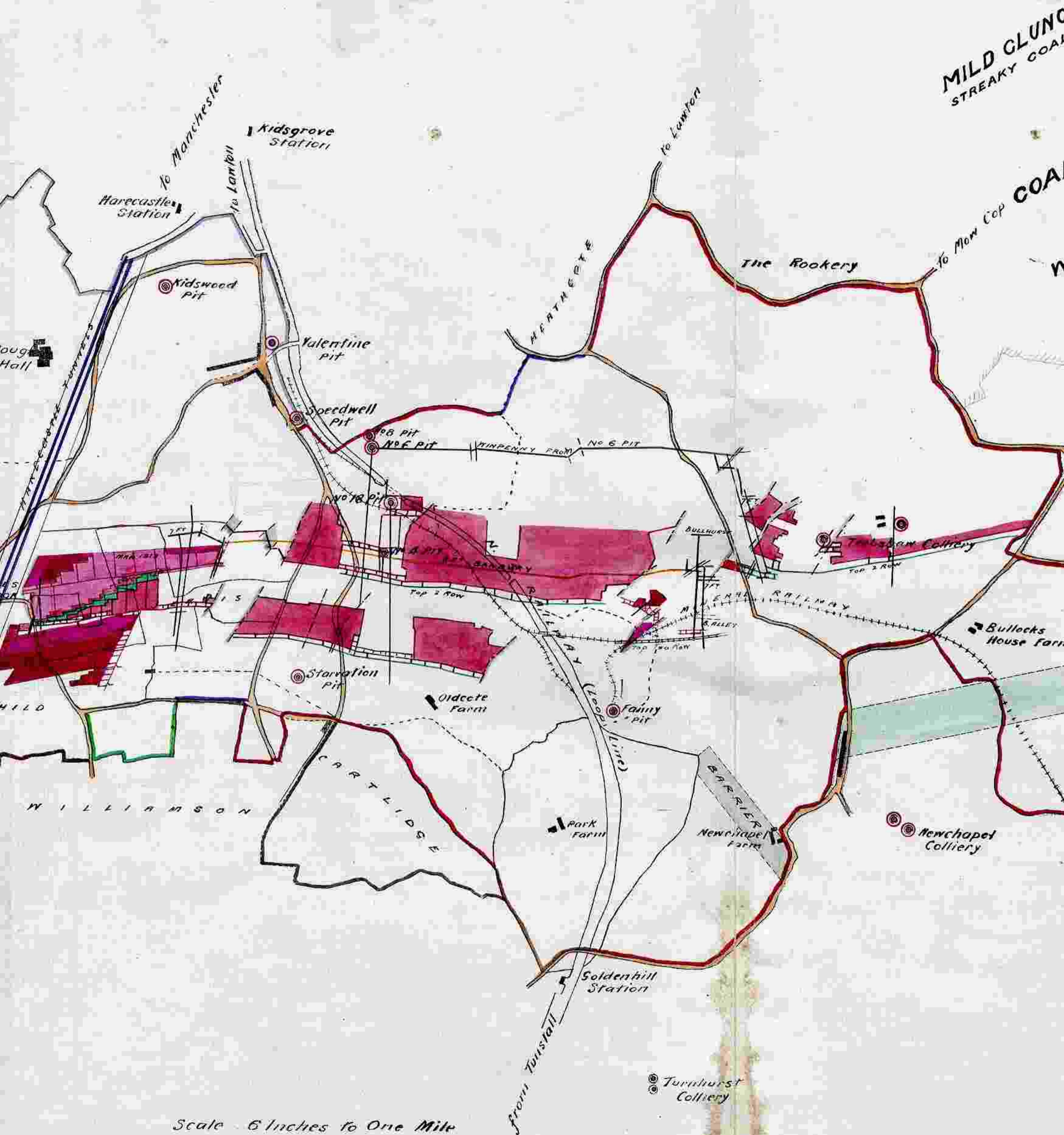
ONE ACRE

100 YDS.

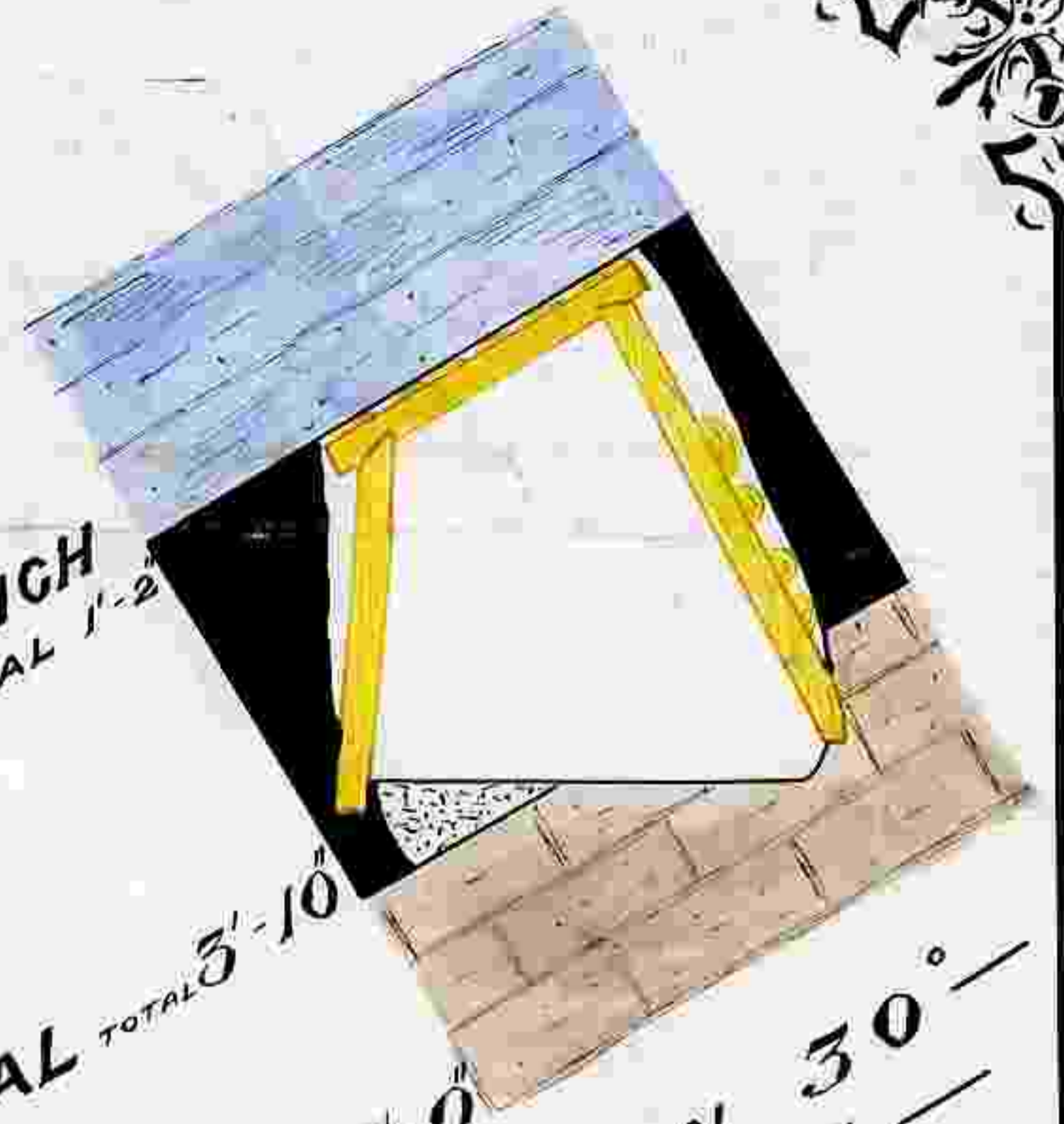


Scale

BOTTOM TWO ROW



O ROW

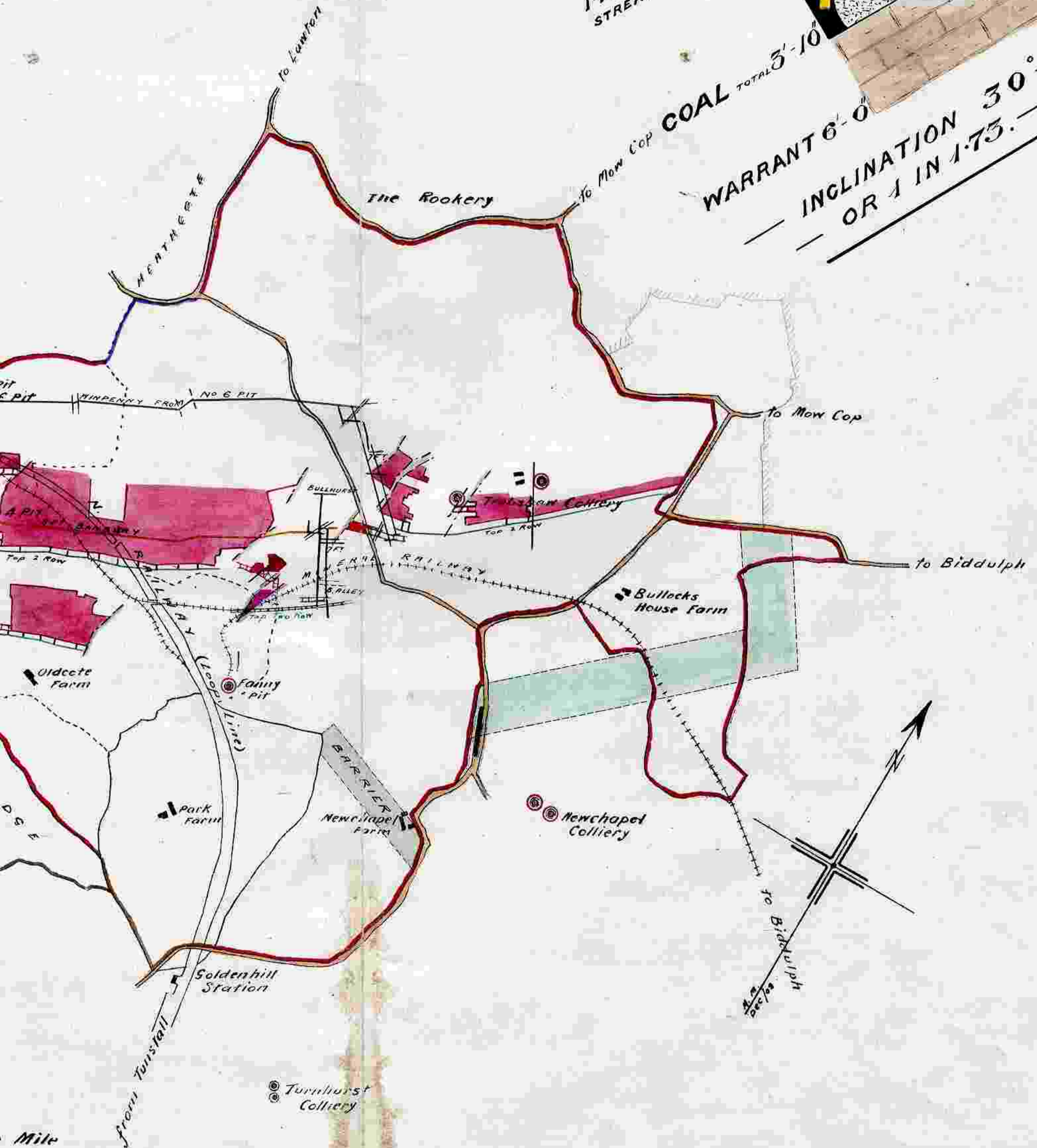


