

BULLETIN 3.2

AUGUST, 1976

### TOCKETTS MILL

Although work is far from complete, Tocketts Mill, between the townships of Guisborough and Skelton in the county of Cleveland, now has a safe future as a preserved mill. The buildings became vacant in 1972 after the death of the last tenant. At that time it was in immaculate condition although it had not worked as a mill for some years. For the next two years it stood empty and the vandals did a thorough job of destroying window frames and loose equipment and removing some of the slates from the roofs. By the beginning of 1975 the place presented a sorry appearance indeed. During this time, however, permission was sought by the owners for the development of the site as a caravan park with the mill as a restaurant. After consultation with the Langbaugh Planning Officer, the Cleveland Industrial Archaeology Society and the Conservation Section of the Cleveland County Planning Office it was decided that the mill, with its machinery, could be regarded as an asset . . . and attraction in its own right . . . rather than a shell to be redeveloped for new uses.

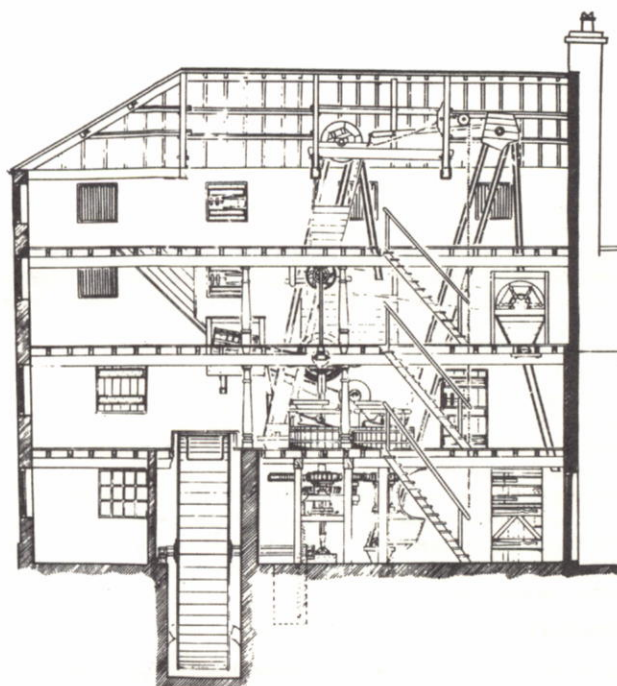
The caravan park development has now reached the end of its first phase. A new road has been built down to the mill, a bridge erected, electricity installed and sewage disposal facilities established. Later, a new restaurant will be built behind the mill and linked to it by a glass corridor at first floor level. At the same time the development of the mill as a museum will be completed.

It was considered, however, that the repair of the 18 foot diameter water wheel could not wait. The wheel has cast iron bosses and shroud plates and wooden buckets and spokes. The woodwork was badly decayed and this meant that there was a danger that the wheel would collapse into the wheel pit. This has now been made good and there is another link with the past in that the work was done by the firm of J. Hauxwell & Son Ltd. of Yarm, the firm which was started in the 1850s by John Hauxwell and which became the most famous firm of millwrights in North Yorkshire with a large team of millwrights, pattern makers, turners, etc.

The mill house has now been converted into the shop and manager's flat but the outside is restored to its original condition. The ground floor of the mill has been cleaned and lighting has been installed to show up the hurst machinery. A small display of photographs, drawings and millwright's tools has been set up by students of South Park Sixth Form College as a joint project between Liberal Studies and Technology Departments.

During the next two years work will go ahead on restoring the upper floors and the machinery. There are three sets of millstones (one by Mountains of Newcastle), a grain dresser, a silk screen, two elevators and sack hoist. All are capable of going again. At the same time a recirculating pump will be put in to drive the water wheel. The pump will fill the mill pond which will then empty over the wheel into a large underground tank.

