

KINGSWOOD COAL – PART 2

by M.J.H. Southway

In his first article, in the last issue of BIAS JOURNAL, the author dealt mainly with the Kingswood, St. George, Hanham, Oldland, and Bitton areas. In this article he moves north and east to take in the Westerleigh, Pucklechurch, Mangotsfield, Soundwell, and Siston-Warmley areas.

Rudder, in his **History of Gloucestershire**, published in 1779, describes the Bristol Coalfield, in its bed of carboniferous limestone, as follows - "A remarkable rock of stone called the White Lays, (white lias), which runs through Yate, Cromhall, Thornbury, Almondsbury, Clifton, and across the Avon to the Leigh and Mendip in Somersetshire, and taking a large sweep thence eastward, returns a little short of Lansdown, to Wick, Sodbury, and to Yate, forming a circle of fourteen to fifteen miles in diameter, and it is said that coal may be dug everywhere within the circumference of that circle. Rudder's information was rather over-optimistic about coal being found everywhere within the circle he describes, but he does delineate the boundaries quite well.

Coalpit Heath

The most important area in the north of the coalfield was that at Coalpit Heath, where in 1620 Arthur Player, who had gained control of many pits in the Kingswood area, "of a greedy desyer of gayne to himself", turned his attention from his Manor of Frampton Cotterell to the neighbouring Manor of Pucklechurch, where he was charged with trespass by digging for coal in a meadow at Westerleigh in the Lordship of Thomas Roberts. Player claimed that he had a concession on the coal there, granted him by Roberts, but Roberts had leased the surface soil to copyholder Thomas Hobbes, and it was Hobbes who actually brought the trespass action against Player. Was there some collusion here? Perhaps Roberts regretted having granted the concession, and now wished to work the coal himself, possibly with the assistance of Hobbes.

Roberts' successor Samuel Astry certainly wished to keep it to himself, as in 1673 he wrote to a Mr. Clements, inviting him to be his Steward of the Manor, and to oversee the working of the coal. Astry died in 1704, and his wife in 1708, whereupon the estate passed to their three daughters, one of whom married Sir John Smyth, of Ashton Court. There was no Married Womens Property Act in those days, and so Sir John be-

came possessed of 5000/6000 acres of rich minerals. Later he took into partnership Lord Middleton, a Nottinghamshire coalowner, and Edward Frances Colston - of Bristol, each of whom took up a quarter share in the Coalpit Heath Company. Sir John, too, had been at loggerheads with the Player family, charging them with encroaching on Westerleigh "physically and with water".

The first workings were drifts into the Basset, the exposed edges or outcrops of the coal seams in hill-sides etc., where natural drainage was available. Then came the bell pits, where a shaft was sunk to a shallow seam, and the Adventurer descended a ladder and worked outwards all around him into the seam, excavating until the roof started to fall in, when he hastened up the ladder and sank another shaft some yards away, from which he again worked outwards until the roof became unsafe. Sometimes the roof was precariously supported with debris or waste to give a little longer life to the working, and ventilation would be obtained by holing through to an adjacent old shaft. The coal was at first hauled out in a Corf or basket on a man's back, climbing the ladder. In some parts, particularly in Scotland, this was women's work, but locally there is little record of women being employed in the pits, though some were employed on the surface. Soon the laborious hauling was taken over by Bucket Reels, or "Reel and Standers", the typical well-head gear or windlass, sometimes utilising two buckets for better balance. This was a slow business, the depth of the shaft was restricted to 20 or 30 yards, and the maximum raised in one winding would be only one to one and a half bushels, say one cwt., totalling only 10/15 tons per day.

