

## THE BIAS PAPER MILLS SURVEY

by Brian Attwood

Papermaking is still an important industry in the Bristol region, and although the number of Mills is much smaller than in the first half of the 19th Century, expansion of the survivors, together with the development of new mills, has ensured that a large number of people are still employed in the industry, and the total output of paper products has in fact greatly increased.

The distribution map shown in Figure (1) gives a good indication of the geographical distribution of the paper mills, past and present. It is obvious that two regions in particular have had the highest density of mill operation, namely the Mendips and the valley and tributaries of the Avon. The siting of a paper mill is mainly governed by two requirements, the proximity to a centre of commerce, in this case namely Bristol, and the presence of clear water for the papermaking process. It is for the latter reason that there is no record of early paper mills in the Somerset plain area, where there was neither the natural fall of water, nor the purity of water required.

### GENERAL COMMENTS

#### *The Papermaking Process*

Up to the beginning of the 19th Century all paper products were made by hand, using the papermaker's tool of the vat and hand mould. Up to this time the raw material was essentially rag, but during the latter half of the 19th Century this was progressively replaced by the use of cellulose fibre, so that today virtually all paper, except for some specific high grade qualities, use cellulose fibres obtained mainly from trees.

In the hand made process the fibrous suspension, highly diluted in water, is contained in the vat. The papermaker (vat man) dips the hand mould, together with its deckle, deep into the vat, and withdraws it allowing water to drain through the wire screen. When sufficient drainage has taken place, he removes the deckle and passes the mould with the deposited fibrous web upon it, to the couch man. He transfers the web by laying the mould onto a woollen felt, fibrous web downwards, then by a careful rocking action, removes the mould, leaving the fibrous web upon the surface of the woollen felt. A further woollen felt is placed on top of the fibrous web, and the process repeated until a stack of felts/fibrous webs (post) is built up. This is transferred to a screw press where excess water

is removed by pressing. Finally the webs are carefully removed from the felts and hung in a loft for drying in the atmosphere (loft dried).

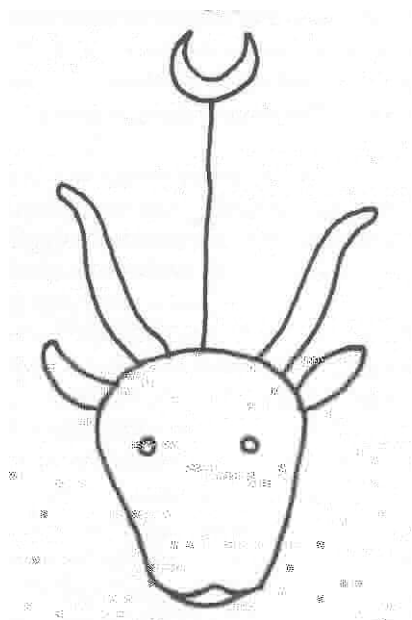
At the beginning of the 19th Century continuous methods of web forming were developed, namely the Fourdrinier machine and the Cylinder Mould. These inventions allowed the process to become continuous, and resulted in a great increase in the output of paper accompanied by a considerable decrease in cost, the result of which was the gradual decline of the number of hand made paper mills in operation. Details of the evolution of the paper industry are fully described by Dard Hunter in **Papermaking** and Clapperton in **The Papermaking Machine**.

During the period when the whole or a greater part of the English paper industry was based upon the use of vats, it is obvious that there must have been a thriving industry producing the large numbers of moulds required in the many mills. It has been fairly well established that the stock of moulds carried in a one vat mill may have been anything up to 50 pairs. When searching through records such as Parish Records for information on paper-makers and mills, it is often noted that there is reference to wire makers who had a connection with the paper industry and who had specialised in the craft of mould making. The mould makers were found in many different localities, and as might be expected most were found at the centre of districts where there were a number of paper mills. In the immediate area surrounding the Bristol region it has been established that there was a wire worker, W. Leach, who operated near the Market Place in Devizes. This individual also functioned as a collector of rags for the paper mills of the district. Another recorded example is that of J. Hughes of Winchcombe, Gloucestershire, and within the City of Bristol itself there is recorded that in 1770 an Ann Fowler had a wire works and paper mould manufactory in Redcliffe Street. Often the hand mould has stamped on the metal part the name and address of its manufacturer, but as the number of hand moulds in existence is now reaching very small numbers, little use can be made of this source of information for building up a complete picture of the location and distribution of the mould making industry.

#### *Water Marks*

The term 'water mark' is used to indicate the lighter markings in paper visible when the sheet is held to the light. They are produced by the wires on which the paper is made. The original use of water marks was to serve as

a trade mark indicating either quality, size, or maker of the paper. The study of water marks is one of the techniques used by paper historians to ascertain the age and occasion of production of a given piece of paper. The designs of water marks have ranged from simple lettering and dating through a wide range of designs covering heraldic symbols, animals, and various other motifs. Below are shown typical water marks of the early papermaking period. A water mark can be observed by viewing the paper through light, sometimes when dealing with a page in a book, and in particular a printed page, this can be difficult, particularly when dealing with old publications. A modern technique is to use Beta Radiography in order to record the image permanently onto a photographic paper, (see B.W. Attwood - Proceedings of the Technical Section, British Paper & Board Makers' Association - Part 3 1952, **Examination of Paperboard Formation by Beta Radiography.**



**THE BIAS SURVEY**

In this survey of paper mills in the Bristol region the normal sources of reference were used such as Paper Trade Directories, County Record Office, and the monumental work of A.H. Shorter **Paper Mills and Papermakers in England 1495 - 1800**. Having established the presence of mills, details of location were obtained by means of ordnance survey maps etc., and in most cases visits paid by various members of BIAS and the author to the sites, relevant information being collected wherever possible, and records made of condition of site etc.

