ART. X.—Canal Head, Kendal. By PAUL N. WILSON.

Read at Penrith, April 6th, 1968.

#### Introduction.

THE general history of the Kendal and Lancaster Canal is well documented. J. F. Curwen's paper in CW2 xvii 26-47 gives an excellent account of its planning and construction, and Cornelius Nicholson in *Annals of Kendal* (Kendal, 1861) 147-148 explains how vital it was that this rapidly developing town should be provided with a reliable and efficient method of transport to obtain its raw materials and get its products to its markets. The festivities which accompanied the opening of the Canal on 19 June 1819 were vividly described in the local press.<sup>1</sup>

Kendal was, in the 18th and 19th centuries, and is even more so in the 20th, an industrial town. At first its industries, mainly textile and tanning, called for the labour of human hands. As mechanical processes developed during the latter half of the 18th and early 19th centuries, Kendal did not lag behind. It had a good river running through the centre of the town, and soon after 1800 new woollen factories were built at Dockray Hall, Castle and Low Mills, all taking their

<sup>&</sup>lt;sup>1</sup> "The Kendal and Lancaster Canal opened for navigation yesterday. All business was suspended, the shops were closed, flags were hoisted, and the bells rung. A procession of packets from Kendal met a procession from Lancaster at Crooklands, and the combined procession of sixteen boats and packets proceeded to Kendal. The proceedings included a dinner at the Town Hall, to which read rather strangely now. [c. 1865.] For instance, Mr. Mayor [John Pearson] gave 'A bottle at night and business in the morning'. T. Wilson, Esq., gave 'The Bonny Lasses of Westmorland', 'Old wine and young women'. and the concluding toast was 'Champagne to our real friends, and real pain to our sham friends'. A ball in the evening terminated the festivities of the day." Local Chronology (a collection of excerpts from the local press). Kendal, 1865, p. 35.

power from the river Kent. A few miles to the north, paper-mills were opened at Burneside, and to the south there were Wakefield's Gunpowder Mills at Sedgwick and paper-mills at Beetham.<sup>2</sup> The whole of South Westmorland urgently needed the Canal.

It reached Tewitfield, twelve miles south of Kendal, in 1797, but considerably more money was then required to build the locks to the Kendal section, and the incidence of the Napoleonic War did not help the financial position. Work was re-started in 1812, and in due course the completion date was evidently given as the summer of 1810.

### The Canal basin and covered wharves.

The Canal Company took their cut to the Canal terminus in the Aynam,<sup>3</sup> and the Corporation undertook to construct the Canal basin with its wharves and warehouses. It is with this section of the work, and the effect which it had on Kendal, that this paper is concerned.

Early in 1818 Kendal Corporation appointed a Lancaster Canal Committee, and a meeting of this Committee and the Canal Company was held in Lancaster on 27 March 1818.4 The Committee were evidently given "powers to act", and they certainly used them !

On behalf of the Mayor and Corporation they undertook:

<sup>&</sup>lt;sup>2</sup> Ref. Water Power Mills of South Westmorland, John Somervell, Kendal, 56-65 (Titus Wilson, Kendal, 1930). <sup>3</sup> Information from the Town Clerk's Office, Kendal. <sup>4</sup> Kendal Corporation Records. I am indebted to the Town Clerk of Kendal and his staff for permission to look through their records. The most interesting is The Canal Book, a well-bound volume,  $9\frac{3}{4}$  in. x  $7\frac{3}{4}$  in. x I $\frac{1}{4}$  in., running from 10 March 1818 to 14 December 1835, which records the activities of this Committee. I will refer to The Canal Book as CB and to Kendal Corporation Records as KCB and to Kendal Corporation Records as KCR.

- (i) Not to extend the Canal beyond the Aynam<sup>5</sup>;
- (ii) to build a new bridge over the river Kent in place of the existing "Mill Bridge";
- (iii) to erect warehouses and wharfs at the terminus of the Canal.

In these days of delay and frustration, when many years often pass between the preparation of an important scheme and its fulfilment, it is interesting to record the speed with which this committee of Kendal Town Councillors got on with the job. They agreed to meet at 6 o'clock every Monday evening at the Commercial Inn (the atmosphere may have been more conducive to making rapid decisions than that of a committee-room in the Town Hall), and seem to have got their priorities right.