If the collier, or pitman as he was then called, struck a spring of water, this too would have to be hauled out by the bucketful, and production of coal was restricted. Thus they could not cope with any more than about 60 gallons per hour, anything greater would "drown the pit". At Mays Hill they were still raising water by the bucketful in 1743 and 1744. Lord Middleton soon brought his Nottinghamshire experience to bear, installing Horse Gins to raise both coals and water. Thomas Smyth wrote to Middleton - "We had the misfortune to have one of the Horse Engines burnt by a spark of fire going on to the thatch, by which it was entirely consumed". The whole area around the shaft, including the horse-walk, was frequently enclosed in a very large

circular wooden building perhaps 60 ft. across, with a thatched conical roof, a great fire hazard.

In 1783 a deep drainage shaft, eventually 55 fathoms, was sunk at **Ram Hill**, ST676802, and a Beam pumping engine installed, 7ft. stroke, working 8 strokes per minute and raising 28 gallons per stroke by means of an 11 ins. pump, 224 gals. per min. This drained a series of workings at Ram Hill. Encouraged by the success of this scheme, they purchased, in 1785, Serridge Farm, a very extensive layout of which the Farmhouse had been built only two years earlier. It still stands to-day, a lovely old building in the style of a Manor House, very well restored and maintained. Here at ST675796 they sank another walled shaft, the **Serridge Engine Pit**, 47 fathoms deep and fitted with a 10 ft. stroke Beam pumping engine 8 strokes per min., with a 16/17" pump in two lifts, raising 86 gals. per stroke, 688 g.p.m. The water was actually raised 37 fathoms to a level 10 fathoms below the surface, emptying into the River Froom near Damsons Bridge. The Engine was erected by Mr. William Bond and Mr. Thomas Palmer, who were paid 20/- each per week, plus £20 jointly when completed. Sunday labour was to be paid at the daily rate. (No double time then!)

The Serridge Engine drained a very large area of super bell pits, which here were about 145 yards apart, rather well spaced. Handel Cossham later estimated one pit per acre as the local spacing, about 70 yards apart. Soon a Winding shaft, **Orchard or Middle Whimsey**, was sunk at ST673796 and three seams, Hard 2 ft. at 132 ft., Hollybush 3ft. at 210 ft., and Great or Deep 4 ft. at 290 ft. were eventually developed as continuous "Pillar and Stall" workings. Middleton wished to excavate the lowest seam first, allowing the roof to subside and so free the second seam for easier working, then in turn releasing the upper seam in the same way. This seems to have been the practice in some of his Notts. pits. However, Thomas Humphrys, the Coalpit Heath overseer, strongly protested that this would fracture the coal in the upper veins, "which we strive by every means in our power to prevent, as it makes much unsaleable small coal". Humphrys also pointed out that this method would necessitate sinking the Engine Pit to the full depth at once, thus not only increasing the initial capital outlay, but also the running expenses by having to pump from the full depth from the onset, - "the additional expense of drawing a column of water 13 or 14 fathoms more than it does at present, and that for perhaps 30 or 40 years to come, is an object worth attending to, especially as there is no necessity for it". Humphrys' well reasoned argument won the day. A winding shaft was also sunk at Ram Hill, ST679802 to the 2ft. 6 ins. "High" seam at 558 ft. The barrel-shaped skip from this shaft, made from wrought-iron rivetted plates and measuring about 4 ft. 6 ins. high by 3 ft. dia. was used as a rain-water

butt serving neighbouring cottages until a few years ago. It is said that it was bought for preservation by a visiting I.A. Enthusiast.

Lord Middleton was intensely keen on improving the transportation of coal away from the Collieries, which were still dependant on the packhorse, and in 1783 he wrote "Water carriage is what all Colliers must aim at. Strike a Levell from ye Hill side unto ye side of our Pitts, so as to make all shaft lifting needless, and save horses on ye top. Water to Bristol, or as near to it as we can". Various abortive schemes for canals were proposed between 1776 and 1793, but none succeeded in bringing the barges to Coalpit Heath. At last, almost in despair, Middleton wrote "Can a wood Waggon Way be got to ye canal yt is cutting from ye Severn to ye Thames, or can one be got to Bristol from ye Colliery?" It was from this germ of an idea, after various frustrated schemes, that the Bristol & Gloucestershire and Avon & Gloucestershire Tramroads were developed, though it took until 1832 to move coal from Orchard and Ram Hill. The former tramroad was eventually succeeded by the Bristol and Gloucester Railway in 1844, operated first by the Great Western and later by the Midland Companies. The line always suffered from the handicaps of steep gradients and narrow tunnels inherited from Tramroad days.