MILD GLUNCH
STREAKY COAL 1'-2"

COAL TOTAL 3'-10"

WARRANT 6'-0"

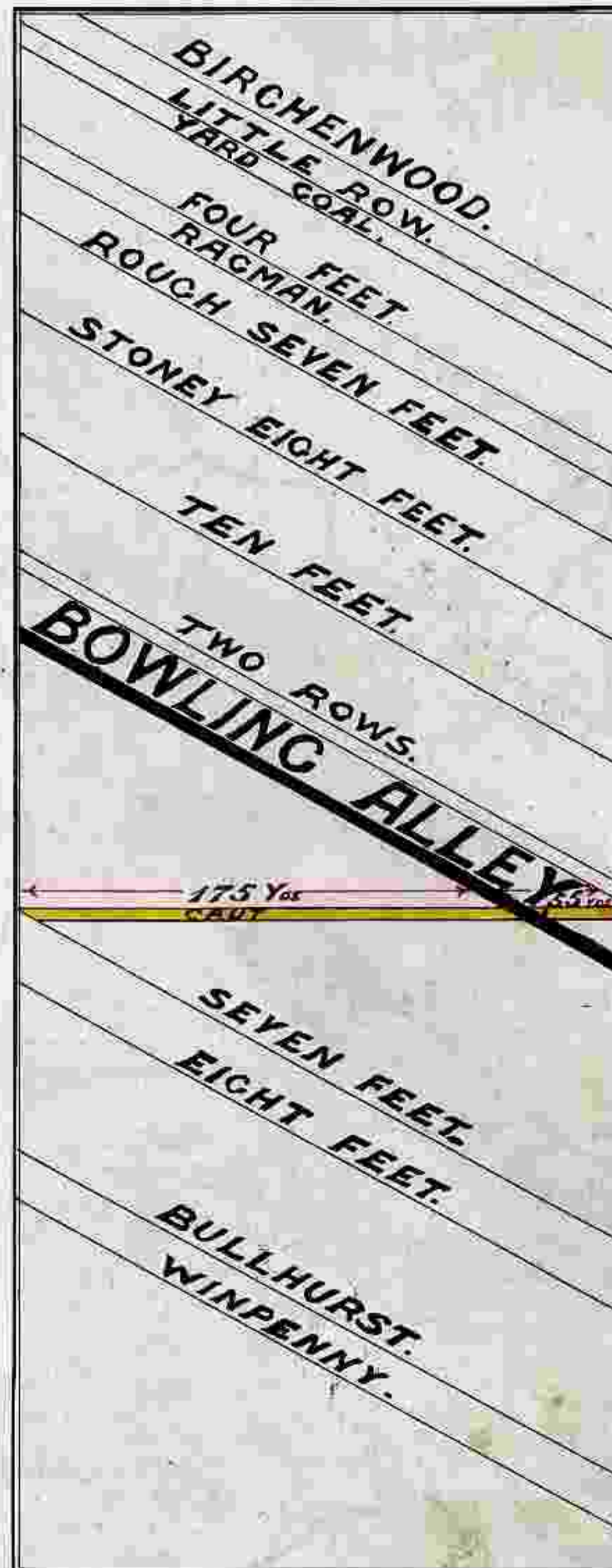
INCLINATION 30°
OR 1 IN 1.75.