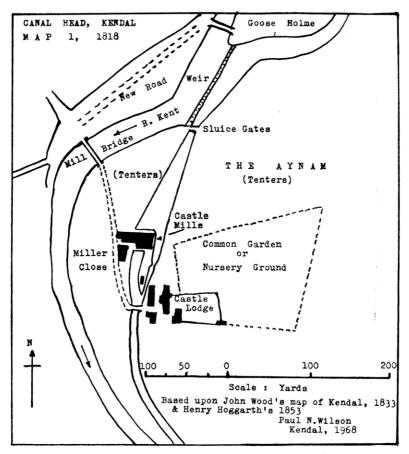
In fairness to those members of Local Government and their officials who now strive to get things done, it must be remembered that Whitehall did not care two hoots if the Kendal Corporation elected to build a bridge, dig a canal through private land and erect large warehouses. If the Corporation wanted to do the work, and could get the money, they could carry on. Even so, the time-table *was* remarkable, and is worth recording.

# Clearing The Aynam and building the bridge.

I have tried, in maps I and 2, to show what happened to The Aynam between May 1818 and June 1819. They are based on John Wood's map of 1833

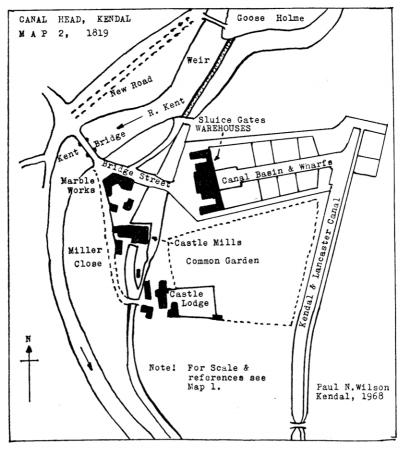
<sup>&</sup>lt;sup>5</sup> The Aynam, see map I, was an area of land which lay to the north of Castle Mills, and was bounded on the west by the Castle Mills Head Race, on the east by the Castle Hill, and on the north by Wildman Street. A. H. Smith, *Place Names of Westmorland*, 115, describes Aynam as: ". . . a piece of land cut off or taken into an estate". It is interesting to find that Hoggarth's map of 1853 refers to *Little Aynam* as an area to the south of Castle Mills, now built over by Queen Catherine Street, Parr Street, and the Aynam Road houses. In some mysterious way Little Aynam has now moved north, and is applied vaguely to an area bounded on the west by the line of the filled-in head-race which, 150 years ago, was *The Aynam*.

and Henry Hoggarth's (probably more detailed and accurate) map of 1853, modified by such information as is contained in KCR, CB, and from other sources. For example, Wood's map shows Aynam Lodge, which was built in 1824, and Kent Terrace (now Thorney Hills) built in 1823-4. These I have left as open spaces. On the other hand, I have shown the Websters' *Marble Works* at the corner of Bridge Street



MAP 1.—The Aynam and Castle Mills, Kendal (1818).

and the road to Castle Mills (now Aynam Road) because these appear to have been built at the same time as, or very shortly after, the Canal Head warehouses.<sup>6</sup>



MAP 2.—Canal Head, Kendal (1819).

<sup>6</sup> The attractive, early 19th-century house which formed the apex of the triangle of buildings shown as the *Marble Works* later became the official residence of the Chief Constable of Kendal, and when the Kendal and Westmorland police forces were amalgamated during the 1939-45 War, it was transferred to the Municipal Electrical Engineer. Since the nationalisation of the Electricity Supply Industry in 1948 it has been privately occupied.

The Corporation having decided that the "Canal Head'' should be at "The Aynam", their first and most urgent job, apart from getting on with the new bridge, was to negotiate with those who had rights on the land which would have to be taken over. By far the most important were the occupiers of Castle Mills, the leasehold of which was held by Kendal Corporation.

At the beginning of the 19th century the partners in Castle Mills were the brothers Isaac and William Wilson, and William Braithwaite & Son, who had a 99-year lease running from 1784.7 They rebuilt the mill in 1806, and the main building, still standing, is shown on maps I and 2. The mills were driven entirely by water-power. A weir ran diagonally across the river Kent below Stramongate Bridge, and diverted the water round Gooseholme to The Aynam (now "Little Aynam'') where there was another weir. It flowed through sluice-gates, along the Castle Mills head-race, turned big water-wheels located under the mill building, and returned to the river by a long tail-race.<sup>8</sup>

The main difficulty arose from the fact that the whole of The Aynam and Miller's Close, together, for that matter, with Gooseholme and many other open spaces in Kendal were used as "Tenter Grounds". "Tenters" were frames, first of wood and later of wrought-iron, fitted with sharp hooks on the top and bottom members, upon which the processed woollen