Later Developments at Coalpit Heath

In the meantime, developments were proceeding at Coalpit Heath, **New Engine** was sunk at ST678794 around 1825, and later became the supply and maintenance depot for the whole group, with Blacksmiths' Shop, Carpenters' Shop, Sawmill for pit-props. etc. Other shafts were sunk, **Church Leaze** at ST676798, **Oxbridge** ST682815, **Rose Oak** ST677806, **Half Moon** ST679811, **Nibley** ST692820, **Leonards** ST681813, **Upper Whimsey** ST678807, No. 5, No.6, and various other numbered and unnumbered shafts. A considerable geological fault cut across the workings, but as usual in those days the courageous management was not put off by the sudden loss of a seam, but proceeded to sink another shaft on the other side of the fault, so that for instance the Hard seam lost at 96 ft. in the Oxbridge workings, was recaptured at 480 ft. in the adjacent **Frog Lane** shaft sunk in about 1852 at ST687816. This pit had in fact twin oval shafts 9 ft. x 6 ft. 6 ins. and 660 ft. deep. The southerly shaft was fitted with a Cornish Beam pumping engine made by Bush of Bristol, 85 ins. cylinder dia., 10 ft. stroke, working 6½ strokes per min. There were three 20" dia. stages, the bottom being a lift pump, and the intermediate and top, force pumps, capacity 129 gals. per stroke. The water was actually raised 615 ft. to a level 45 ft. below the surface. Steam was supplied at 30 p.s.i. from a battery of four 28 ft. x 7 ft. Lancs. boilers with a fifth 34 ft. x 6 ft.

The northerly shaft was originally equipped with a vertical winder, but this was superseded around 1870 by a twin horizontal 27 ins. X 4 ft. with 12 ft. plain drum, eventually raising 400 tons per 10 hour day, from up to 660 ft. Four 28 ft. x 7 ft. Lancs. boilers supplied steam at 50 p.s.i. In addition to the Hard seam mentioned above, the Hollybush at 540 ft. and the High at pit bottom were also worked. By 1891 both shafts were being used as downcast, the upcast being provided by linking up with the **Mays Hill** workings. The latter shaft, at ST690819, is believed to have been first sunk in about 1780, and then enlarged in 1847. It was larger than that at Frog Lane and was used for raising and lowering the pit ponies. The Winder was a Beam type about 36 ins. x 6 ft. fitted with a 16 ft. flywheel and geared 1:2 to the 10 ft. winding drum, and the maker is believed to have been Acraman. Ventilation was originally provided by a 16 ft. Guibal fan 5 ft. 4ins. wide driven at 95 r.p.m. by a 12" x 18" horizontal engine, with a similar engine as stand-by. Later a Capell fan was added, 6 ft. 10 ins. inner dia. with 12 ft. outer rim of vanes, driven by an 18 ins. x 3 ft. horizontal engine 40 r.p.m. speeded up by a rope drive to 128 r.p.m. at the fan, circulating 38,000 c.f.m. Two Lancs. boilers 28 ft. x 7 ft. supplied steam at 50 p.s.i. In latter years the Mays Hill winder was only used in emergency, Frog Lane dealing with regular working with its double decker cages and underground hauling engines working inclines well over a mile in length. Steam was supplied from the surface boilers.