For convenience the mills have been indexed A - G (still in operation) and 1 - 38 (sites with known mill history), and their location, using these references, are shown on the distribution map. The variety of type of paper mill and site condition in the region is great, ranging from the ruins of a wall or chimney to a modern industrial complex. This is shown well by the illustrations Figs. 2, 3 and 4.

**Mills in Operation**

*Mill Site 'A'*

Smith, Stone & Knight, Avonside Mill, Little Avon Street, Bristol.

This mill, tucked behind the covered goods yard of Temple Meads Station, produces ticket board and general packaging materials. It is equipped with a 78" M.G. machine (i.e. *Machine Glaze* or *Yankee* machine).

The first reference to this mill appeared in 1876 in the Paper Mills Directory when J. Sellick was quoted as producing browns on a 60" wide machine. Later he was followed by John Mardon (1885) who produced browns, middles and wrappers on a 78" machine, presumed to be the same machine that operates today. Smith, Stone & Knight had taken over the mill by 1910, and have since modified and extended the operation, using as a basis the 78" machine. The original 60" machine is no longer in existence.

*Mill Site 'B'*

St. Anne's Board Mill Co. Ltd. This mill, a modern industrial complex, is sited on the River Avon at St. Anne's, Brislington. It has a relatively short history, and is a wholly owned subsidiary of the Imperial Tobacco Group. It produces high quality folding box-board, both coated and uncoated, and has installed upon the site its own mechanical pulp mill.

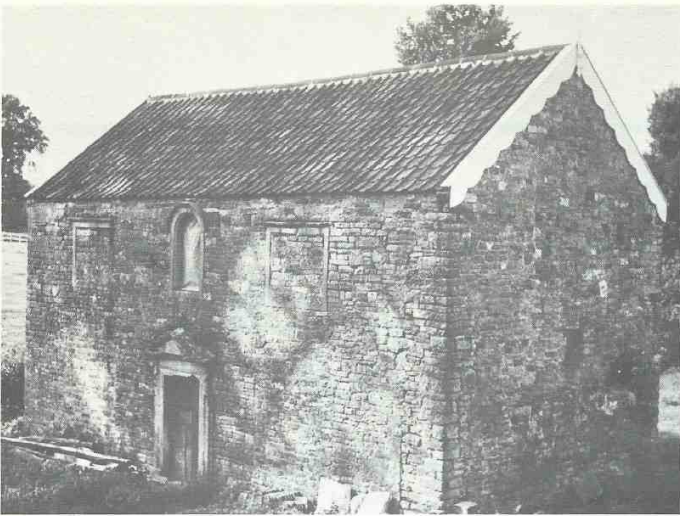
The site has an interesting history dating back to the Middle Ages. On one part was situated the St. Anne's Chapel dating from 1392, which is associated with a holy well a short distance away in the woods near the St. Anne's stream. A plaque commemorating the Chapel is on the wall of one of the present mill buildings. On the site of the Chapel was set up the original Brislington Pottery.

The first board machine was put into operation in 1914, followed by a second in 1917. A third was installed in 1923, and three larger machines during the 1930's. After World War II a major expansion took place, and during the 1950's the Inverform process (known as the third method of producing continuously paper and paperboard) was developed and commercialised by this Company, for which in 1966 it was awarded the Queen's Award to Industry. One of the prototype Inverform machines is now stored at St. Anne's and it is intended that this equipment will become part of the papermaking display at Bristol's new City Museum. The total production of the mill is presently in the order of 140,000 tons per annum, and the development and planning of a new machine to be in operation in the mid 1970's is currently in hand.

*Mill Site 'C'*

Keynsham Paper Mill on the site known as Avon Mill, belongs to the Dickinson-Robinson Group.



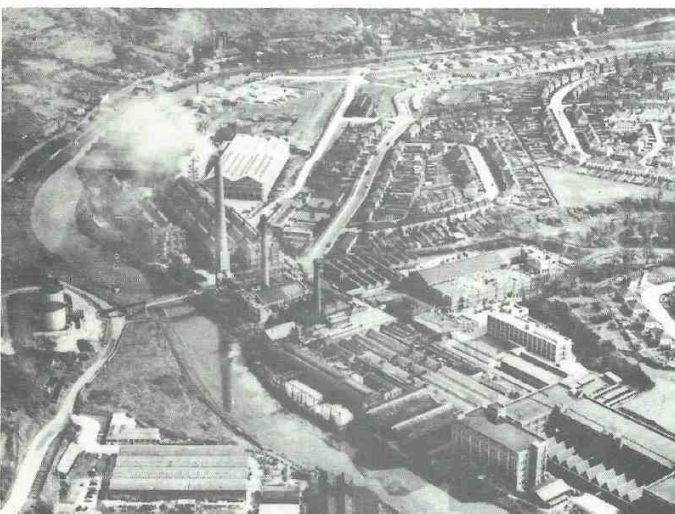


**Sherborne Mill at Litton**



**Hodgkinsons hand made paper mill at Wookey Hole**

Still used for producing high quality hand made paper. In the foreground is the old industrial building which, in the opinion of the author, has the typical layout of a paper mill.



**The St. Anne's Board Mill complex**

A large modern industrial papermaking complex used for producing high quality folding boxboards.

The mill is adjoining the site of the old brass mill, much of which has been demolished for safety, but the remains that are still to be found are in excellent condition and well looked after. The site was sold to E.S. and A. Robinson in 1927.