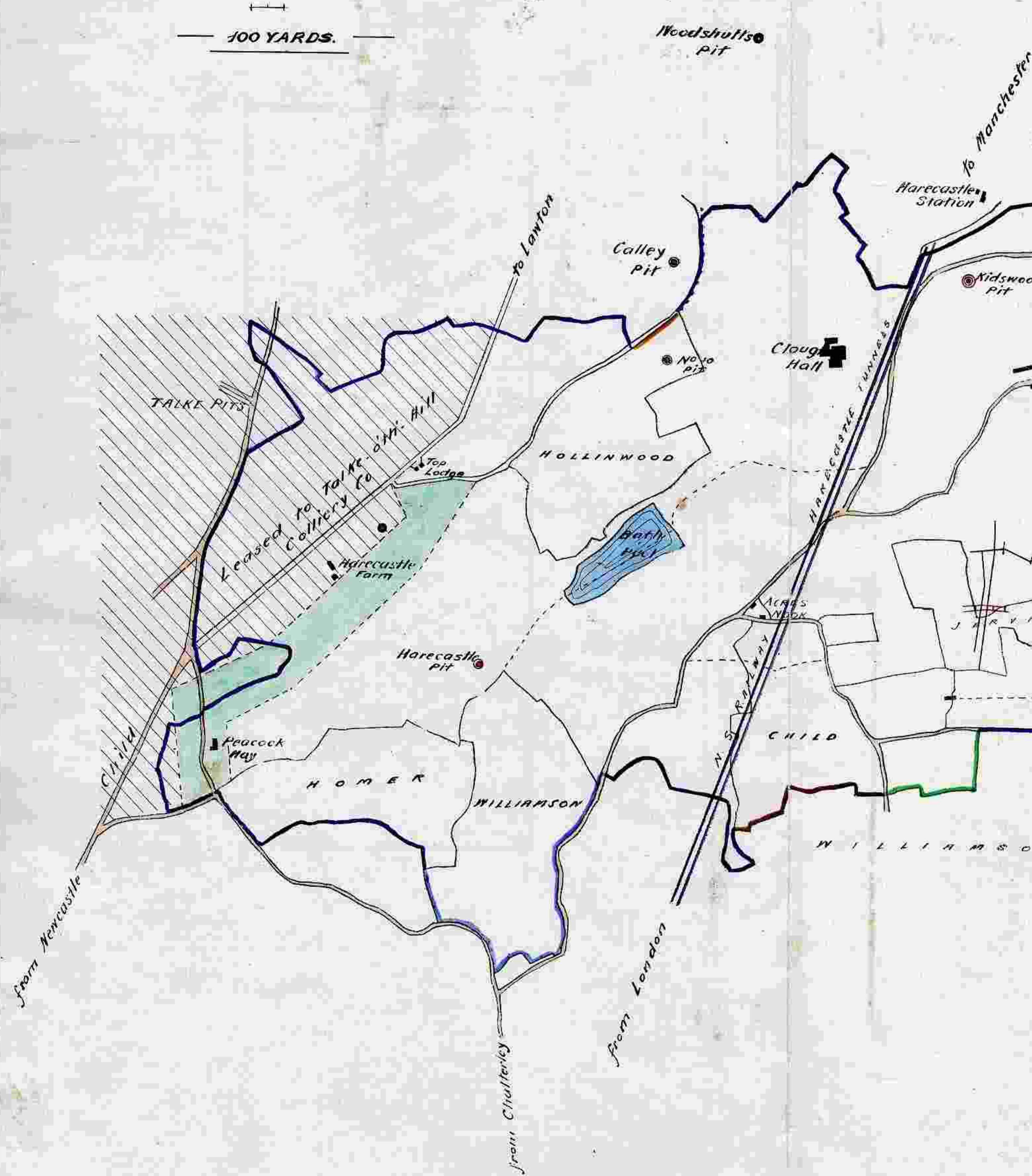
Mile

BOWLING ALLEY

16



BOWLI



Scale

BOWLING ALLEY

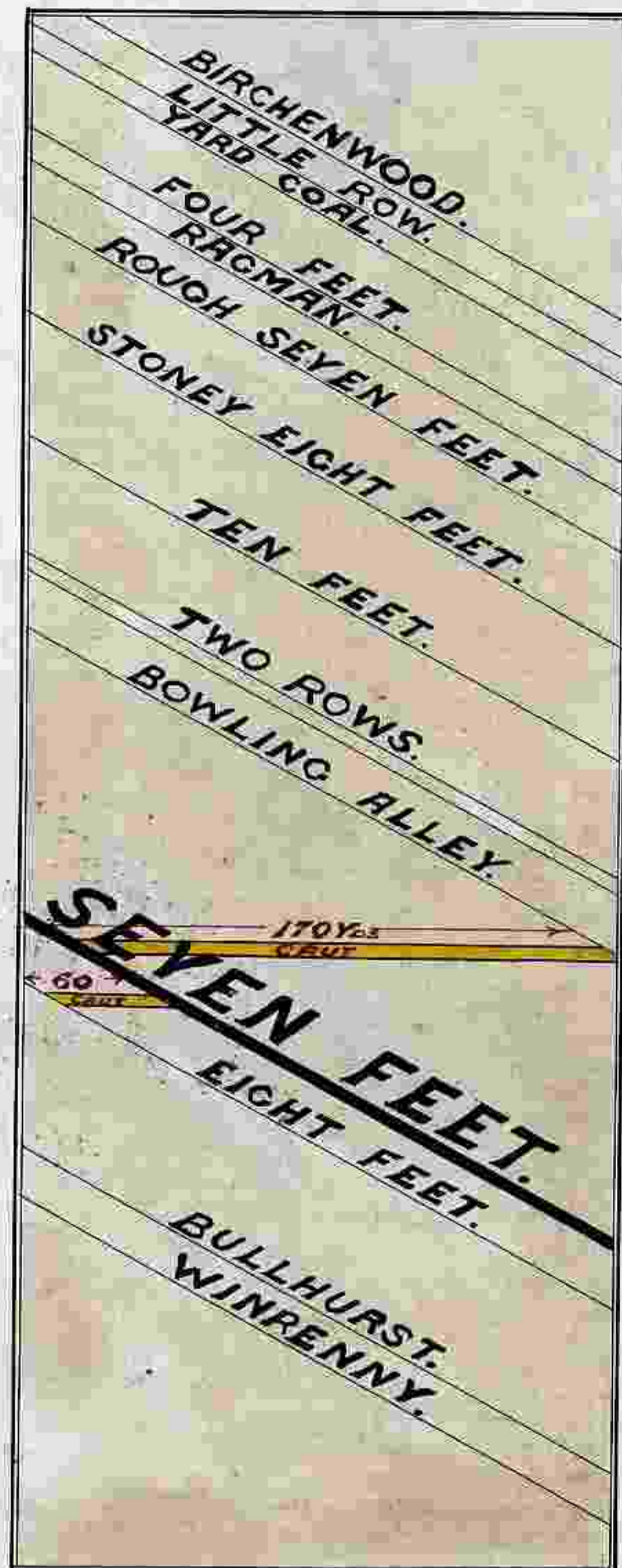


ALLEY



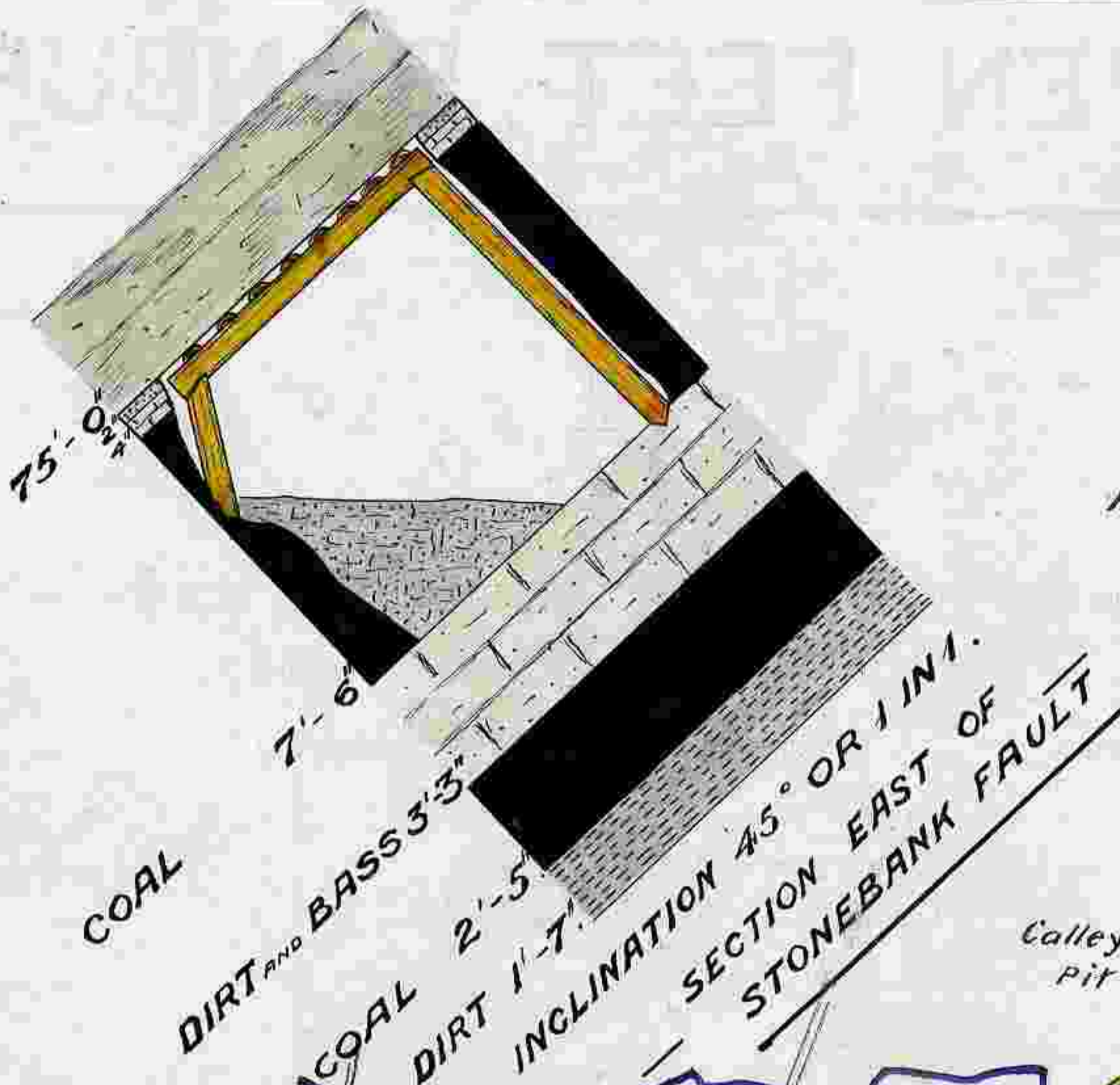
SEVEN FEET BANBURY

17



SEVEN F

ROCK
EASTWARD
DIPS



Woodshuffs
pit

to Manchester
to London

Harecastle
Station