In addition to the Frog Lane pumps, the nearby **Nibley** shaft was equipped with a 16 ins. x 3ft. horizontal engine geared 1:3 operating twin 8" pumps by means of bell-crank levers mounted over the shaft, raising 70 g.p.m. Two egg-ended boilers supplied steam at 25 p.s.i. Thus in 1891, with production probably at its peak, over 2,800 tons of water had to be raised to produce 400 tons of coal per 10 hour day. The Colliery was finally "drowned out" in 1949.

Two locomotives worked the several miles of private track and sidings connecting with the Midland at Westerleigh and the later Great Western 1904 Badminton cut-off near Coalpit Heath Station. One of these was "Lord Salisbury," a 1906 Peckett 16" 0-6-0 having the portly old gentleman appearance which fitted her name. She was sent to Radstock when Coalpit Heath closed, and finished her days at Norton Hill Colliery, which closed in 1965. Whilst at Coalpit Heath she was stabled in a substantial stone-built locomotive shed, complete with maintenance pit, at ST682795, and her saddle tank was filled from an ancient Haystack Boiler which probably emanated from either the Ram Hill engine of 1783 or from the Serridge Engine of four or five years later, already mentioned. It would have been contemporary with these. This boiler, still in existence, is mounted on a bellied enlargement of the side and original end wall of the locomotive shed, which was obviously lengthened

at a later date to accommodate the second engine. Thus the 8 ft. dia. boiler is now about half-way along, and on top of, the 10 ft. high side wall. The "bellied-out" mounting or tower incorporates a furnace and fire-door somehow reminiscent of a giant "kitchen copper", but a local ex-employee informed me that this was merely to prevent freezing in winter, and was not intended for steam-raising! Water was raised to the tank from a nearby well by means of a donkey pump.

A curious recollection of Coalpit Heath was the weigh-bridge at ST683795 which remained in use until closure. This was of the broad gauge type, with a length of third rail bolted on to cope with the later standard gauge wagons, thus advertising its age. It did not disappear until after 1960.

Handel Cossham

Not far away, and still on the Smyth estates, were a group of old abandoned 18th century shafts including **Dudley**, ST695782; **Puffers**, ST694780; **Whimsey Garden** or **Bryants**, ST693777; **Cooks**, ST692775; **Great Cart**, ST690772; **Old Engine**, ST688770; **Hang-beggar**, ST687769; **Old Wood**, ST684768; **Quarry**, ST685765; **Parkgate**, ST684787; and **Brandybottom**, ST682771. Most of these were around 350 ft. - 450 ft. deep, but the last named was 675 ft. according to an intensive survey carried out by Handel Cossham in 1851. This seems to have been Cossham's first real opportunity to show his mettle, and although the seams, all in the Upper Series, were assumed to have been completely worked out in nearly all the shafts, his observations and instinct led him to think differently, and on behalf of his new partnership, Wethered, Cossham and Wethered, he took out a lease from the then Manorial owners, Sir John Henry Greville Smythe, Bart., and C.E.H.A. Colston.

He re-opened Cooks and Bryants pits as a temporary measure, and began to sink an Engine pit at **Parkfield**, ST689778. This was sunk to 800 ft. and equipped with a 54 ins. x 7 ft. Cornish Pumping Engine, bottom lift 8½ ins. intermediate plunger 10¼ ins. and top plunger 12 ins. A new deep winding shaft was begun sinking in 1856, and came into production in 1858. This again was sunk in the upper series, above the Pennant, and tapped the 2 ft. "Hard" seam at 588 ft., the 2 ft. 4 ins. "Top" seam at 700 ft., and the 2 ft 6 ins. "Hollybush" at 774 ft. with the 3 ft. "Great" seam below at a separation varying between 18 ins. and several feet.