The paper mill is in new buildings dating from approximately 1933. The mill has a 162" wide machine manufacturing high grade M.G. papers. It has also installed on the site a high speed coating machine.

*Mill Site 'D'*

Bathford Paper Mill Co. Ltd., Bathford, Nr. Bath, on the By Brook north of Bathford village produces white and tinted printings, opaque book binders, bible papers, etc. Installed is one 84" wide machine.

Water marks from this mill are stated to date back to 1809. In 1816 it was known to the Excise Commissioners as mill No. 18, being worked by a George Veeles and John Midhurst. In 1876 it was described in the Directory of Papermaking as Trevarano Mill, when it was owned by Reed Bros., making news, printings and cartridge on a 54" machine. The mill was largely rebuilt in the early part of the 20th Century, but remains of water courses and a turbine pit are still visible. A large steam engine is maintained in situ, although it stopped working in 1966 when the mill was converted to electric power. This steam engine is a horizontal tandem compound engine by Wood Bros. of Sowerby Bridge in 1912.

*Mill Site 'E'*

W.J. Dowding & Sons Ltd., Chaps Mill, Slaughterford. Chaps Mill dates from the early 19th Century, and is located close to the sites of two other mills, see mill numbers 32 and 33. It is presently producing papers for grocery, wrappers, cover papers, browns, etc., on one 70" wide machine.

*Mill Site 'F'*

W.S. Hodgkinson & Co. Ltd., (now part of the Inveresk Group), Wookey Hole Mill, Wells, Somerset. This mill is probably the largest existing hand made paper mill in the world, producing mould made account books, writing, drying, banks, bonds, deckle edge note paper, currency and security paper, etc. The oldest record of a paper mill in Somerset is given in a deed of sale in 1610, and this mill was on or near the site of the present Hodgkinsons paper mill.

The present mill appeared in Excise Letters in 1816 as mill No. 366, Wookey Hole, worked by Golding and Snelgrove. The Directory of Papermakers of 1876 stated that the mill was then owned by W.S. Hodgkinson & Co. In 1948 it is stated that the mill was fitted with 13 vats.

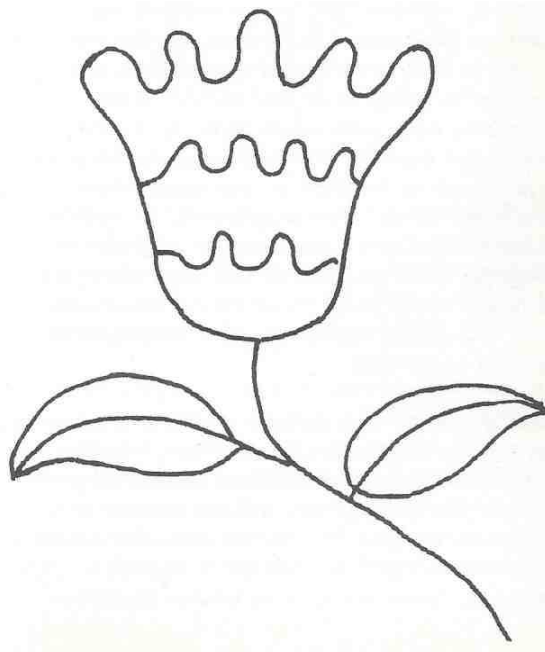
With regard to the original mill on the site, other than the original 1610 reference, there are many references through the period 1650 to the present day, giving information such as follows:- 1728, two overshot mills, one paper and one corn, were for sale. 1783, the water mark "Band & Sons" is noted and it referred to a family operating the mill from 1743 to approximately 1800. In 1816 it is noted that Golding & Snelgrove had two mills at Wookey Hole.

There is some doubt as to the actual number of mills and their location at Wookey, see further notes mill No. 27, but the author would draw attention to the fact that opposite the main gates of the present mill there is a house and old buildings which have the typical layout of a paper mill, namely a work room (beating, forming, etc.), and a long drying room.

*Mill Site 'G'*

St. Cuthbert's Paper Works Ltd., (Inveresk Group), Wookey Hole, Somerset, produces industrial papers, security papers, general high quality material such as photographic base papers etc. It has two continuous machines at present in operation. The front of this building is of interest having an ornate facade.

In 1788 reference is made to a Joseph Coles and water marks of Joseph Coles are known from 1797 to 1799. Excise Letters of 1816 refer to the mill as No. 364, Lower Wookey, and a mill with this number has been named in turn Lower Wookey, the Mendip Mill, and St. Cuthbert's Paper Works. For example in 1860 Burgess & Ward produced printings and news at Lower Wookey Mill, while in 1876 Burgess & Co. had two, machines (60" and 105") at Mendip Mill producing printings and news. In 1890 Dixon Hansborough had two machines (65" and 98") at the St. Cuthbert's Works producing printings etc.



**MILL SITES**

*Mill Sites Nos. 1, 2, 3 and 4*

Bristol: There is a considerable amount of confusion regarding the extent of the paper mills in Bristol, other than those listed as mills 'A' and 'B'. Some of the confusion is caused by the fact that it is known that in the Bristol district a considerable amount of paper was pasted together to form pasteboard, and as a consequence the premises upon which this operation took place might feasibly have been known as a paper mill. At the same time, Bristol, being a large commercial centre, had a number of practising paper agents, and it is not clear whether some of these agents actually had their paper produced within the confines of Bristol, or took their paper from mills in the vicinity, such as the Mendips, etc. It is however certain that there was at least one early paper mill in Bristol, the reference being dated 1756 when an accident is reported to a labouring man in a paper mill in Bristol.