Calley
pit

Kidswood
Pit

Clough
Hall

No 10
pit

TALKE PITS

HOLLINWOOD

Leased to Talke Colliery Co.
Harecastle Farm
Top Lodge

BARRIER

Bath
Pool

Child

Peacock
Hay

HOMER

WILLIAMSON

CHILD

WILLIAMSON

from Newcastle

from London

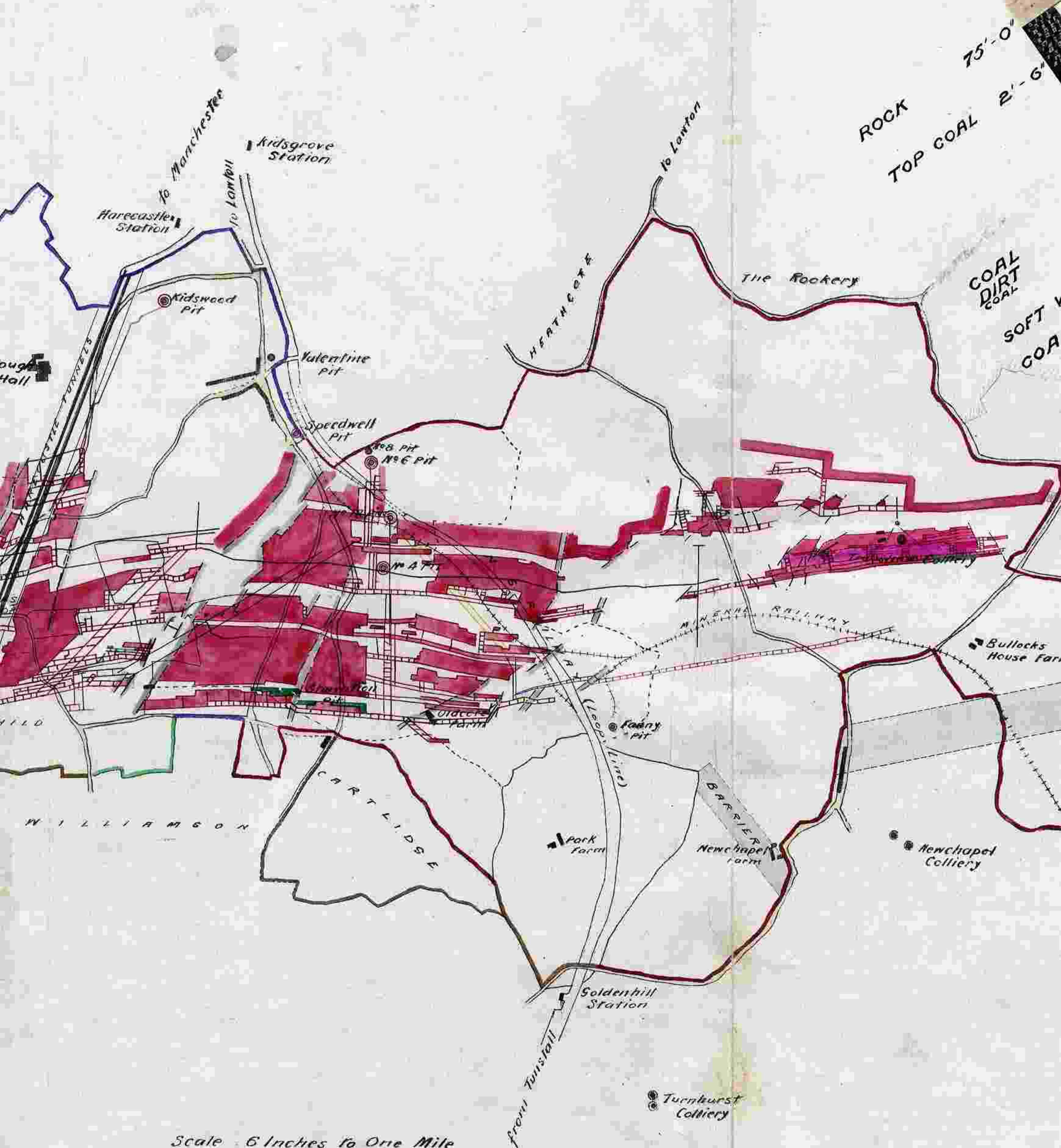
from Chatterley

ONE ACRE.