<sup>&</sup>lt;sup>7</sup> Somervell, *op. cit.*, 62. <sup>8</sup> After the high flood of 2 December 1954, exceeded only by the "Great Flood" of 2 November r898, the Lancashire River Board (now the Lancashire River Authority) took a number of steps, admittedly piece-meal, to reduce the danger of flooding in parts of Kendal. These included widening and re-grading the river between Stramongate and Miller bridges, and using material dredged from the main river bed to fill in the head-race to the east of Gooseholme, above the "Little Aynam" weir, and the remainder of the head-race from the Sluice Gates to the Mill. Subsequently Kendal Corporation filled in the tail-race, and straightened and widened Aynam Road in front of the entrance to Castle Lodge. I make these points because the old and important waterways have, in a few years, vanished so completely, that future students, even having

a few years, vanished so completely, that future students, even having access to all the maps, may be left in doubt as to just what went on. Castle Mills stopped using their water power in 1942.

cloth was fastened to dry and stretch. It was an essential part of the local woollen industry, and the tenters took up a lot of space.

The Canal Committee, 18 May 1818, agreed to pay Isaac and William Wilson  $f_{,227}$  for removing 680 yards of tenters from The Aynam and allowing a dyehouse on Miller's Close to be pulled down. They also got  $f_{,100}$ for the loss of privilege of using tenters on Miller's Close.<sup>9</sup>

In addition to these lump sum payments they were given compensation of  $f_{33}$ . Ios. od. per annum for a period of 37 years (the term of the lease of the ground) for moving their tenters and sacrificing a blacksmith's shop. One Thomas Cookson, who also had rights in this area, was to be allowed to move his tenters to land on Miller's Close previously occupied by the Wilsons.

Isaac and William, somewhat grudgingly, undertook to move their tenters to:

". . . the first field between the Ulverston and Brigsteer roads, which is part of Kendal Fell Lands . . . This from its distance will occasion a great addition of Labour, which Isaac and William Wilson deem to be underrated at what they [the Kendal Corporation] propose £20 per annum."10

Having sorted the Wilsons and, as it were, cleared the ground, the Committee turned their attention to the new bridge over the river Kent. They met on 13 April, and appointed Mr Webster architect.<sup>11</sup>

He was instructed to prepare a plan of the bridge, advertise for contractors, and be ready to let the contract on 4 May. Webster may have been pretty certain that he would be appointed architect (he was an alderman of the Borough) and have had his plans ready, but even so it was a remarkable effort on the part of four local builders to submit offers for a most attractive three-arch dressed stone bridge with a total

<sup>&</sup>lt;sup>9</sup> CB 17 and 23.
<sup>10</sup> KCR, undated letter, c. April 1818, signed by Isaac Wilson.
<sup>11</sup> Francis Webster (1767-1827), see Appendix.

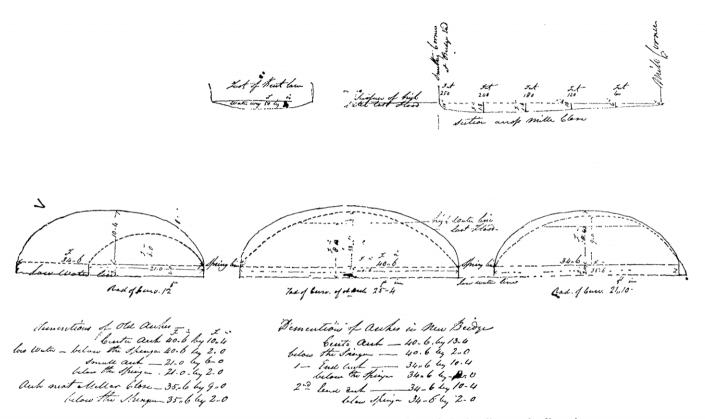


FIG. I.—A rough sketch, presumably by Francis Webster, showing — in broken lines — the dimensions of the 1818 Mill Bridge and — in full lines — the dimensions of new Kent Bridge (now Miller Bridge).

span of over 130 feet in slightly under three weeks. The prices quoted varied from  $f_{1,500}$  to  $f_{797}$ , and the order was placed with Edward Gibson and Jas. Harrison, masons, at the lowest price.<sup>12</sup>

Plate I is a photograph of the bridge taken from the south in 1960 when the river was at about its normal winter level.