Of the many references to papermakers, the earliest recorded to date is 1739 (The Bristol Poll Book 1739) where mention is made of Henry Cotton in the Parish of St. Nicholas, and John Rainer in the Parish of St. Thomas. It is interesting to note that there was in 1729 a Henry Cotton apprenticed to a Ben Davies, a papermaker of Overbury, Worcestershire. It seems likely that Cotton did have a paper mill in Bristol, and it is certain that he had a paper business at the Golden Lion on Bristol Bridge from 1740 to 1761. In 1744 a John Stock, papermaker, claimed that there was no other papermaker in the City of Bristol, (Baldwin Street location, later at Bridgewater Slip on the Back), and a reference of 1771 states that Thomas Mullet & Co papermakers and stationers, succeeded John Stock. Referring to the above possible site of a paper mill on Bristol Bridge and vicinity, note should be taken of the following - 1774 Kingsmill Grove was a papermaker in the Parish of St. Thomas, (Bristol Poll Book 1774). In 1785 this man was a papermaker and stationer in Bridge Street, and in 1791 Grove and Pounteney were papermakers on Bridge Parade. The Bristol Poll Book of 1784 informs us that Hugh Evans in the Parish of St. Nicholas, and James Ablart (St. Philips out Parish), were papermakers, and that in 1785 Evans & Allan were papermakers at the Back, Bristol. Kingsmill Grove is known to have been one of the owners of White Brook Paper Mills in Monmouthshire, and Joseph Pounteney was a papermaker at Cheddar up to 1809.

Moving into the 19th Century, no Bristol paper mills are listed in the Excise Letter of 1816. However, in later Excise Letters the following paper mills are listed:- Mill No. 56, 1839, Thomas Wescott at St. Philips Marsh; 1841, Mill No. 26, Elizabeth Manley at Castle Green; 1847, Mill No. 50, R. Mullett and S. Rogers at Tower Hill. Because of the considerable

changes to the structure of Bristol brought about by development and re-building, wartime damage etc., there is no trace whatsoever of any of the old paper mills of Bristol.

*Mill Site No. 5*

Northwick Mill, Nr. Dundry. This was a paper mill sited on the rivulet between Chew Magna and Winford, and is known to have been in operation in 1791. It was referred to as Mill No. 12 in the Excise Letter of 1816 when its papermaker was a Thomas Kendall. An advertisement in the Bristol Gazette, January 3rd 1833, states, "Northwick Nr. Bristol, to let, a paper mill in complete repair consisting of one engine (beater), two vats, tow presses, drying lofts and shed." The mill was driven by a 21 ft. overshot waterwheel. It was stated in this advertisement that the mill had been used as a paper mill for about 80 years, thus pre-dating the first reference of 1791 in the Universal British Directory of Trade and Commerce. The last reference is 1848 when it appears with a different Excise Number (463).

*Mill Site No. 6*

Long Ashton. Only one reference has been found to this mill, a reference appearing in the Daily Post, 23rd December 1740, which states that a fire occurred in the drying room of a paper mill, and the damage amounted to £150. No further information regarding papermakers, or the position of site of mill, has been found, or any reference in Parish records or local maps.

*Mill Site No. 7*

Bath. NO information or relics of this site exist. In an Excise Letter of November 1832 reference is made to a scale mill No. 550 in James Street, Bath, the occupier being a W. Fear. James Street West is located in modern Bath near the College of Technology, and this does seem an improbable site for a paper mill. For this reason it is suggested that it was in fact a pasteboard mill where sheets of already prepared paper were pasted together to make board structures.

*Mill Site No. 8*

Bath Weston. This mill was probably on the tip of the island in the River Avon formed by the cutting of the Avon navigational channel. Strictly speaking the mill would be in Twerton Bath, but it is part of the Weston Bath Parish. In 1734 the death is announced at Weston Bath of Thomas Banks, papermaker, and it is recorded that his estate consisted of paper mills in Weston Bath, Bath, Bath Easton, and Katharine Vale. No further reference is made to papermaking at Weston until 1834, when in Robsons Commercial Directory of London and the Western Counties, it states that the papermaker was J. Bryant.

*Mill Site No. 9*

Bath Easton. The site of this mill is located off the lane

to the School near Bath Easton Church. Conversion of the mill into a modern residence has taken place, resulting in most detail of the mill being obliterated. The Mill Pond and most of the water courses have been filled in. It is suspected that this is the actual site, but the picture is rather confused by the fact that the owners have found large numbers of pottery fragments during excavations, and in the kitchen during modernisation a large oven was discovered.

The Directory of Papermaking of 1860 refers to Mill No. 406 worked by T. Dewdney as "Bathesdon" mill, which produced grocery papers etc. It is known that in the mid 1920's there was definitely on this site the ruin of a paper mill cottage.

*Mill Site No. 10*

Monkton Combe Mill. De-Montalt Mill, Combe Down, sited on the side of Horsecombe Vale, south of Bath. When in operation it produced high quality hand made papers. It is suspected that it produced some heavyweight materials because of the granting to a Mr. Steart of an honorary medal from the Society of Arts for the communication of his process for the production of extra stout and beautiful drawing boards.

On the site there is a complex of mill buildings and cottages, the former either derelict or used as stores, with a free standing chimney in the neighbouring woods. A small stream runs past the buildings down to the Midford Brook. 19th Century prints and engravings of the mill show that water was led onto the water wheel, said at that time to be the largest in England, by an iron pipe; no trace now exists. The mill was built in 1805 with stone from the Combe Down quarries by the De-Montalt family who had inherited Prior Park and the Ralph Allen estate, and was operated by Messrs. Barry, Ellen and Steart. It was unusual in being a steam operated mill making hand made paper, but it also had the above mentioned very large water wheel. Note of a water mark from this mill is dated 1811 and it is suspected that this was one of the mills which produced the Bath writing paper widely used in the West Country in the early part of the 19th Century.