The first winder, perhaps the sinking engine, was an 18 ins. x 3 ft. Beam engine, with flywheel and geared twin barrel drums, 40 ft. Headgear and 9 ft. Pulley. Later a twin 28 ins. x 4 ft. horizontal winder was fitted, with 15ft. barrel drum, 38 ft. Headgear, 15 ft. Pulleys and two wrought-iron cages weighing 11 cwts. each. The original ventilation was by means of underground

furnaces, but later an 18 ft. x 7 ft. wide Ventilating Fan was installed, driven by a twin 14 ins. x 16 ins. horizontal engine. There were six Lancashire boilers, four being 27 ft. x 7 ft., one 30 ft. x 7 ft., and one 24 ft. x 8 ft. Three Hauling engines were installed underground, supplied by two egg-ended boilers 24 ft x 4 ft.

Later the old **Brandybottom** shaft was re-opened and fitted with a 24 ins. x 4 ft. 6' ins. condensing engine with flywheel, geared to a 13 ft. barrel drum winding a single 6 cwt. cage. The headgear pulley was 13 ft. dia. An adjacent shaft belonging to **Lord Radnor**, ST682772, was leased and equipped with a 60 ins. x 8 ft. Cornish engine with 780 ft. of pumping rods and three stages of pumps, 10 ins., 10¼ ins., and 11 ins. The mineral area available to the Company on this whole site was about 1400 acres, with seams reasonably level, and few faults. Altogether a very productive works, producing 155,674 tons in 1875, and well in excess of this by the time of Cossham's death in 1890. The workings were well equipped with up-to-date machinery, and even had their own gas-works for underground illumination, this being a non-fiery area. However, water was always a growing problem despite the considerable pumping capacity at work, and eventually in 1936 the then owners, The East Bristol Colliery Company Ltd., decided upon abandonment. Cessation of pumping caused a build-up of water levels, which eventually percolated over two miles distance of strata to drown out the Coalpit Heath workings, which as we have seen closed 13 years later, in 1949.

Handel Cossham lived for a time at Shortwood Lodge, ST683763, so as to be near the Parkfield workings, and it is interesting to find that his Secretary, John Henshaw, was grandfather to the present owner of Shortwood Lodge, J.H. Britton, Esq., J.P. Cossham was interested in the **Shortwood** pits also, three of these disappeared in the excavation of the huge Cattybrook claypit ST682765, but there are small spoil-heaps remaining at ST680768, **Lapwater**, apparently an Engine pit, which still provided a water-supply for the adjacent brick-works in 1970; ST678765 **Chaffhouse**, 396 ft. deep; and ST678764, **Cook and Thatchers**, all Working the "Top" and "Hard" seams. These had a chequered career, the Financial Times of May 1892 tells us that they were worked until 1844 by Reynolds & Co., "who lost heavily", then transferred to J.S. Fry, and worked at a loss, then in 1852 to James Wethered and Handel Cossham, who worked at a great loss until 1856, when they were dismantled and abandoned. Next, we read, "Cook and Thatcher, ropemakers, lost disastrously and tragically, and they were finally taken up by Isaac White, in 1865, with his ill-starred passion for mining speculation". Not quite finally, as in 1879 the proprietors were named at C. Lovell & Co.

In 1892 these pits were the focus of a financial scandal when a certain Richard C. Nokes, a Civil Service Customs Officer, was asked by the Financial Times, "whose debentures he was trying to foist upon the public." It seems that his Prospectus called these pits "South Parkfield", a name which referred exclusively to Cossham's Brandybottom and adjacent Engine Pits. Obviously Nokes was trying to cash-in on the name. He even had the audacity to describe the pits as "Virgin property" after all those failures. As the Financial Times said, "Parkfield seams **do exist** on the property, but they are a mass of faults and unworkable at a profit".