Between them, the architect and the builders did a good job. The foundation stone was laid on 20 May 1818, and the bridge was opened to traffic in November of the same year. It has withstood floods which have all but filled its arches, and now carries a stream of traffic of weights, and travelling at speeds undreamed of when Francis Webster drew up his specification. The bridge was officially called "Kent Bridge", but by the time John Wood made his map in 1833 it had reverted to "Mill Bridge", and subsequently, possibly when Aynam Road was constructed from this bridge to Nether Bridge in 1877, its permanent title, "Miller Bridge'', became established.<sup>13</sup>

To complete the access to the new Canal Head basin from the centre of the town the approach road from Lowther Street (referred to as *New Street* by those who could not bring themselves to utter the name "Lowther") was built up, and a dressed stone wall

levels. Annals of Kendal, op. cit., 294. "20 May, foundation stone of the Mill Bridge laid by the Mayor; Alderman F. Webster was the architect of this bridge, which cost £888, two former ones had each stood seventy-five years." The price included some extras to the original contract. <sup>13</sup> The attitude of Kendalians to the retention of place-names is un-predictable. They refused to accept "Kent Bridge", but now very few still use the centuries old "Nether Bridge", preferring the bastardized "Netherfield Bridge", presumably because so many cross it daily to earn their living at Netherfield Works. My father made heroic efforts to save the old name, and a few of us try to carry on the fight. However, the new one has only to slip into a few Town or County Council minutes, or get into a Ministry of Transport report, and "Nether Bridge" will be lost more surely than if it had been swept down the river in some gigantic flood. flood.

<sup>12</sup> The specification for the bridge is complete and detailed, but the Plan to which reference is made has vanished. However, there is a rough ink-sketch (Fig. 1) which shows the span of the arches of the existing bridge, those of the new bridge, the level of the river bed, and some flood levels.

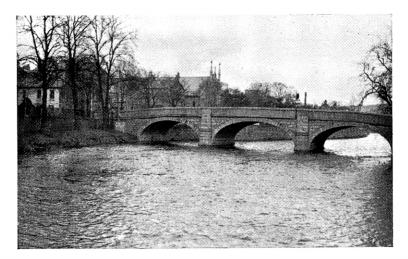


PLATE I.—Kent Bridge, now called Miller Bridge, leading from the centre of Kendal to Canal Head. Designed by Francis Webster and built between 20 May 1818 and November 1818. The river retaining wall and railings on the left were built at the same time.

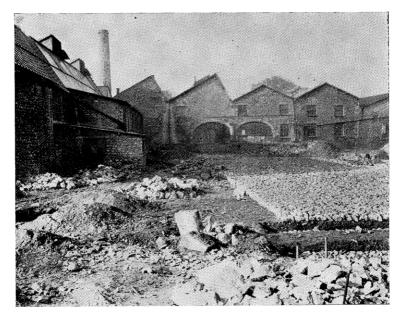


PLATE II.—Canal Head Warehouses, now Gilbert Gilkes & Gordon's Canal Iron Works, photographed from the east in 1947 from the empty (and partially filled in) canal basin. The buildings are the 1819 warehouses slightly modified. Note the two arches through which the barges passed into the covered wharfs.

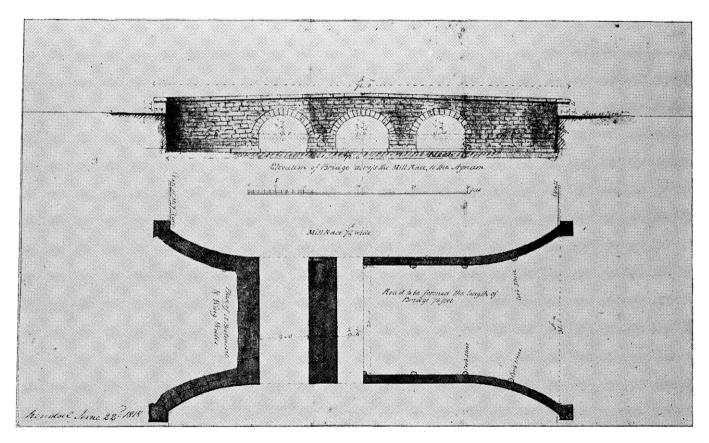


FIG. 2.—The three-arch (later increased 109/35/09/24/29). VMR4993 by Francis Webster carrying Bridge Street over the Castle Mills Head-race.

was built from the northern bridge abutment to the Waterside. In KCR there is an ink sketch showing the wall and a short section of the railings which topped it. There is no doubt that the present railings are original, and followed Webster's plan. Part of the wall and railings can be seen to the left of Plate I.<sup>14</sup>

Finally, it was necessary to bridge the Castle Mills head-race, as will be seen from map 2. There is, in KCR, a pleasant coloured sketch, reproduced in Fig. 2 and presumably by Francis Webster, showing a three-arch bridge over the head-race. There is also a note from Castle Mills, pointing out — quite rightly that such a bridge would greatly restrict the waterway and interfere with the flow of water to their wheels. As a result a fourth arch was added.<sup>15</sup>

The contract for this bridge was let to James & Joseph Carradus on 22 June 1818 for £88, with an extra later for the fourth arch. It was a charming little bridge, but now, unfortunately, only the parapet walls remain to be seen (Plate III).