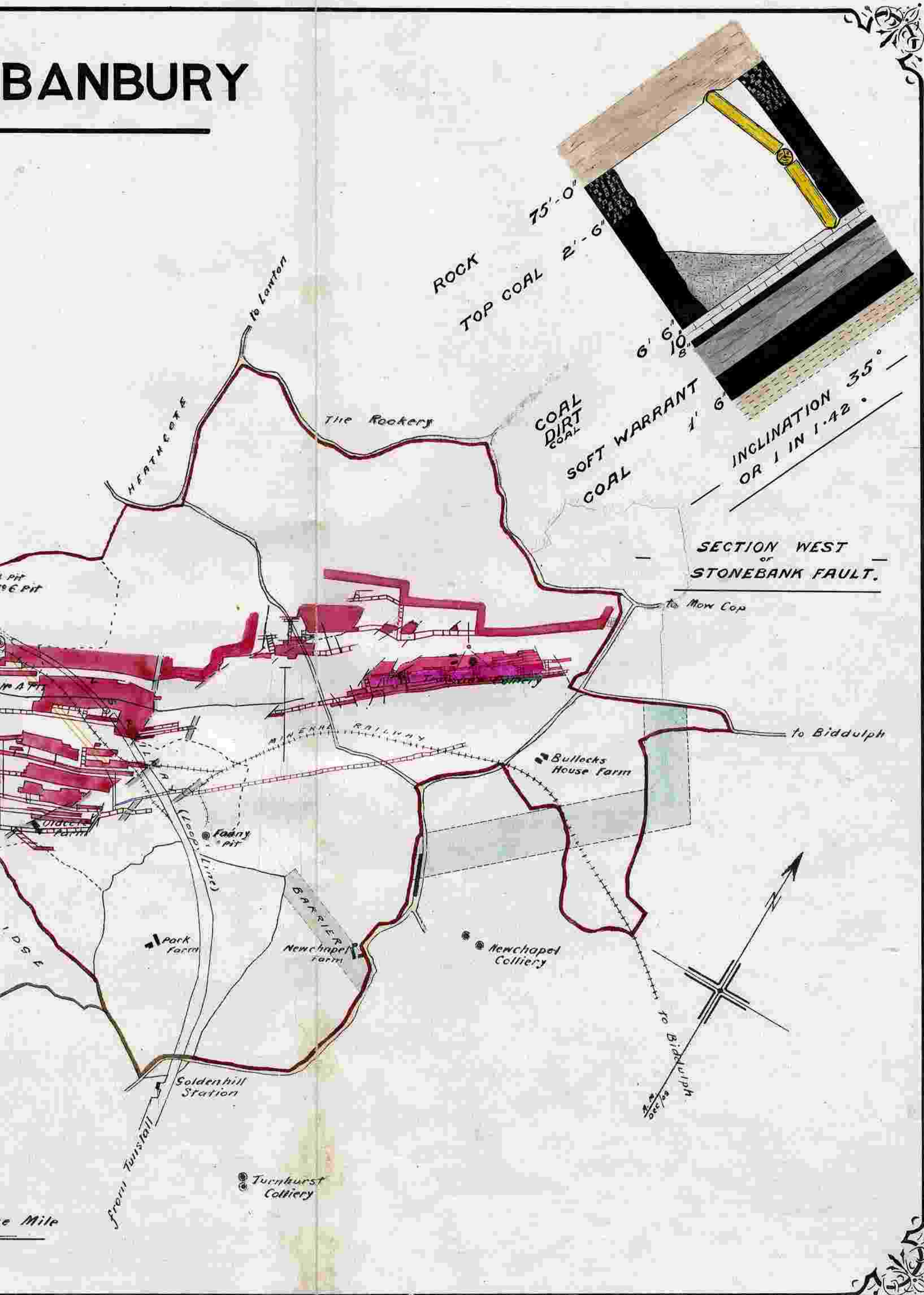
100 YDS.

