RIEVAULX ABBEY, ITS CANALS AND BUILDING STONES.

By HENRY A. RYE.[1]

A short time ago my attention was drawn to *The Annals of an old Manor House*, by Frederick Harrison. In it occurs the following passage in the account of Sir Richard Webster of Sutton Place, Surrey, who was born in 1591 and succeeded to the estate in 1613:—"Sir Richard Webster was not only the first to introduce into British farming the systematic cultivation of grass and roots, but he was also the first to popularize in England the method of canalization by locks. These he studied in Holland. He began by making a cut from the River Wey near to Stoke Mill, and formed the idea of making the river navigable from Guildford to Weybridge. The Canal proved of great public utility and is still in use, *the first of all the canals in our Kingdom.*"

It is with this latter statement I wish to deal, and I think that by the end of my paper I shall be able to shew that there was at least one earlier canal in our Kingdom, four hundred and seventy years before the time of Sir Richard Webster.

When I first entered upon my duties as estate clerk of the works and surveyor to the Earl of Feversham at Duncombe Park, seventeen years ago, I found that there lingered a tradition in the neighbourhood that the building stone and material for Rievaulx Abbey (which is situated on the estate and so came under my care) had all been brought by water and in boats. No one, however, to my knowledge, had tried to show how this was done. In my leisure hours, or while superintending repairs to the ruin, I set myself to solve the problem.

The first question, was, where did the stone come from? There are three kinds of stone used in the building, two in the earlier and one in the later work.

[1] Read at the Scarborough Meeting, 20th July, 1895.

The last was the easiest to trace, and was found first, then the earliest, and the hardest to locate was the second.

The earliest stone is a dark brown soft sandstone, which comes from an old quarry about a quarter of a mile from the abbey in the direction of Bilsdale, close to the river bank and not far from Bow Bridge on the road leading to Old Byland. This quarry is called Penny Piece. Of this stone the whole of the Norman work is built. Here I found the ruins of a stone dam and traces of the banks of a canal running down to Rievaulx mill. From here they are obliterated, first by the refuse carted from the abbey when some clearing of the ruins was made in 1812, and next by the cinders and slag from the Duke of Rutland's ironworks.

On mentioning my discovery to many people I was only laughed at and told that I must produce documentary evidence before they would believe it, so I ceased to mention the subject till I was introduced by the Rev. C. N. Gray, vicar of Helmsley, to the Rev. Canon Atkinson, who was engaged by the Surtees Society upon the Chartulary of Rievaulx. In return for my help he directed me to the charters which supplied the missing evidence and enabled me to prove my theory up to the hilt. I give the charters as numbered in the Surtees Society's volume.[1]

CCCLXVIII. "In the beginning nine carucates of land were given to the blessed Bernard, abbot of Clairvaulx, namely Griff and Tilleston, to found an abbey there, A.D. 1131."

So the abbey started with Abbot William and twelve monks, and no doubt they had as rough a time of it as their brethren at Fountains, living in temporary buildings of roughly split timber thatched with heather and labouring on, getting Griff and Tilleston into cultivation. Evidently they prospered, for we find them sending out and founding other houses before they had built their permanent home. Melrose, 1136, Warden in Bedfordshire, 1136, Dundrennan, 1142, Revesby in Lincolnshire, 1143, and I believe Rufford in Nottinghamshire, 1148, were colonized before the work was far advanced.

[1] The original is Cott. MS. Julius D. I. in the British Museum. The Surtees Society's edition (vol. lxxxiii) was published in 1887.

Next we turn to CCXLIV. "To Stephen by the grace of God king of the English and to all the archbishops, bishops and abbots and to all the sons of Holy Mother Church, Roger the abbot and all the convent of the church of the most Holy Virgin Mary of Byland send salutations and prayers. Be it known that for the love of you we have granted in perpetuity to God, and to the lord abbot William and to the brethren of the church of the Most Holy Virgin Mary of Rievaulx that they make a dyke through our land at the foot of the hill "Escheberch" in the manner they know to be needful and may have for their use the land which on their side they enclose by the same dyke as peaceably and freely as we until yesterday have held the same. Farewell."