The 1832 Excise Notes state this mill as Combe Down Mill and the last reference is in Lewis's Topographical Dictionary of England 1840. There is some doubt regarding the validity of this statement, because it is known that in 1834 the mill was converted to the production of Gutta Percha. Again in 1834 there was an announcement that the mill had been acquired by the Bath Washing Company as a laundry. The mill is now used as a store/saleroom by a Company selling general household materials.

*Mill Site No. 11*

Catherine Mill. The exact site of this mill is not

known as there are a number of derelict mill sites throughout the St. Catherine's Valley, several of which have been disturbed by modern waterworks operations. It has been suggested that the best candidate for the site is that marked as St. Catherine's Mill (dis. on the ordnance survey 2½" sheet at ST 782 697). If this is the case the building has been converted into a house, and the water courses erased.

Excise Letter of 1816 records Mill No. 21, Catherine Mill, being operated by T. Bevan, and Greenwoods map of 1822 shows this mill at the head of St. Catherine's Valley almost on the border with Wiltshire. The Directory of Papermakers for 1860 lists the owner as Thomas Cross producing brown papers, cartridges, mill boards, etc. In 1871 a census report attributes an increase in the population in the Parish of St. Catherine to the re-opening of a paper mill, it is believed the re-opened mill was operated for a time by John Hall who operated mills in Bristol and at Pensford.

*Mill Site No. 12*

Saltford. This mill was situated close to the site of the Jolly Sailor at Saltford, and the Jolly Sailor House was in fact part of the mill property. No remains exist of actual mill buildings.

Originally this was a site of a tucking mill belonging to Rodneys of Saltford. Thorpes map "5 Miles Around Bath" of 1742 shows a paper mill on this site. In 1757 it is recorded that there was to be sold 2/3rds of the paper mills and other property situated at "Safford", then in the possession of Francis Hunt. In 1765 R. Pain was apprentice to Francis Hunt, papermaker. Thorpes map "5 Miles Around the City of Bath" of 1787 shows the site as Salford Paper Mill. In 1800 the Harford and Bristol Brass Co. owned two shares of the property, and by 1804 possessed the entire site. They did not appear to make commercial use of the mill, and it seems possible that it was purchased for the ownership of water rights, particularly as they owned Kelston Mill on the opposite side of the river.

*Mill Site No. 13*

Chewton Keynsham. Situated on River Chew near a house known as Chewton Place. NO trace of the mill is now apparent, the remains being used to develop the site into a modern dwelling house in the early 1960's. Water courses and sluices still remain in spite of some damage during the 1968 floods.

A considerable amount of information is obtainable on this mill centred around the Popham Collection in the Somerset Record Office dated 1683. Reference is made to the fact that in 1678 there was on this site a Grist and Paper mill leased to N. Falx, papermaker. Further information indicates that the mill was in the hands of either Mr. Falx or his wife or widow up to 1696. In 1749 it is recorded in the Worcester Journal that "at

the paper mill near Keynsham all the utensils belonging to the business and a great quantity of paper were destroyed by fire. The damage to this and other property amounted to £500". This is the last reference to paper being manufactured on this site. From 1762 to 1894 the mill was used for log-wood milling, and from 1900 to 1922 it was used to generate an auxiliary supply of electricity for the Keynsham Electricity and Light Power Co. The mill building survived until 1945/6 when it fell into decay, and was converted into a dwelling house. In the 1960s this in turn was radically converted into a modern dwelling.

*Mill Site No. 14*

Golden Valley Paper Mill, Bitton. The premises are now occupied by Pressed Fibre Co. of Great Britain on the Bristol to Bath road near the centre of the village of Bitton. Some of the mill buildings are very old, and the water dam is still in existence and it is believed will not be demolished, as it serves a useful function in preventing localised flooding.

From 1760 Bitton Mill was a brass mill, part of the Warmley Co. of William Champion. After Champion's bankruptcy it passed to the Bristol Brass Co. In 1826 it is reported that Bevan and Swaine were responsible for the Land Tax for this mill, and it is assumed that this is the same Bevan who previously occupied the mill site one mile up river of the Golden Valley Paper Mill site, (see Mill Site No. 15). It seems likely that Bevan transferred his paper mill operation from Mill No. 15 to this site in the early 19th Century.

The mill was burnt down in 1849 and the premises were then purchased by Messrs. Sommerville of Edinburgh, who installed extensive machinery to modernise the operation. In 1876 a further fire took place burning down the whole mill except for the machine room. Rebuilding started in 1880 (the date on the chimney). The Sommerville family ran the business until 1903 when it was sold to the Kingsmiths, who operated it until it closed down in the mid 20th Century.

*Mill Site No. 15*

Bitton Mill. Site approximately 1 mile upstream from Bitton on the River Boyd. On the approximate site of the water mill there is a dilapidated building which has been adopted for residence. This is believed to have been sometime a flour mill.

In 1787 it is reported that a very complete paper mill in full working order was for sale. The first known reference to a master papermaker on this site occurred in 1812 when Thomas Bevan, papermaker, insured his mill (see notes regarding Mill Site No. 14). In Ellacombe's History of Bitton it is stated that there used to be a small paper mill on the Boyd in the Golden Valley which was transferred to the

village of Bitton on the site of the mill belonging to the Brass & Copper Co.

The 1830 Ordnance Survey 1" to the mile map shows a paper mill on the River Boyd in the Golden Valley approximately 1 mile from Bitton.