Scale

SEVEN FEET BANBURY

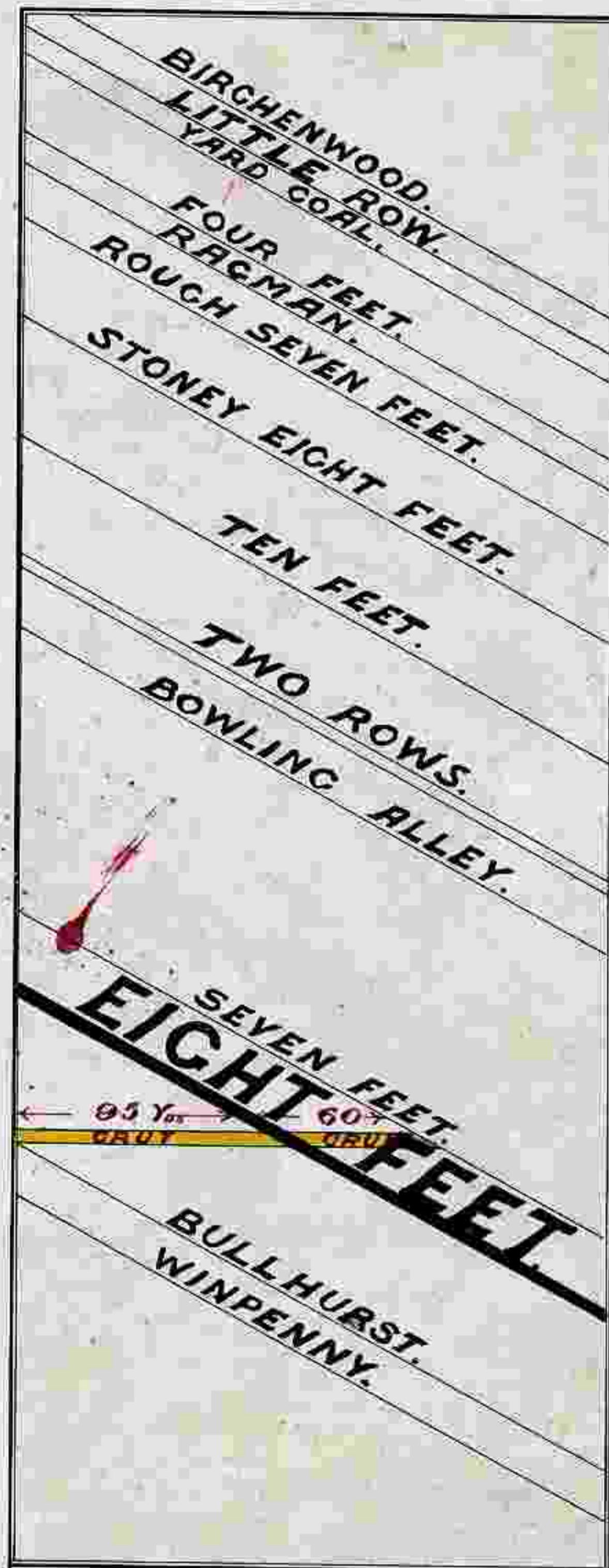


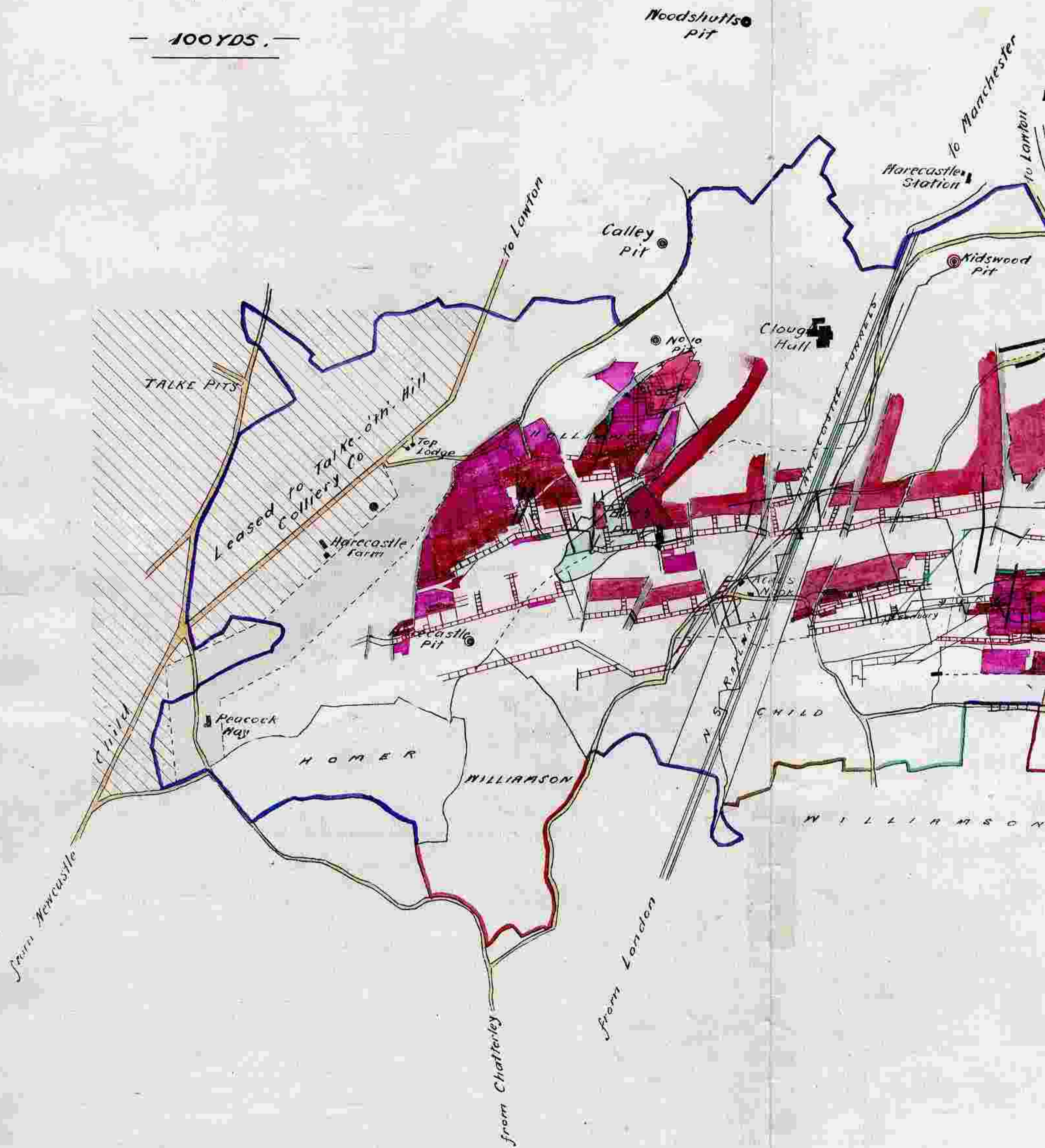
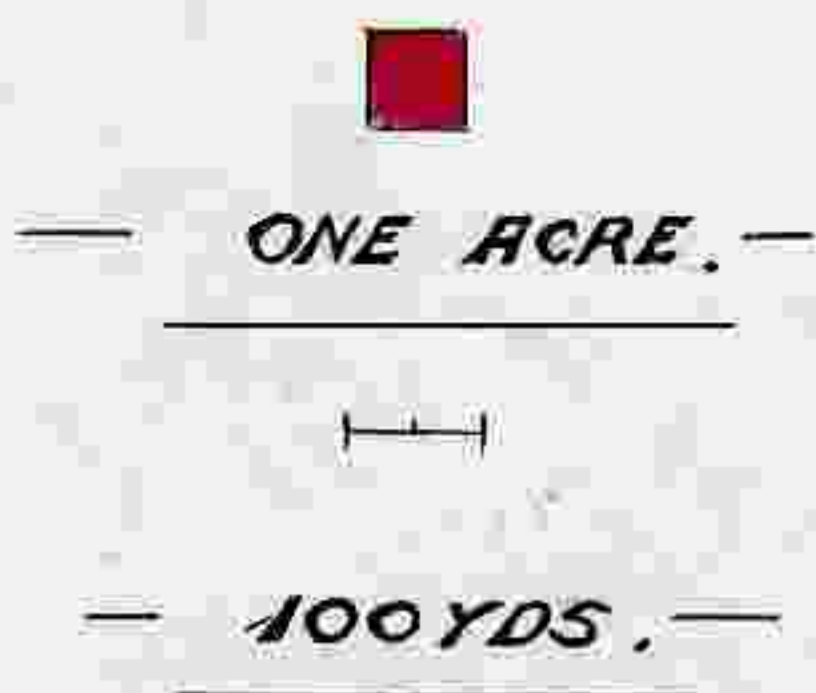
BANBURY