Unfortunately, the history of the mill is thinly documented, but it is clear from the building that it is a mid nineteenth century mill on an older steading, probably of the seventeenth century. In fact a document of 1679 records the establishment of a new right of way for "horsemen and footmen" from the "New Mill" in the Upleatham area, and this probably refers to Tocketts. If so then it is close to the date of the first building on the site. The early nineteenth century saw the rebuilding of many mills in the Cleveland area as a



result of great improvements in agricultural practice. Many of these did not have the working life they were planned to have, because they were overtaken by the development of steam mills in Stockton and Yarm and by the growth of the railway network. For many of them the end of their flour milling came by the 1870s and they continued to work simply as meal mills. Most had their flour making machinery taken out, but at Tocketts it remained. The mill has survived as the most complete in the area.

There are many problems yet to be overcome, and these have not been reduced in intensity by the present economic climate. So far it has not been possible to obtain any grant for restoration. On more detailed matters, they would be very pleased to have advice on how to obtain 5" wide canvas belts for driving the ancillary machinery and they are also searching for corn milling exhibits (redundant machinery, equipment, scales, weights etc., as well as photographs, letter headings etc) as there will be a reasonable amount of display space available eventually.

At present all members of the public are welcome in the area of the mill . . . there is a very fine bar not far away ! Visitors can go into the ground floor to see the water wheel, hurst machinery etc. The mill floor, second floor and garner floor are not open as yet because of repair and insurance problems. It is hoped that this can be put right in the fairly near future.

J. K. Harrison, Chairman, Cleveland Industrial Archaeology Society, 9 Campion Drive, GUISBOROUGH, Cleveland TS14 8DW.

## NOTTINGHAMSHIRE WINDMILLS

The records show that in 1893 there were at least 129 corn millers in the county, using wind, steam and water for motive power in their mills. Today only a few of those mills are left, nearly all in varying stages of disrepair, but still serving as landmarks both physically and historically.

No example of a post-mill survives intact in the county, and the following is a list mainly of tower mills, in varying degrees of repair, which can still be seen. The typical Nottinghamshire tower mill has a circular, tapering brick tower and a white painted, ogee (onion shaped) cap.

### North Leverton Windmill 776820

The windmill at North Leverton is one of the few working mills left in the country and the only complete mill left in the County. The fact that it is working at all is due to the dedication of local people and especially to the millers who have been totally committed to keeping the wheels grinding with the minimum of financial compensation.

The windmill was first built in 1813 and despite a number of alterations and repairs has changed little in appearance since that date. The mill enjoyed a period of prosperity for the first hundred years of its life, but technological changes caused its economic value to be eroded away after the Great War of 1914 - 1918.

The structure itself is a three-storied tower mill built of brick and coated with tar. The cap is of ogee profile, timber covered and painted white. The four sails are slightly inclined to catch the wind blowing across the Trent Valley and directed by the fantail to face into the wind.

Wind pressure upon the sails rotates the wind shaft. The sails themselves are constructed of hinged flaps which can be adjusted to control the speed of rotation and when in repose the flaps are left wide open with an elementary form of brake in action. This series of operations subjects each member of the sail to stress and the maintenance costs are high.

In 1959 matters came to a head when the mill was struck by lightning and major repairs became necessary. Notts County Council came up with a grant of £1,000 and a loan for a similar amount, and other bodies donated smaller amounts. Since the initial grant the County Council has given further assistance and, from last year, have agreed to pay an annual grant of £250 towards maintenance. It is hoped that other bodies will follow suit.

The mill is run by a group of enthusiasts known as the "Friends of the Windmill" who run it as profitably as they can by grinding or rolling oats and barley as cattle feed for local farmers. The financial deficit is made up by the sale of bags of flour and leaflets and by voluntary contributions.

Visitors to the mill are always welcome, but large parties should first contact the Secretary of the Windmill Company, Mr. R. Gray, The Farm, North Leverton, Newark (Telephone: Sturton-le-Steeple 200) from whom an interesting booklet about the windmill and its history is available.