### The warehouses and wharves.

The Canal Head warehouses are shown in plan view on map 2. They comprised a central block of two buildings, each 55 feet by 60 feet, each with an arch in the eastern wall through which the barges floated into the covered wharves. On the western side there were large doorways opening on to loading-bays facing

<sup>&</sup>lt;sup>14</sup>An unexpected use was later found for these railings. The wall rises at a constant angle from the Waterside, and the foot of each vertical support is about half an inch higher than its neighbour. This has provided an excellent *vernier* gauge for flood levels. Thus the flood of 14 October 1829 reached the 37th rail, that of 7 October 1874 the roand, and the "Great Flood" of 2 November 1898 the 126th. Now the Lancashire River Authority record flood levels scientifically, which is as it should be, but I still like to get down to the river after a high flood to record the highest rail the water reached. <sup>15</sup> Even so the flow was restricted, and wooden "fairing boards" (like

 $<sup>^{15}</sup>$  Even so the flow *was* restricted, and wooden "fairing boards" (like the bows of a ship) were built out from the upstream side of each pier to help streamline the flow.

Bridge Street and Castle Mills head-race. The north wing was a stable block for the barge horses, and the south-wing cottages, presumably for warehouse labourers. (The bargees and their families probably lived on board.)

There were few alterations in the original outline until about 1900, but now, although most of the main walls still exist, it is not very easy to pick them out. I am indebted to the directors of Messrs. Gilbert Gilkes & Gordon Ltd., the present occupiers of the Canal Iron Works, for their great help in providing photographs and other material which has made possible the writing of this paper.

Plate II is a photograph of the eastern elevation of the warehouses taken in 1947, when the firm were preparing to build a big extension to their works over the drained Canal basin. In the centre can be seen the two arches through which the barges passed into the covered wharves. The roof-line of the buildings to the right may be original: that of the buildings to the left has been altered to provide north lights, but the main walls are original. The ground level to the extreme top right, beyond the stone pitching, is approximately the level of the coal wharves. The water level of the Canal was 146 feet above ordnance datum, and it was about four feet *above* the level of the coal wharves. Hence to provide a level floor for the new factory building relatively little filling-in was required, and much of this was provided by the stones which had been used to build up the sides of the Canal basin.

No drawing of the original warehouses has survived, but Francis Webster wrote out a very detailed specification (KCR). The "walling, slating and mason's work" was let to John Airey in August 1818 on a piecework basis, and the carpenter's and joiner's work to Jas. Jenkinson, Wm. Lewthwaite and Jas. Taylor. Early in 1819, contracts were let for walling and paving of wharves, building cottages and stables, putting up doors and painting.<sup>16</sup>

As the opening day approached, the Canal Head must have presented a scene of hectic activity, but the work was completed on time.

# The future development of Canal Head.

For over 25 years the Canal Head warehouses and wharves carried on the business for which they were designed. The only new industrial buildings put up were George and Francis Webster's "Marble Works" at the corner of Bridge Street and the lane leading to Castle Mills; these were probably the town office, works and stores of the Websters' mechanized factory at Helsington Mills.<sup>17</sup>

The capital investment made by the Corporation amounted to  $f_{37,004}$ . IIS. 6d., and according to the Canal Book, the annual income from the rent of the warehouses, wharves, etc., was about  $f_{550}$  per annum. There were expenses for maintenance, and from time to time those who had lent money to the Corporation required repayment. If this investment had been made by a capitalist the return would have been uneconomic. For the town of Kendal, taken over a period of many years, it was money very well spent.

The railway came to Kendal in 1846, and the fate of the Canal was sealed. From then on there was no need for covered warehouses for perishable goods. It might still be slightly cheaper to carry coal from

<sup>16</sup> "We will paint for you [the wharfs and warehouses] 3 coats of lead color (*sic*) oil painting at 6d. per [square] yard. Mary Rishton & Son. 3 May 1819." KCR. <sup>17</sup> Parson & White, *History*, *Directory*, *etc. of Cumberland*, *Westmorland and Furness* (1829) 638. "The MARBLE WORKS in the town [KENDAL] and neighbourhood, belonging to George and Francis Webster, are very extensive and were first brought into repute by the late Mr [Francis] Webster, architect, who, about 30 years ago, constructed machinery on the river Kent [at Helsington Mills, *cf. Somervell*, op. cit.] for sawing and polishing marble . . . In the town Messrs. Webster have their splendid show-rooms [in Bridge Street ?] for manufactured chinney-pieces, &c."