There were quite a number of Colliery Property swindles going on at that time, on October 18th 1890, the Financial News exposed the "Bristol and Downend Midland Colliery Co. Ltd." and one Samuel Victor Morley was sentenced to five years penal servitude for "defrauding by means of debentures". Strangely enough the Vendor of both the Morley and Nokes properties was the same man, Alfred Scott, Colliery proprietor, of Marlborough Hill. It later transpired in a Bankruptcy proceedings that the "Bristol and Midland" lease actually belonged to a certain Henry Hands, who mortgaged it to a Mr. Le Voi for £3000.

In the same year, 1890, John Colthurst of Chew Magna was approached by a firm of London solicitors on behalf of their clients, "The District of Bristol Collieries Co. Ltd." and the "National Finance Corporation" who claimed that they had a lease of Coal Rights under 60 acres of his land at Blackhorse Mangotsfield, "granted 15th November 1884 by one Joseph Charles Newman of 19 Portland Square, Bristol". They even had the temerity to take him to court, where Colthurst avowed that he had no knowledge of Newman, and was able to produce his own deeds. We shall be examining a further piece of financial skulduggery later.

Mangotsfield and Staple Hill

From Shortwood we pass over into Mangotsfield, where a Drift mine, **Fryars** once existed at ST673762. Then over at ST668763 was **Church Farm Land pit**, working the 2 ft.9 ins. "Mangotsfield Great" at 78ft. and the 2 ft. "Mangotsfield Little" at 93ft. Little more than 100 yards away **Church Farm Deep** worked the "Great" at 215 ft. and the "Little" at 229 ft., so the strata was quite steeply inclined. The original proprietors were Richard Haynes and Charles Emmet, and the latter promoted a new company in 1870, Mangotsfield Colliery Co. Ltd., with Thomas Brown, Mining Engineer, as managing director. However, the Report of the Geological Survey, by R. Hunt, quotes the proprietors as J. Brown in 1874, and Brown & Buller in 1877. It was usually known as **Bullers Pit**. In 1881 the Deep shaft was sunk lower to 285 ft. and a new 14 ins. dia. x 9 ft. stroke beam pump installed, making it an Engine pit for drainage. The Engine House still stands, with

ft., not much met with elsewhere. From the **High pit** a cross measure also met the Sheppards' seams mentioned above. The workings were eventually interconnected between the three shafts, High pit became the Downcast, Centre pit the Upcast, and Lower pit the winding shaft, with a private branch tramway to the Avon & Gloucestershire Tramroad, which it joined at ST664744. The workings were quite close to the anti-clinal axis, and in consequence were at quite a steep angle, 45° at some points. They were drained by a separate Pumping shaft near the Lower pit, originally equipped with a Newcomen engine with three stages of bucket lifts. A second Newcomen engine was added later, again with bucket lifts, and eventually the two engines were taken out and replaced by a single Boulton & Watt operating both sets of pumps.

In 1852/3 an ill-advised attempt was made from the High Pit, to penetrate the old Lodge Hill workings, drowned out many years before. We read "In the old workings to the rise, the Pillars are now being worked out". As a result, a torrent of water swept down through the three sets of workings and completely overwhelmed the pumps with debris so that they could not be brought to work again, and the workings had to be abandoned. An eye-witness who assisted with the closure commented that had one of the pump lifts been of the Plunger type it could have coped with the water without becoming choked with debris, and the whole colliery might have been saved, as within a short time the flow of water diminished until "it might have been contained by a 3 in. pipe". Unfortunately Whittuck had a bad record from the safety angle, and was reputed to be neglectful and parsimonious in maintenance.

There were quite a large number of workings in the Soundwell area and at least one Blackband iron-ore pit at **Hopewell Hill**. As late as 1927 a group of unemployed miners and labourers opened up a **Drift** at ST647751, which they named **The Miniature**. This broke into older workings from which they extracted quite a quantity of coal before being stopped by the authorities. Somewhere near ST650750 a famous mining landmark stood 200 years ago, this was the **Flagstaff**. Here was the head of the north extension of **Players New Level**, which zig-zagged in a southerly direction for about five furlongs, before turning almost due east into the original level for another seven furlongs or so to reach its mouth at ST663742 where it emptied into Kingswood Brook, (erroneously called Warmley Brook, and sometimes Siston Brook) and thence to the River Avon. Player's map of 1750 shows 37 pits along this level.