### Coddington, near Newark 832536

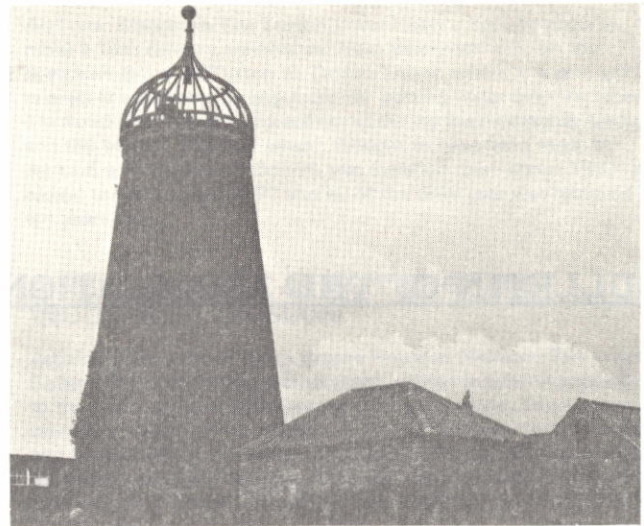
Balderton Lane. The four storied, tarred, brick tower of this 19th century windmill still stands prominently in a small pasture close to the road. The mill was of characteristic design, originally having four patent sails, a fantail and an ogee cap, though these have all disappeared. During the second World War the mill was damaged and it is now derelict. There is only one doorway which is at ground level; the door itself is missing and cattle wander in and out at will. The floors have been removed which gives the interior a striking appearance as one can look up through a criss-cross of huge beams and see the whole shell of the mill, with windows disposed at random. There is a mill stone laying on the ground inside the mill and another outside used as a well-cover.

### Norwell 774618

A three storey tower, about 30ft. high (9m) remains in good condition, of the original four storey windmill built in 1852. During the First World War the mill lost two of its sails, but continued to work on the remaining two sails until 1920. The existing tower is about 25ft. (7.6m) in diameter internally at the base and 17ft. (5.1m) at the top.

### Nottingham 585395

Belvoir Hill, Sneinton. This was an 18th Century or early 19th Century windmill. There are the remains of a red brick tower with the top destroyed. It formerly had an ogee cap. The mathematician, George Green, was born at the mill and helped his father to grind corn. He used to climb up to the top storey to study scientific problems.



GRINGLEY WINDMILL

### Gringley-on-the-Hill 730905

An early 19th Century, red brick tower windmill with a domed wooden cap and ball finial. It is four storeys high and has flush casement windows. There are no sails.

### Newton 680423

Only a brick round-house still stands of the former white-painted, timber post-mill which had four spring-sails and a tailpole with a winch. Remains of post-mills are extremely rare in Nottinghamshire and it is unfortunate that so little is left here.

The site is close to a quiet lane on a ridge overlooking the Trent Valley with a fine view of Shelford Church. Wheat is growing in the field at present and a long, narrow crop-mark suggests that there may still be a sail left lying buried in the ground. The round-house is about 13ft. high (3.0m) and 17ft. (5.3m) diameter with four brick buttresses and a pair of large timber cross beams. An iron curb runs round the top. The walls are one brick thick, tarred on the outside and formerly white-washed inside. An ancient mill stone lies on the ground next to the building.

### Eakring 673625

Tork Lane. A tall 19th Century, five storey mill. The sails were removed in 1912 but the brickwork is in good condition and some fine, decorative corbelling can be seen at the top. The mill is within a conservation area and the County Council are looking into the possibility of providing a new cap to the tower.

### East Markham 730725

Priest Gate. An early 19th Century, tarred brick mill, 4 storeys high with one large door at the base on the north side, and two windows at each of the upper levels. Milling continued here until about 1930. The brickwork is sound, but the cap, the four sails, and the machinery have all now gone. The mill was about 70 ft. (21m) high, with an internal diameter of 20ft. (6m) at the base and 7ft. (2.1m) at the top.

The mill is on the site of an earlier post-mill of which there are a few remains. The mill has stayed in the ownership of the Lightfoot family from at least 1869 till the present day.