*Mill Site No. 16*

Wick and Abson Mill. There is no real evidence that there was a paper mill at or near Wick. In Biglands Collections relative to the County of Gloucester 1736 reference is made to a paper mill near the cliffs adjoining the River Boyd, but this seems to indicate the old Bitton Mill (Mill Site No. 15). However, in 1810 in the London Gazette it is recorded that W. Pook from the Parish of Wick in Abson, a papermaker, went bankrupt. There is some confusion as there are also records of a Wick Mill at Wick near Berkeley. Other references e.g. 1755 state that a mill at Wick was insured by H. Dane, papermaker, while in 1770 a T. Harris, papermaker, insured his utensils and stock in the paper mill. His death is recorded in 1796. In 1803 another Harris is recorded as being a master papermaker at Wick, near Bath. Other than the above references it has not been possible to trace any further history of this site.

*Mill Site No. 17*

Bye Mills, Pensford. This mill suffered badly in the floods of 1968, and little now remains on the site. In 1864 Mr. Joseph Hall bought from the executors of T. Cross of Portland Square, Bristol, the St. Catherine Paper Mill, near Bath (see Mill No. 11). It was only in his possession for a few years as the Bath Corporation bought the site for the development of a reservoir. Mr. Hall then purchased the vacant Copper Mill (Bye Mill) at Pensford and turned it into a paper mill in about 1875, (appears in Paper Mill Directory 1876). Being a post-Excise mill it does not bear an Excise Number. The mill produced browns, middles, blue and white royal hands, and mill wrappers on two machines, each approximately 60" wide. In the late 19th Century Bristol Waterworks, needing an increased supply, under their Parliamentary powers purchased the mill and paper production ceased. See also Mill Site No. 38.

*Mill Site No. 18*

West Harptree, known as Herriotts Mill. This mill lies in the Chew Valley Lake, having been submerged when the Chew Valley Lake was developed by the Bristol Waterworks Co. In Excise Letters of 1816 the mill is recorded as No. 8, the papermaker at that time being a Charles Gunn. It obtained its title "Herriotts" because it was situated close to Herriotts Bridge in the Parish of West Harptree. The mill ceased operation in 1828.

*Mill Site No. 19*

Sherborne Mill, near Litton. Located in the valley between the village of Litton and the water reservoir.



The site of the mill building is adjoining the mill house, now rebuilt into an attractive residence. The actual mill building is used as a storage barn. All equipment, including power supply, has vanished. However, the building itself is fairly well preserved, one side of the building having a small doorway with a carefully moulded architrave.

Regarding the history of the mill, it appears in Excise Letter 1823 as occupied by John King, and in 1825 by Thomas Gilling, and in 1833 by Walton Fussell. There is, however, some query regarding the authenticity of this location. The Litton Tithe map of 1839 indicates that in this valley within a few yards of each other were two mills, the lower one being specified as a grist mill, and it has been assumed that the upper mill was a paper mill.

*Mill Site No. 20*

Compton Martin. Located in the village of Compton Martin on the Blagdon road. Alongside the village pond can be seen fairly substantial ruined walls which are believed to be all that remain of the paper mill, which is mentioned in Excise Letters of 1816 as No. 7 Compton, then being operated by James Bryant. The ownership of the mill had changed by 1822 when Thomas Holder and John King were the owners. The Parish Register for the 1820s shows Thomas Holder as a papermaker. There is also in the Parish Register some indication of trade problems, as in the Church Warden's accounts for 1821 there is reference to papermakers in distress. As the mill does not appear in the Excise Letters of 1832 it is reasonable to assume that by then work had ceased.

*Mill Site No. 21*

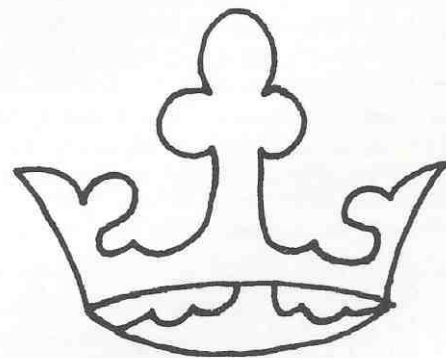
Rickford Mill. Situated near Burrington Combe. The original mill pond has been developed into an ornamental lake, and can be easily inspected from the road which runs along the foot of Blagdon Combe. There is on this site a prominent house, which, it is assumed, was the mill house, for the leat supplying the mill runs behind this building.

Records show that in 1800 Charles Gumm was a papermaker at this mill, and was employing an apprentice, Thomas Curtiss. In 1809 the same Thomas Curtiss & Co., papermakers, are recorded as having insured this mill. The Parish Records show a James Carpenter as being the papermaker in 1813, and there are several references to the Hall family, these dating up to the 1850s. This is the same Hall family associated with papermaking and printing in the Bristol district, (St. Catherine, Pensford, Stanton Drew). Excise Letter of 1816 records the mill as No. 11 with Giles Hall as papermaker. The last definite reference which has been found is 1860 in the Directory of Papermakers where it is described as Rickford Mill, Burrington, near Bristol, the papermaker being John Blatchford, and he was producing

high grade hand made book papers. It is believed that the mill was later used as a printing works.