This charter is not dated, but Stephen, King of England 1135–1154, Roger, abbot of Byland in 1142, and William, abbot of Rievaulx, who died 1146, are all mentioned, so we are confined to the four years 1142–1146. But if we look back to CCCLXVIII, I think we shall get even nearer. The second entry is "A.D. 1145 Walter Espec gave to us Bilsdale with all that pertains to it."

Upon this gift building began in good earnest. The stone was found close to the river, but carting was slow work; so seeing how much better and quicker water carriage would be, and that as well as getting water to drive the mill and flush the drains, they might use it to bring the stone, some of our monks got the abbot to apply to Roger of Byland for leave to make this dyke, and this charter was the result. The dyke was made and a dam thrown across the river Rye at the end of it. The water held up was brought to the abbey in a canal by the mill, and returned to the river again through the field still called the Dams, close to the present school. The dyke and the ruins of the dam are very plainly to be seen, as also the banks of the canal, with the hill "Escheberch," now Ashberry hill, towering above it.

During the next nine years the church was completed, with the dorter, the rere-dorter, the warming-house and the frater, all of which have traces of the Norman

work still remaining, and all have the "Penny Piece" stone in them or parts of them.

Now we must look to another charter, LXXV: "Hugh de Malabestia greeting. Know ye that I have given by consent of my wife and my heirs to the church of St. Mary of Rievaulx in perpetual alms, all the land which lies between the hill called Brochesholes and the river Rye, from Oswaldeshenges, as far as the canal and the whole of the adjacent island at the foot of the canal towards Helmsley, that the aforesaid monks may make a dyke through that land as near the hill as they can, and lead the river Rye through it, and the land which adjoins it on their side shall belong to them in perpetuity. Moreover, that I might make this offering more freely, the monks have give me twenty shillings for charity, and I with my own hand have offered them upon the altar of St. Mary of Rievaulx, where in the presence of many both monks and laymen I have made a covenant, that in very truth I would observe my attestation of this charter for ever without any evil intent, and would make sure the aforesaid land which I have given to the house of Rievaulx against all comers. These being witnesses: Brother Walter Ruffus of the Temple; Ralph of Belveir; Thomas of Hameldon; Thomas of Muschams; Walter of Stainsby; Robert of Buhner; Roger son of Thomas."

As there is no date, and I have not been able to get dates to the witnesses, we must again turn to CCCLXVIII, and in the nineteenth entry we find: "Hugh de Malabestia gave us Oswaldesenges," but no date. I do not see why we should not take the date of entry 16 as giving, near to it, 1160, and as No. 25 can be dated certainly 1170, I think we may safely fix this as from 1160 to 1170, but I should think close to 1160.

This charter I think is the first extension of the canal and carries it from the Dams to an outlet close to Rievaulx bridge. The dyke is very perfect and it runs as close as possible to the hill now called Terrace Bank. It is hard to see quite what this was for, but it may have been that the outlet at the Dams was too near and in the way of the extensions and alterations that were going on in Abbot Aelred's time. We know from his

writings that the house had prospered, for he says that he governed three hundred monks, and in describing their life he says that they drank nothing but water, ate little, worked hard, slept little and that on hard boards, never spoke except to their superiors on necessary occasions, and loved prayer.

"Oswaldeshenges as far as the canal and the whole of the adjacent island at the foot of the canal towards Helmsley" will be seen at a glance on the map. The island is formed by the canal on the east, the river Rye on the north and west and the return of the canal on the south.