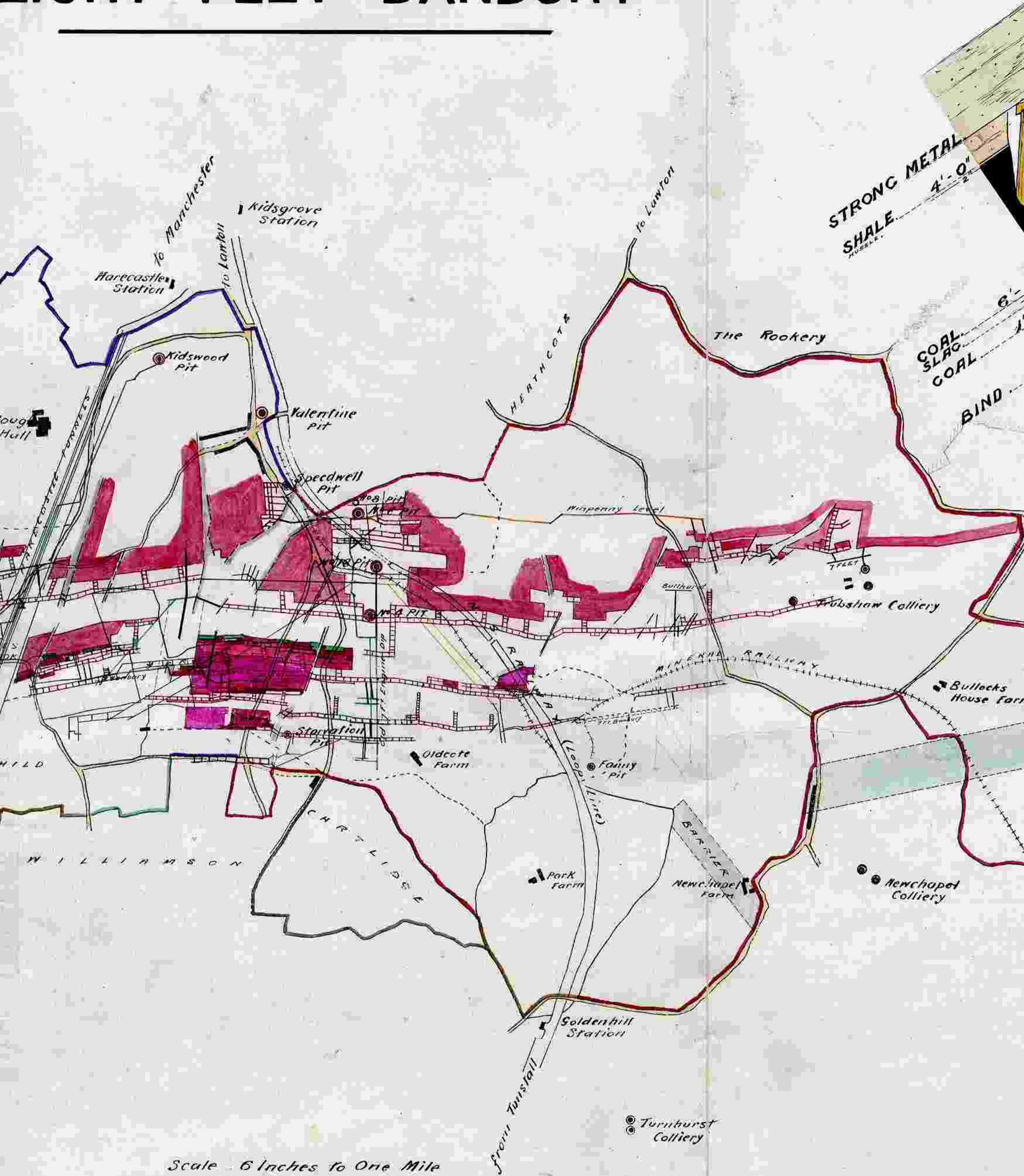
EIGHT FEET BANBURY

18





EIGHT FEET BANBURY



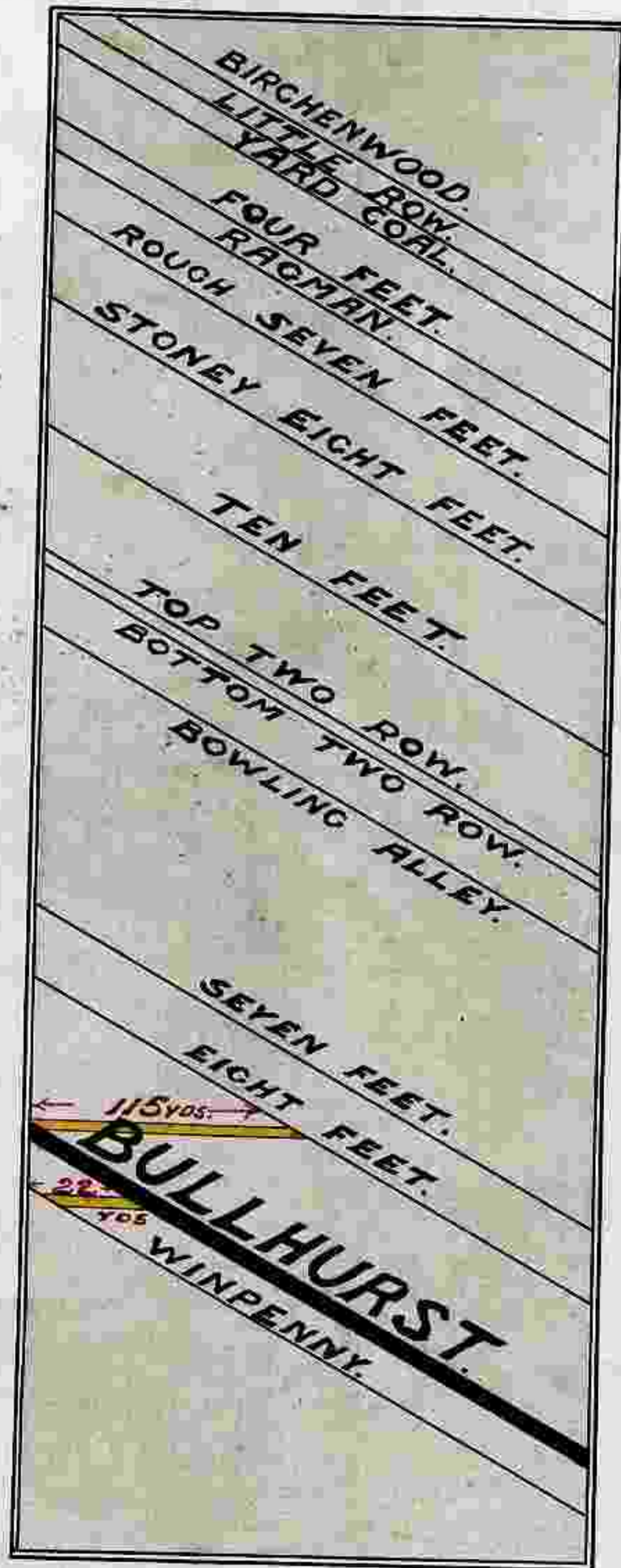


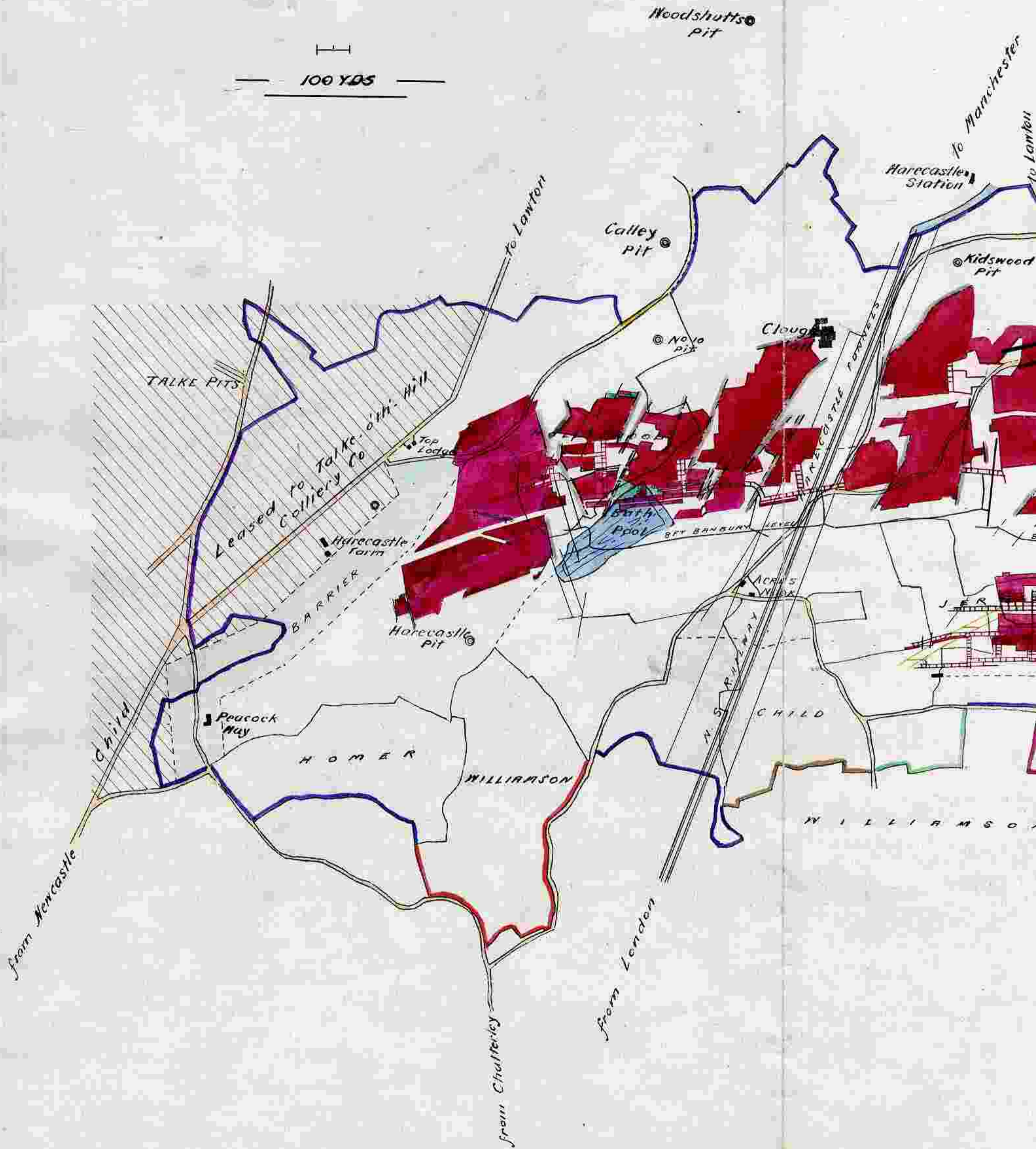