*Mill Site Nos. 22, 23 and 24*

Cheddar. Little is to be seen of the paper mills of the Cheddar valley except for some buildings incorporated in the concrete works near the Market Cross. Other mills of the district are shown on the Tithe map of 1839 further up-stream towards the mouth of the Gorge. It is certain that in its history there have been at least three mills at Cheddar. In Collinson's **The History and Antiquities of the County of Somerset 1791** it is stated that there was a "very considerable manufacture of paper in this location", particular emphasis being made on the high quality of the water. He mentions that there were seven mills on the river, three of which were paper mills, the papermakers up to 1790 are not known. In the period 1791 to 1796 John Pountney was in partnership with other papermakers of the Bristol district, and is assumed to have been connected with one or more of the mills at Cheddar. It is probable that by 1800 one or more of the mills at Cheddar was in the possession of a Thomas Hyde, and in 1801 this gentleman took on an apprentice, Robert Gilling. A Joseph Pountney was made bankrupt in 1809. Excise Letter of 1816 shows only one paper mill at Cheddar, this was given the No. 9, and was being run by John Gilling & Co. (See also Gilling at Litton Mill Site No. 19). This same mill, in an Excise Letter of 1833, is referred to as Cheddar Four Mills. The census report of 1851 mentions the decrease in the population of Cheddar, and partly attributes this to the closing of the paper mills in the district. However, the Directory of Papermakers for 1860 still lists two mills operated by William, Samuel and Arthur Tanner, producing writing papers, hand made at Mill No. 59, and both hand and machine made at Mill No. 9. In the Directory of Papermakers 1876, mill No. 59 only appears, being listed as owned by Tanner and Budget, with one machine producing news and printings. By 1890 Wansborough and Warral were operating the mill with two machines making a very wide range of papers, and in 1900 the mill was operated by the Wansborough Paper Co. and was equipped with four machines. There is no mention of the mill in the Directory of 1905. This mill later became a pottery and is now incorporated in the concrete works close to the Market Cross.



*Mill Site Nos. 25 and 26*

Bleadney. These mills are situated on the River Axe at Bleadney. In the history of Bleadney there have been two paper mills in the village, one known as the Lower Mill. The Lower Mill has been converted into a dwelling house, this building was at one time a corn mill, but had been used also for the manufacture of paper. The second mill site is situated upstream and is alongside the Picadilly Inn. It has not been possible to locate any relevant buildings on this site. There is some mystery regarding the history of these two mills, as some cross references could easily refer to one of the Wookey Mills. However, Piggott's Directory for 1822 lists Clark and Horsington as paper manufacturers at Bleadney, and Excise Letter of 1832 records Richard Clark and William Horsington being located at Mill No. 486, Bleadney. Records of the mill indicate that the chief buyers of the mill's product were in the Bristol, Bath and London districts, and the last recorded date is 1848.

*Mill Site No. 27*

Lower Wookey. It has not been at all possible to find a site for this mill, although reference is made to it by Shorter as follows:- In 1758 J. Coles of the Parish of St. Cuthberts insured his dwelling house and paper mill. This man is sometimes described as of Wookey Hole, and at other times as of Lower Wookey. In 1761 he took an apprentice, J. Riddell, and there is a further reference in 1771 of him insuring a paper mill. Then in 1803 there is a reference to James Coles and Joseph Coles, each operating one vat. In 1816 it would appear that they occupied separate paper mills, both of which were named Lower Wookey. It must be appreciated that there is considerable confusion regarding the history and siting of the Wookey mills and the Bleadney mills.

*Mill Site Nos. 28 and 29*

Dulcot. Mill Site No. 28 named Brush Mill (Excise No. 367) situated off the main road linking Shepton Mallet and Wells. Opposite to this mill Site No. 29 named Old Mill (Excise Mill No. 368). Regarding the Old Mill site, the water mill is still intact, and has in the 20th Century been used for cider making. At the Brush Mill site the stack remains and the rest of the site is derelict and overgrown. There are, however, several brick or stone containers inside the building, which on examination, one would believe were used for storing liquid chemicals when the mill was used for leatherboard manufacture. There is also on the site a pit for the water wheel, but the stream has been diverted. Close at hand is the Georgian Mill House.

Papermaking had been carried out at Dulcot for many years, and in 1752 John Hawkins insured a white paper mill on this site, and there is a reference of 1756 of W. Dore, a papermaker, late of Dulcot Mill

being imprisoned for debt. In 1769 when the mill was kept by a Mr. Pearson it was entirely consumed by fire. There are no other references to papermaking in the Dulcot region until Excise Letters of 1816 when two mills are mentioned, Mill No. 367 (Brush) occupied by John Snelgrove, and Mill No. 368 (Old Mill) by Charles Gumm. In 1838 No. 368 mill is recorded as being 'left off'.

In 1876 the Directory of Papermakers describes the mill No. 367 (Brush Mill) as Dulcot Mills owned by James Black and producing browns, middles and mill-boards on one machine. Similar details in the Directory of Papermakers of 1885 states that there has been added a second machine. Around about 1898 the mill started to produce leatherboard and fibreboard for the local boot and shoe industry, but was destroyed by fire in 1904.

*Mill Site Nos. 30 and 31*

Stoke Bottom and Stoke Lane Mills. Stoke Bottom is situated between the coal mining area of Nettlebridge and Coleford. In order to find the mill remains one has to make a detailed search, but there are signs of the outer walls still in existence (ST 659479).

In 1791 Collinson, in the History and Antiquities of the County of Somerset, notes a logwood and paper mill. In 1802 it is reported that a Henry Fussell was a papermaker in this Parish and took an apprentice, J. Lewsey. It is believed that certain of the Parish Records are on a paper watermarked "Fussell 1822". The Excise Letter of 1816 lists Henry Fussell at Mills Nos. 363 and 485, Stoke Bottom, and in 1826 it is reported that a Jacob Fussell, papermaker of Stoke Lane, was declared bankrupt. The mill was later again put into operation, first operated by T. Gilling and in 1832 by H. Coles. Mill No. 363 ceased operation completely in 1839, and the last known reference to Mill No. 485 is in the Paper Directory of 1860 when it was quoted as being worked by H. Coles, producing writing papers. Note: See also Fussell and Gilling at Mill Site No. 19, and Gilling at Mill Sites Nos. 22, 23 and 24.