Lancashire to Kendal by boat, but the railway took over all other goods. The London & North Western Railway leased the Canal in 1864 and bought it in 1885. They did not buy the *Kendal section*, which remained the property of the Corporation and out of which, taking one thing with another, they have not done badly !

The earliest lease of the Canal Head warehouses in KCR is one of 12 December 1827 to:

''. . . James Machell of Preston in the County of Lancaster, Common Carrier . . .''

Machell is named as the previous tenant, but his name is not included amongst those who took up the earliest leases of the wharves. It seems probable that Machell took up the lease during the early 'twenties.

When, after the railway came, the Corporation found that there was no longer a use for the warehouses as *canal* warehouses, they accepted the fact that the *buildings* were valuable, and built a wall, backed by puddle clay, across the end of the Canal basin, thus leaving the buildings dry and available for occupation.

The first lease, dated I August 1854, was for 21 years to:

 $^{\prime\prime}...$  William Kissock, of Kendal aforesaid Timber Merchant ... the said William Kissock will immediately at his own Costs and Charges convert the said Warehouse into a Saw Mill and will use the same when converted as a saw mill during the whole of the said term and will erect a Steam Engine and other necessary and appropriate machinery and appendages thereto in a good and workmanlike manner ...  $^{\prime\prime18}$ 

The rental was only  $\pounds 40$  per annum, presumably because of the capital Kissock was required to expend. The stone chimney (one of the best in Kendal), which can be seen in Plates II and III, was probably built at this time.

Machell quickly vanishes from the picture. After <sup>18</sup> KCR.

two years, on 5 August 1856, a new lease was drawn up between the Corporation and:

". . . William and Henry Williamson . . . of Stainton in the Parish of Heversham . . . "

The term of the lease was 20 years, the rent £85 per annum, and a plan drawn on the document ties up exactly with the Ordnance Survey map of c. 1855. It shows the engine-house and chimney, and a Stock Book of Williamson Bros. includes an entry of a 5-h.p. steam-engine when they moved from Stainton to Kendal.

The Williamson Bros. were general engineers; they converted the southern main warehouse into an iron foundry, and the northern section into a machine and fitting shop. They made all sorts of machines for the local bobbin- and sawmills, agricultural machines, steam-engines, etc., but soon became known for their "Vortex" water-turbines built to the designs of Professor James Thomson of Queen's College, Belfast.

When I was preparing to write this paper I had formed the idea that the Canal Head was Kendal's first "Industrial Estate", developed because of the new form of transport. I quickly found that I was wrong. The Websters' Marble Works formed the only new industry to be introduced before the warehouses were converted into an engineering works.

There was, however, a large area of level land, joined to the centre of Kendal by a good road and bridge, and handy to the multitude of back-to-back, ill-lighted, insanitary yard cottages which had, over the past 20 to 50 years, been built to house the working classes of Kendal. Castle Mills expanded rapidly, and the first Ordnance Survey shows a considerable area of weaving sheds to the east of the high mill building, and much of the "Common Garden" from Castle Lodge to Canal Head South was soon built over.

Aynam Road was made in 1877, enabling more

workers' houses to be built in Queen Catherine and Parr Streets, and southwards to the Gas Works and Netherfield.

In 1868 the Corporation used unwanted wharf space at Canal Head South to build municipal slaughterhouses (demolished in 1959); Aynam Mills, Canal Head North, probably including what is now Samuel Gawith's snuff factory, were built in 1877/8, and H. H. Day's ''Castle Foundry'' in 1893.

Returning to the warehouses, stables and cottages, little alteration took place until after 1900. On 31 December 1881 Gilbert Gilkes, an engineer from Middlesbrough, who had married the daughter of John Jowitt Wilson, an eminent Kendalian, four times mayor, and part-owner of Castle Mills, took over the Williamson Bros.' business. He steadily expanded the trade of the "Canal Iron Works", concentrating more and more on water-turbine manufacture and dropping the agricultural and miscellaneous machinery side. Open spaces in front of, and between, the buildings were roofed in, stables became stores, and north lights were built into the roofs. All the available space between the Canal basin and Bridge Street was used, but it was still easy to follow the outline of the original warehouses.

One substantial house was built in the area in 1824. This was Aynam Lodge, at the corner of Miller Bridge and Bridge Street. (The roof can just be seen in the bottom left-hand corner of Plate III.) Possibly at about the same time, and certainly before Wood's map of 1833, a builder's yard was opened in the small triangular piece of land between Aynam Lodge and the head-race. This was later occupied by the wellknown Kendal builders, J. W. Howie & Sons, and is now leased by the Corporation to Gilkes.<sup>19</sup> Howie's

<sup>&</sup>lt;sup>19</sup> The buildings have some charm, but no particular architectural merit. They are difficult to maintain, and I am informed by Gilkes that they are likely soon — possibly before this paper is published — to be pulled down.

were also monumental masons, and the yard may have taken over this part of the business from the Websters' Marble Works across the way.