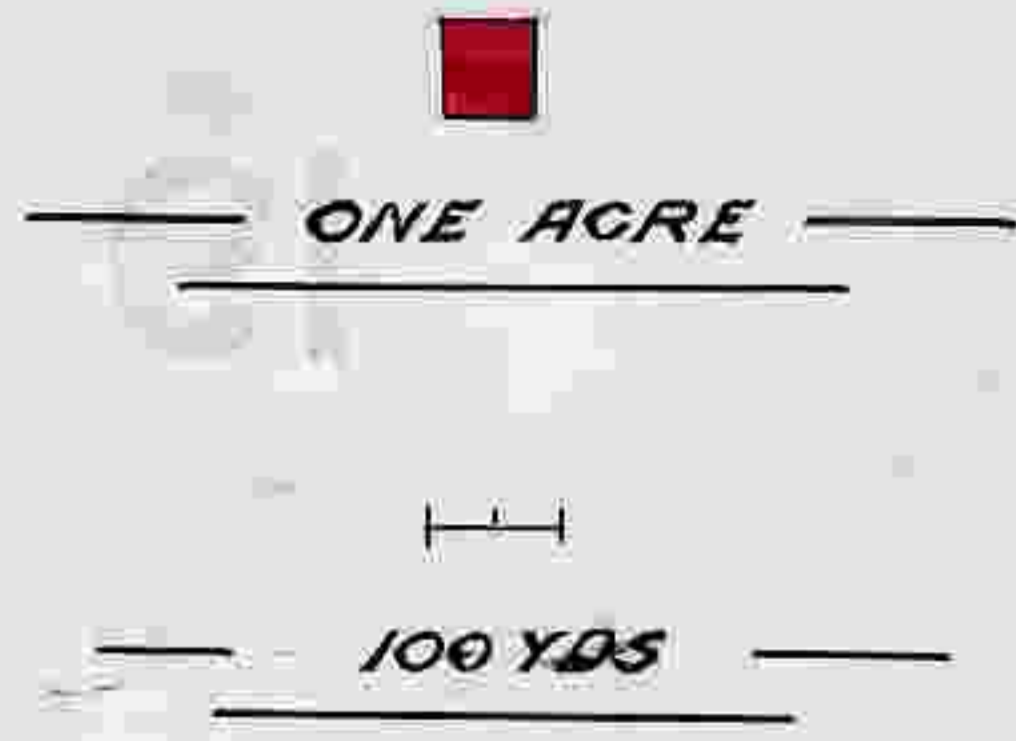
BANBURY



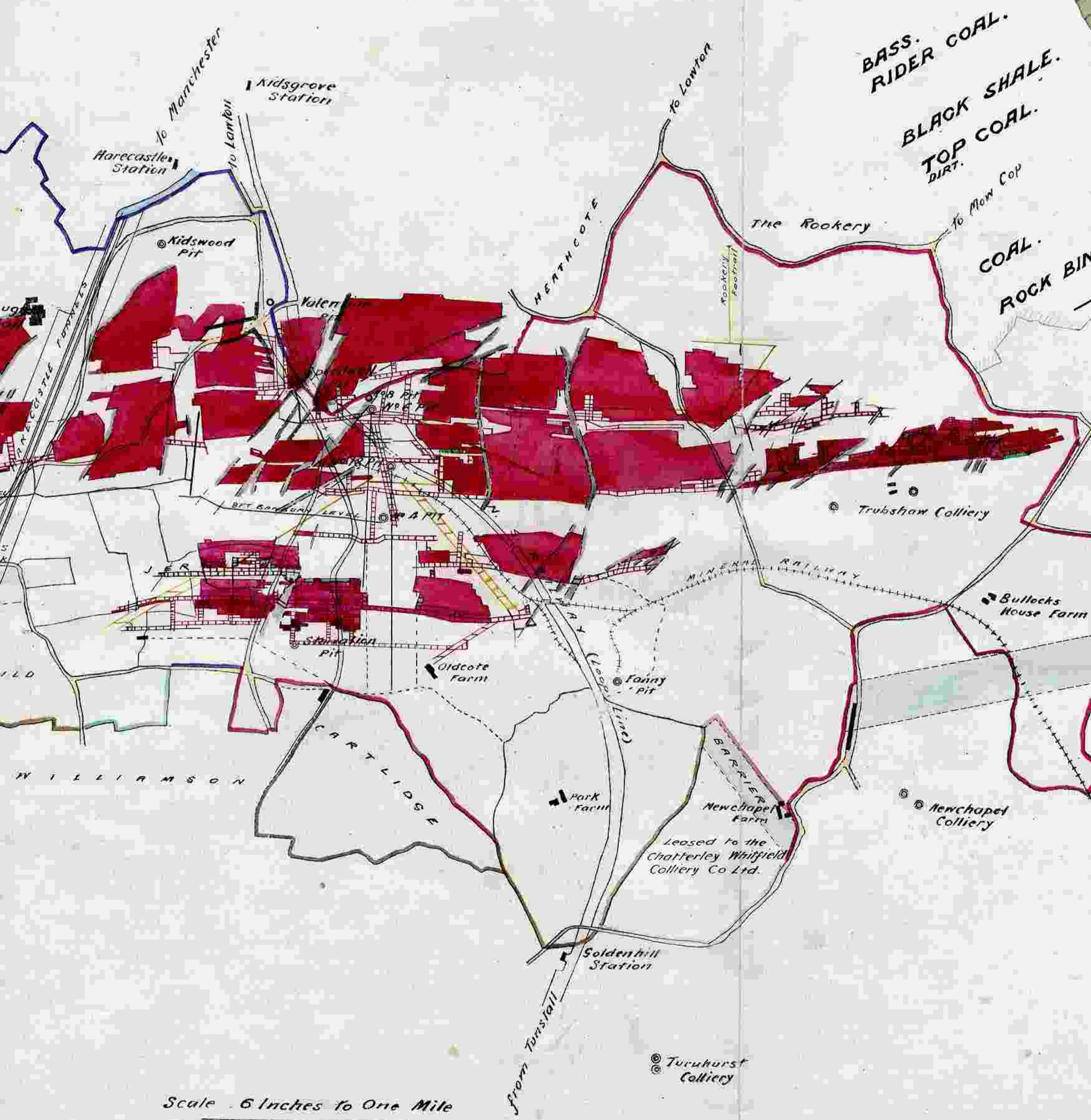
BULLHURST

19





BULLHURST



Scale 6 Inches to One Mile

RST



one Mile