*Mill Site No. 32*

Slaughterford. This mill was situated on the Bye Brook. The mill is now derelict, but one still can see the old water wheel and an unusual arrangement of water courses. This site was actually used only to produce the fibrous material which was taken down to the lower mill (Chaps Mill, see Mill Site 'E'). A description of this mill and its equipment is well supplied by J.K. Major in Journal of Industrial Archaeology May 1964. It has not been possible to find a more detailed history of this mill.

*Mill Site No. 33*

Slaughterford Weaverne Mill. It has not been possible to find a trace of this mill and its actual location is in some doubt. In 1792 it is reported that W. Duckett, paper-

maker of the Parish of Slaughterford, was bankrupt. In 1793 the mill was operated, again by Duckett but with a H. Gardner, and later in the same year the site then a 2-vat mill, was put for sale. A further note of sale takes place in 1794 when application was to be made to H. Garner of Corsham, assumed to be the same H. Gardner above. The mill was in this man's hands in 1800 and he was still registered as a papermaker at this mill in 1816. It is not certain when this mill ceased operation.

*Mill Site No. 34*

Castle Combe. Again this is a case of not being able to find the location of the actual mill, and as a consequence no siting. The mill, however, is well recorded in history and the following main items will be of interest. In the Natural History of Wiltshire, written sometime in the 17th Century, it is stated that the mill was built around about 1635 by a Mr. Wyld, a Bristol merchant. The actual site of the mill was in all probability Longdean, which is quite close to the village of Castle Combe. In 1746 the mill was to be let or sold, it was described as a well-established mill and probably the master papermaker was R. Lewis. References show Lewis to still be in control of the mill up to 1763. A reference of 1767 states that a John Nash, belonging to the paper mill at Castle Combe, was found hanging. No further information on the mill has been found up to 1808 when a partnership between R. Barrow, papermaker, and Charles Barrow, clothier, was dissolved.

*Mill Site No. 35*

Banwell. This mill was situated in the small village of Banwell, the site being finally acquired by Weston-Super-Mare Waterworks. Some of the buildings associated with the mill are still in the village, surviving as cottages. The mill pond was where the bowling green is now sited. It is believed that the mill produced bible paper and bank note material. The earliest reference to the mill is 1710 when Thomas Emery used the mill for carrying out the trade of miller, tanner and papermaker. Around about 1770 Thomas Emery was succeeded by John Emery, while in 1813 the master papermaker was G. Emery, still being in his hands in 1816 as Mill No. 10. It ceased work as Mill No. 10 in 1841, and revived for a short time as Mill No. 12 in 1847, being worked by G. Pym. In 1850 it was converted to a flour mill and brewery.

*Mill Site No. 36*

Portishead. The Severn Kraft Mill, Portishead. The original buildings of this mill which had a very short life are located in the dock area of Portishead, but there is no papermaking equipment on the site.

In the Directory of Papermakers for 1925 it is recorded that Severn Kraft Mills Ltd., (incorporating Jonathon Bracken & Sons Ltd., and Trent Paper Mills Ltd.), were

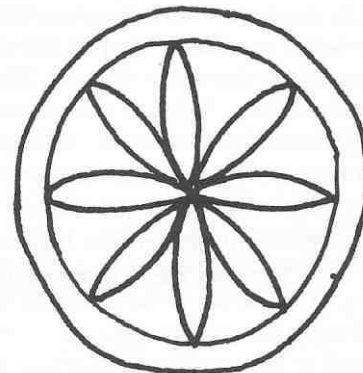
erecting a paper mill for the manufacture of kraft paper at Portishead. The mill commenced operation some time in the 1930s but ran into difficulties due to the saline content of the process water, this led to a legal action. The last reference to the mill is in the Directory of Papermakers for 1937 and production ceased sometime after this. The machine was dismantled and it is known that the forming section is incorporated in one of the paper machines at Reeds, Aylesford, Kent.

*Mill Site No. 37*

Compton Dando. There are a number of mill sites in the immediate surroundings of Compton Dando, but I have not been able to find a definite reference to paper manufacturing except from the comments of a middle-aged man who spent his childhood in the village, and states that people used to refer to the manufacture of paper at one of the mills. It is suggested that if there was a mill, then it operated in the post-Excise Number period.

*Mill Site No. 38*

Stanton Drew. This mill is situated at Stanton Drew facing Stanton Court. The building is in a fair state of preservation, but there are no signs of papermaking equipment. The mill was run by the late Mr. John Mardon, son of James Mardon, and he ran at the same time the Bye Mill at Pensford. When some of the sources of water to the River Chew were taken over by Bristol Waterworks Co. in 1883 Bye Mill was closed, and John Mardon transferred his business to the Avonside paper mill, Bristol. The site of Bye Mill was acquired by Bristol Waterworks Co., but it is uncertain who acquired the Stanton Drew Mill.



When the new Bristol City Museum is completed there will be a section in the technology department devoted to the paper industry in the Bristol region, in which there will be a display of the various tools of the trade, illustrating the operations and development of the industry.

Finally the author would like to take this opportunity of thanking the numerous members of BIAS who, with their usual enthusiasm, assisted him in this survey. Thanks also to the many other acquaintances who have supplied him with vital information. The story is not complete and the author looks forward to hearing any other items of information, and maybe the uncovering of various pieces of equipment such as moulds, vats, etc.