By 1907 Gilkes had expanded to the maximum on the warehouse property, and bought some of the "Common Garden" belonging to Castle Mills where they put up their stone-built "No. 2 Shop" which can be seen in the top right-hand corner of Plate III. It was inconveniently far from the main works, and many man-hours were wasted pushing large chunks of machinery or castings from one part of the works to the other. Soon after the end of the 1914-18 War the Corporation leased them the coal wharf at Canal Head South where they built a new foundry.<sup>20</sup>

The Municipal Slaughterhouse was closed in 1932 and converted into a store; in 1959 it was demolished when the New Corporation Depôt was built.

#### The mid 20th century.

Up to 1940 the waters of the Canal lapped the eastern walls of the Canal Iron Works; the barges delivered coal to the Kendal Gas Works, and the youth of Kendal learned to skate within the borough boundaries. Then, during the War, the Canal sprang a leak, and the Kendal section was closed and drained, never to be re-filled.<sup>21</sup> For the town it was a sad end to a delightful waterway, but to Gilkes it was a completely unexpected opportunity to expand in a logical way on land adjacent to their existing foundry, machine and

<sup>&</sup>lt;sup>20</sup> As late as 1900, Kendal had a number of small iron foundries, making cottage fire-grates, "L" boilers, gulley grates and frames, railing posts and a host of articles used in the building trade which have now been completely substituted by other material or are mass-produced. Day's "Castle Foundry", the last of the jobbing foundries, closed in 1938, and Gilkes took over their building, thus rounding off their ownership of land between Castle Mills and the Canal. Gilkes made their last casting on 30 December 1960. It was a wall-plaque, commemorating 104 years of skilled ironfounding at the Canal Head, and is mounted on the wall of the "new" foundry.

<sup>&</sup>lt;sup>21</sup> When the Canal was drained Gilkes's men realized that even small amounts of coal, dropped between a barge and the unloading wharf can, in a hundred years, turn into a major deposit. The fuel shortage during the War was considerably eased in many Kendal homes!

fitting shops, and the Corporation got a first-class site for a much-needed municipal depôt.

On what had been the Canal basin and wharves Gilkes, taking a long lease from the Corporation, built two new large machine and fitting shops, with ample crane capacity, and in due course re-furbished the southern warehouse as an experimental and research department, and the northern building as a testing, assembly and welding shop. All production machinery was moved into the new shops, and it was possible to clear out of "No. 2 Shop" and let this to the County Education Committee for an Agricultural Machinery instructional workshop.

The photograph (Plate II) was taken while this work was starting. Unfortunately, the pillar between the two arches has had to be strengthened with a large block of concrete, but the stonework of the original warehouse buildings can still be seen quite clearly.

Plate III is an aerial photograph taken from the west in the summer of 1959. Work on the Corporation Depôt, top centre and left, had just been started. I have attempted, perhaps rashly, to outline in broken white lines the approximate foundation plan of the original warehouses, wharves and stables, and the Canal basin. This compares with map 2. The roof in the bottom right-hand corner is that of the original, 1806, Castle Mills building. The new shed to the left has been built over the filled-in head-race. The head-race to the north of the bridge has now been surfaced and is used by Gilkes as a car park.

Gilkes's offices on the left were the old stable block (see also Plate IV), and some of the workmen's cottages on the extreme right at Canal Head South have been pulled down. Immediately beyond the stone chimney is the "new" foundry, now a "Goods Inwards" store, with the large post-war buildings on the left.

Plate IV is a photograph of the buildings at Canal



PLATE III.—Aerial photograph of Gilbert Gilkes & Gordon's *Canal Iron Works*, 1959. The broken white lines show approximately the ground plan of the original buildings, most of which have been incorporated into the modern factory. The waste land — top left — is now the Kendal Corporation Streets Department Depôt. The building roof, bottom right, is the roof of Castle Mills as rebuilt in 1806. (Reference maps I and 2.) Castle (Day's) Foundry and Gilkes' No. 2 Streets Department Depôt small section of the filled in canal, can be seen top right.