Siston Hill and Warmley

However, we must hasten along south-eastward from our last map reference to ST669739, **Siston Hill Colliery**. This was certainly at work in 1804, and probably much

earlier. The 1871 Coal Commission reported that it was no longer at work, but the Catalogue of Plans of Abandoned Mines says that it ceased in 1876. However that might be, S.H. Hadley was the owner by 1880. Ten years later, in 1890, a new Company was promoted, with Directors mainly consisting of Investment Financiers. They employed five separate Mining Engineers to report on the state of the Colliery, and these came up with glowing accounts of the potential, one giving a list of 15 seams which could be worked, including one of 11 ft. in thickness!

The nett available prospect was given as nearly 7,000,000 tons, or 45 years supply at 3000 tons per week! Unfortunately for them one more honest Engineer let the cat out of the bag: "The Colliery has been idle for several years, and I could carry out no underground inspection, but obtained my information from former workmen who had been employed at the workings." Couple this with his recommendation that "The Lessor should be asked to forego the minimum rent for the first year whilst the water is pumped out." There you have it, - the workings were completely flooded, and all the evidence was heresay from local, perhaps unemployed, miners seeking an assurance of steady work. Another statement from the prospectus catches the eye. "The Colliery connects with the Avon and Gloucester section of the Great Western Railway, which connects it with the River Avon, for Bath and Bristol". This in 1890 although the A & G had closed in 1865!

However, full details of the shafts and machinery were given:- "Four shafts, No. 1 Downcast 9 ft. dia. 95 fathoms, walled and fitted with girders, and guides of best pitchpine. Pit framing 45 ft. with 14 ft. Pulley wheels, two separate cages. Winder by Isaac Boulton, Ashton-under-Lyne, double horizontal 26 ins. dia. X 4 ft. 6 ins. stroke, 12 ft. Winding drum with round ropes capable of 700 tons per day from 200 fathoms. Pumping engine compound, two 19 ins. and one 36 ins. 3/1 gearing with 9½ in. Pumps, top 100 yards force pumps with 9 inch square rods, bottom 90 yards lift pump with 5 inch square rods. Capability 10,000/15,000 gallons per hour. No. 2 shaft Upcast 6 ft. dia. 92 fathoms, walled and fitted with Headgear and single pulley, pumping engine could wind if not in use for pumping. Warmley shaft 80 fathoms to Upper Great vein, North shaft 80 fathoms to 6 ft. seam still unworked. Drift connecting Nos. 1 and 2 shafts at 90 fathoms intersected Great and Gillars End veins, also blackband ironstone overlying Gillars End, and good fireclay below." The **North shaft** was at ST667743, only recently permanently capped. The name Gillars End is a variation of Gillars Inn. Actually, only the Kingswood Great, Gillars Inn, and possibly the Lower Five seams were ever worked, which contrasts ill with the list of fifteen seams mentioned in one report, most of which were stated to be between 5 ft. and 11 ft. in thickness,

never attained elsewhere in the area. Altogether a giant spoof, and little wonder that we hear no further of the scheme, nor of S.H. Hadley's "Dead Rent £500 per annum, merging to 6d. ton royalty".