We are now in the transitional period of architecture, and we find evidence of this style in the alteration and extension of the chapter house and the remains of the cloister which have come under my notice. They are built of a Bilsdale stone of a peculiar kind only to be found in the lower parts of that dale. It was long before I could locate it, but at last I found it at a place called Ventriss Pits. Here there has been a very extensive quarry, and another thing was met with besides building stone, and that was ironstone, but of that I shall treat later on. There is evidence at the quarry of the stone having been sledged down the hill. The great dam, the construction of which was granted by the brethren of Byland in Charter CCXLIV, would hold up the waters of the river Rye, and so deepen the river that there would be no trouble in floating the stone down to the abbey from the foot of the hill at Ventriss Pits, though they are several miles up the river. Ventriss Pits are situated opposite Birch Wood on the west side of Bilsdale. But I must pass on.

Gifts of land had been flowing in to the Abbey in Aelred's time, to the number of about nineteen. His successor Sylvanus received fifteen. Further alterations and a new choir were in contemplation, and now we come upon an interesting bit of evidence which shows plainly what these canals were used for.

Charter CCXLIII is a friendly agreement "between the House of Rievaulx and the House of Byland which, having regard to the future, Aelred abbot of Rievaulx and Roger abbot of Byland, with the advice and consent

of the chapter of each monastery, have drawn up and confirmed, ordering that this compact be kept uninfringed by all their descendants and successors . . . The brethren of Byland have granted also to the brethren of Rievaulx that they may have their bridge water hecked in order to keep back their logs which are conveyed by the river Rye, which bridge shall be of the same height as it was on the day this compact was made, or if they should desire to raise it to the level of the banks they shall be at liberty to do so. They have further granted to them a right of way from the bridge through the common cow pasture and the field of Byland as far as their land extends towards Hestelsceit eighteen feet in width and to repair the road whenever it has need and the brethren of Rievaulx desire, and that they may freely strengthen the dam and bridges on the bank on the side of Byland, and the brethren of Byland on the bank on the side of Rievaulx, so that the brethren of Byland shall have no advantage on the bank on the bank of the Rye towards Rievaulx, nor the brethren of Rievaulx on the other bank of the Rye towards Byland. Moreover the land between Ashberry and the Rye as far as their canal goes beneath Ashberry shall remain to the House of Rievaulx as they have it in the charter of Byland, and also Oswaldeshenges."

So far this charter has been a recapitulation of the rights and an adjustment of disputes by the two abbots, Aelred of Rievaulx and Roger of Byland, and I would draw attention to the last paragraph, on the land between Ashberry Hill and the Rye. If you look at the map you will see that the parish boundary follows the centre of the river from the great dam till nearly opposite the present mill, when it runs off on to the bank, and encloses small strips of land. These are the portions of land spoken of, and they had to be acquired because they would be under water when the lower dam was thrown up to keep the water in the canal at its right level. Now the charter gives us its date, for it goes on to state that from the year of the Incarnation 1176, in order that the mutual friendship may not be abated, it is hereby renewed and confirmed by the addition of certain conditions not included in the original agreement.

So we get a date when building was going on and oak logs were being floated down for use in the work.

We have now traced the first and second sections of the canal. Let us look at the third and last section and we shall see the completed work. We turn to Charter CCC:

"Richard de Malebys, &c. know that I have given to the church of St. Mary of Rievaulx with the assent and goodwill of John, my son and heir, and of my other heirs, in alms, that land in the district of Scawton which is called Oswaldesenges, between Scawton and Byland. Further, I have given to them the common cow pasture from Scawton to Brockhill as far as the bounds of Scawton and Sproxton for six yoke of oxen. I have given to them further, in the same district, all the land at the foot of the hill called Brockhill and from Aldwinetofts to Oswaldesenges, as far as the southern boundary of Huholm beneath Aldwinetofts that they may make a canal and lead the Rye as near the hill as they please, and may have all the land which borders their land of Griff on the eastern bank of that stream. The bridge also of the canal I have given to them to hold freely and to repair as they please. I have given to them further all the holme at Hemgerdebrigge, in the district of Scawton between Aldwinetofts and the river Rye, as their dyke surrounds, to be held in perpetuity, and to be enclosed and used as they please, and to turn the waters of the Rye through it as near to the hill as they please. All these things I have given to the aforesaid monks to be held for ever freely and peaceably. These being witnesses: Hubert, archbishop of Canterbury; Ralph, abbot of Fountains, &c." From these two we may get the date, which must fall between 1193 and 1203.