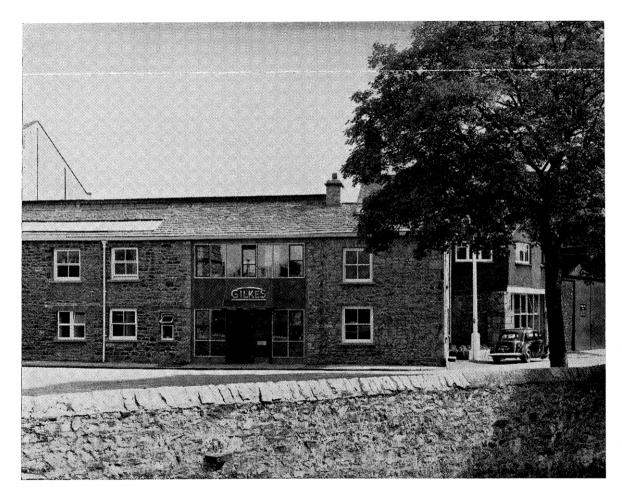


PLATE IV.—Part of Gilbert Gilkes & Gordon and tidying up. The general outline and most of the stonework is original (1819). Beams uncovered when the new entrance was built in 1956 indicate that this was the stable block.

Head North, taken from the north, which were once the office and stable block. Gilkes tidied them up and put in a new front when they had their centenary in 1956, but apart from the entrance panel the stonework, and probably much of the roofing, is original 1819. The office behind the top right-hand window was probably the original Canal Clerk's office, and it was certainly the office used by the head of the firm in Williamson Bros. and Gilkes's time for over a hundred vears. It had a wonderful view over the head-race. where sometimes a kingfisher would dive into the water from the branches of a sapling which grew from a crack in the wall of Howie's Yard, and to the north, before the head-race was filled in and Kendal's first concreteblock building was erected. Now it has been relegated to the status of a Board Room, where matters of grave import can be thrashed out undisturbed by kingfishers or the merry rush of water over the Little Aynam weir.

The Canal bed, dug out or built up by the sweating, swearing, hard-drinking Irish navvies 150 years ago has now been filled-in; one by one the bridges are coming down, and all traces of this fine waterway are being obliterated. Soon, when a precocious child says: "Daddy, why do they call this Canal Head North?" it will be another question daddy will not be able to answer.

Now Miller Bridge and the Canal Head warehouses are the last remains of the great venture of 1818-19. Inevitably, sooner or later, they will have to go, but I hope that this paper, along with John Curwen's of 1917, will help to round off the story of what the Canal did for Kendal.

### Acknowledgements.

I am particularly grateful to the Town Clerk of Kendal and his staff for the trouble they took to make information in their records available to me. Mr James, the Westmorland County Librarian, has been most helpful in providing early maps of Kendal, and information about the work of Francis Webster. My brother, Professor Edward Wilson, has made a number of constructive suggestions about my script; and last, but by no means least, my thanks go to Gilbert Gilkes & Gordon Ltd., who have not only made all their records readily available, but have also provided the photographs (and paid for the blocks) which make this paper considerably more interesting than it would otherwise have been.

#### APPENDIX.

## Francis Webster, Architect, of Kendal.

Francis Webster, 1767-1827, was possibly one of Kendal's most notable architects at a time when, like the present, much new building was going on. I believe that considerable interest in his work is being shown by local architects, and so will confine this Appendix to a short summary of his career. This is largely summed up in the obituary notice which appeared in the *Westmorland Gazette* of Saturday, 13 October 1827:

"At Eller House, near Cartmell, on Wednesday morning last, Mr. Francis Webster, of this town, architect, and one of the Aldermen of this burgh, in the 61st year of his age. More than a common obituary may be looked for to notice the death of one who has for so many years, with credit to himself, moved as a public man. His numerous works in this and the surrounding counties, will long bear ample testimony of the estimation in which he was held as an architect. The perceptions of his mind were quick, extensive and correct. He was the sole inventor of machinery by which almost every description of mouldings can be wrought in marble or stone with greater accuracy than by manual labour. It is not too much to say, that in private life his goodness of heart, the simplicity and kindness of his manners, will be generally acknowledged — by none more than the numerous workmen in his employ. To his cottage, near which he was born, he had lately finally retired from the bustle of a town and active life, to spend his closing years in domestic quiet and rural amusements. But, alas! man is frail. Death has put an end forever to his earthly enjoyments — 'the pictured pleasures of his closing life'."

A number of references to his work will be found in *Records* of *Kendale* iii (Titus Wilson, Kendal, 1926). In 1801 his plans for enlarging the House of Correction were adopted, and in 1815 he is mentioned as the architect of the new Milnthorpe Workhouse, and later as the designer of Miller Bridge, the "White Hall", Kendal, and the architect for Underley Hall at Kirkby Lonsdale. He also reported on Huck's Bridge on the Shap road and other local bridges. It is clear that more research into his work should be undertaken.