One-third of a mile to the south-east lay **Crown Colliery**, illustrated in Bias Journal 4, and incorporating four main shafts, ST673733, **Crown**; ST672734 **Crown South**; ST672735 **Crown Engine**; and same reference **Crown West**. Their early history is somewhat obscure. William Marsden was the proprietor in 1854, then they were purchased by Gabriel Goldney in 1865/66. Unfortunately the prospectus makes bare reference to "Engine House, Plant and Machinery, Pumping and Winding Engines with new Boiler, Pumps, etc.", but no details are given, though we know that the Engine and South shafts, straddling the main London road, were both served by the Engine House of the former, still standing and in use as a Builders premises. The prospectus was chiefly concerned about the "Freehold and Inheritance of and in the Coal, Ironstone, and Building Stone under about 135 acres of land." The fields and their acreage are quite meticulously tabulated, and there is a reference to "A vein of valuable Clay, affording a good opportunity of establishing a Brick and Tile yard, which is much wanted in the neighbourhood." This duly happened, of course, and culminated in the Pipe Works, recently worked out and closed.

Goldney seems to have leased the Colliery in a series of short-term Leases, E.L. Owen, 1872, Crown Colliery Co. 1877, Gabriel Goldney 1878, and R.L. Owen 1880, finally closing in 1888. The seams worked were mainly Kingswood Great at 390 ft., Kingswood Little, and Pound. Rail connection was established, at first with the A & G tramroad, and later with the Midland Railway, Bath branch. Curiously enough, attempts were still being made in 1912/13, and again in 1919 to open up the seams to the south of Crown territory, but these seem to have been frustrated by the Midland Railway Co.

Gabriel Goldney owned another pit at ST670726, the **Goldney**, working the New Smiths seam at 260 ft. This dates from around 1820, and was bought by Goldney in 1890 and deepened by him in 1906, only to close in 1909. The lower part of the curious brick-built Engine house remains, and the mouth of the shaft is somewhat insecurely covered. This is on private land, not readily accessible. Two nearby new housing estates are built on ground occupied by many old shafts.

Another early colliery, **Grimsbury**, had its Engine shaft at ST666732, Winding shaft at ST666733, and Upcast at ST667733, the former two shafts being right on the perimeter of the grounds of the new Grange School, and the latter shaft in the playing field. The colliery, which had its own Coke ovens, closed in 1832 after obtaining Poor-rate remission on account of low output.

Other early pits working the same shallow seams included ST660730 **Old Cockroad**; ST660728 **Smiths**; ST655730 and ST657730 **Gee Moor pits**, worked by the Jefferis brothers, who also worked Brandybottom at one time; and ST658728 **Thompsons** or **Batchellors**, with its twin shaft on the other side of Cockroad, worked from the same Engine house, still standing, and apparently originally occupied by a vertical winder. Thompson was the schoolmaster at Cockroad and Batchellor was the Lord of the Manor from 1831 to 1862, the pits had all closed by 1871.

To the south, down over the hill, lay the **Barrs Court** or **Hollyguest pit** at ST654726 working a 2 ft. 6 ins. seam at 740 ft. This was being worked by Pilditch, Steedes, and Holway between 1864 and 1868, or possibly a few years later. The reason for abandonment was a considerable spring of water which is still flowing to-day, despite partial filling of the shaft.

Away up to ST650730 another group of pits included **Shot Patch**, (or **Shop Patch**) reputed to have been used as a place of incarceration for two Bristol bailiffs who in 1795 had the temerity to attempt to execute a warrant against some local residents who were under the "protection" of the infamous and notorious Cockroad Gang. The luckless officers were seized, lowered into the pit, where they remained for 24 hours, then raised, given a meal of gin and gingerbread, charged 6/8d. for their "lodging", and made to swear an oath and sign an undertaking that they would never trouble or molest the district again!

Other Areas

One could go on reporting these smaller workings ad infinitum and ad nauseam, but there were larger pits at **Cromhall**, **Rangeworthy**, **Wapley** and **Yate** which we have deliberately excluded, as they are being actively researched by David Bick, of the Gloucestershire Society for Industrial Archaeology, who has been most helpful. On the other hand one was sorely tempted to include the Bedminster and **Ashton collieries**, as not only were they working the same Kingswood seams, but they also have a considerable historical connection. Perhaps then the story of these latter collieries might legitimately be included at some later date.

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