By this time a new style had come in, and the monks looked for a harder stone and found in the hill called Hollins, then called Aldwinetofts, close to the farmhouse, now the park-keeper's house of Antofts, a beautiful stone well suited for the work. They apply to Richard de Malebys and he confirms Hugh de Malebys' grant, and extends it. The boundary between Sproxton and Scawton can be easily traced. The Brockshill still keeps its

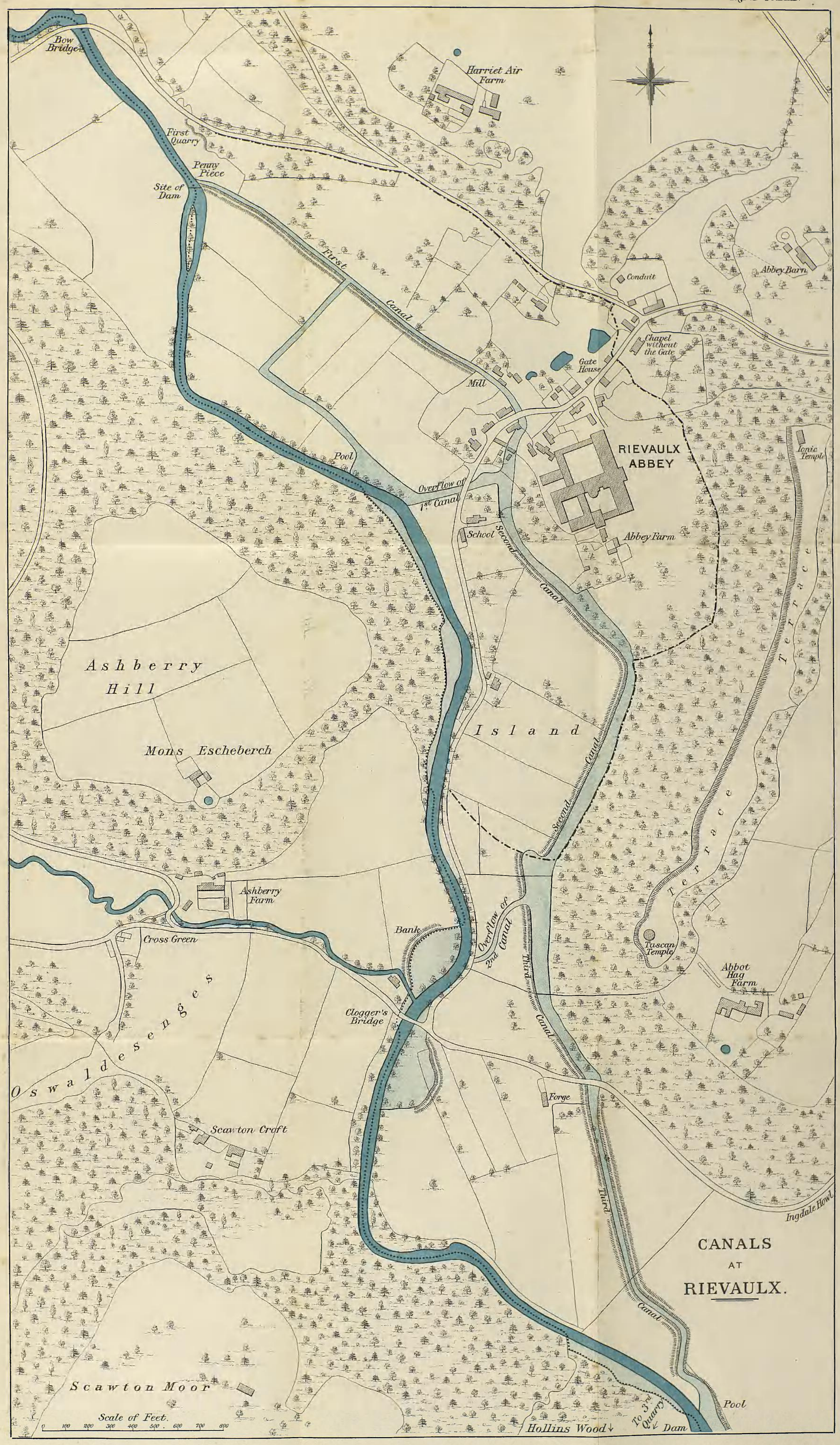
name and is the haunt of the brock or badger. Huholm, beneath Aldwinetofts, is now Duholm below Antofts, and the canal is there right down to the river Rye, with the traces of the large pool where the floats were loaded with the stone which was sledged down to the river. To this day may be seen the rough sledge roads leading down from the vast workings. For this new piece of the canal the old outlet was closed and a dam put in its place. A great dam was also erected near to Cloggers Bridge. This would hold up the water and the low-lying parts would be flooded. A glance at the map will show the parish boundary passing from mid-stream on to the bank, which was then under water, and back again.[1] Again, we find land given at the foot of Brockhill, and from Aldwinetofts to Oswaldesenges.

The later buildings and alterations at the abbey are all of the Hollins stone, particularly the choir and frater.[2]

As well as building stone, ironstone was found on this new possession. I believe the ancient "British village" on the Far Moor was nothing but the ironstone workings of the monks. They set up a forge on the banks of the canal and delivered the ironstone there to be smelted. Here also was brought the ironstone from Bilsdale. This forge was situated close to the road leading from Helmsley through Scawton to Thirsk, just at the foot of Ingdale Howl Bank. It is still called the Forge. The ground in front of the cottage is so highly charged with charcoal that it easily takes fire and burns for days, as I have myself seen. The slag has been used for years to repair the roads. I have an analysis of this slag and it contains 27·6 per cent. of metallic iron. The very best Swedish ironstone only contains 70 per cent. The analysis also shews that the

[1] This was the boundary between Sir George Wombwell's land and the Duncombe Park estate till 1883, when it was altered to mid-stream by mutual arrangement, and so the gifts of Richard Malebys and Byland passed from the Rievaulx Abbey lands.

[2] The roof of this latter was altered by Abbot William Spencer, for built into the mill are some corbels which came from the frater, one bearing W.S. interlaced with a crozier, and another an S. with an ear of rye. Another tradition that lingers about Rievaulx is that building was going on at the time of the Dissolution. I have found built into a pigstye wall close to the school a corbel with a *ton* on it and two round discs beside it. Can this be for Rowland Blyton, the last abbot? If so it is a confirmation of the tradition.



CANALS AT RIEVAULX.

Harrison & Sons, Lith. S. Martins Lane, W.C.

ironstone has been reduced by wood. In the "Ministers' accounts" for 30–31 Henry VIII. mention is made "unius Molendini vocati le Yron Smithes."[1] This I believe to be the site. A corn mill is also spoken of which still stands on the first canal.

There are still close to the rere-dorter of the monks large piles of slag. These must not be confused with the forge of the monks, for they could not have been placed there till after the Dissolution, as they would have made the abbey uninhabitable. Moreover on July 22, 1647, an award was made by Lord Savill and Sir William Savill between Lord Francis Villiers and Francis Earl of Rutland that Lord Francis Villiers should give to the Earl of Rutland £700 in silver for his right of cutting timber in the Helmsley estate for his *Ironworks at Rievaulx.* These hills were formed by Lord Francis Villiers' ironworks.

[1] *Rievaulx Chartulary*, 310.