### Everton 692905

Built about 1820 this mill is four-storeys high and has a domed wooden cap with a ball finial. The sails and machinery have gone but a pair of grey stones remain. The mill was closed in 1920 due to lack of trade.

### Tuxford 734719, 761693

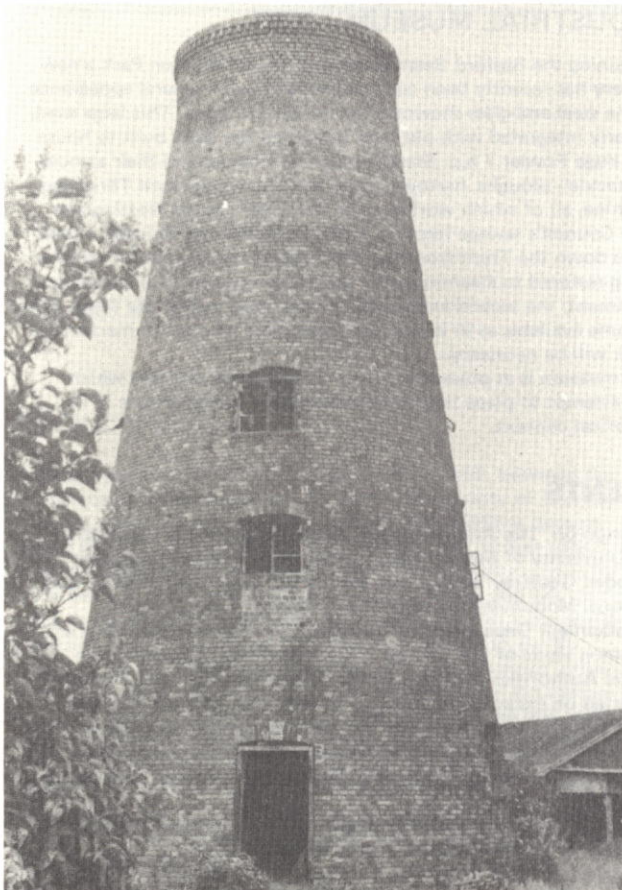
There are two remaining windmills in the parish, both early 19th Century. The one at Stone Road End is four storeyed, but now lacks its super-structure. The one at Mill Mount near the Great North Road is only three storeys high. It has a tarred brick tower, casement windows and two doors at ground floor level. The original four patent sails, fantail and ogee cap with ball finial have all gone but the cast iron windshaft with its sail cross is still visible and a great deal of the internal timber work remains although in a decayed condition. Until about 1930 there was another windmill at Mill Mount; it was taller and built of plain red brick but it has now completely disappeared.

## Misson 690950

This was built in 1863; very late in the history of windmills. Only the stump is left of what was once a brick tower mill with four patent sails and a fantail.

## Misterton

Stockwith Mill, Stockwith Road. This is an early 19th Century tower windmill converted to a cottage. It has tarred brickwork and a gabled, pantiled roof. It is three storeys high and has casement windows and a brick chimney stack.



FARNDON WINDMILL, NEWARK

## Newark 780529

Known as "Farndon Windmill", this building is sited between the Foss and the River Trent with Staythorpe power station in the background. The mill was built in 1823 by James Dyke, whose initials are incised together with the date on a stone over the door. The sails and wooden cap have now gone. The five storeyed, tarred brick tower is 57ft. (12.3m) high and the walls are 1½ bricks thick at ground floor. Flour was milled until 1926; Mr. Horace Spray being the miller at that date. The mill stones and machinery were removed in 1953.

## OTHER NOTTINGHAMSHIRE WINDMILLS

- Bidworth 586558 — 3 storeys of brick tower remain.
- Carlton-on-Trent 802645 — On Wharf, No floors.
- Caunton 743604 — Tarred brick tower close to cottage. Good condition; used for storage.
- East Bridgford - Millgate 692429 — Converted to house.
- East Bridgford - Kneeton Road 703444 — Used for farm storage. Good condition.
- Elston 760478 — Good brick tower. Used for storage.
- Giltbrook 490453
- Grashtrope 798679 — 6ft. high remains.
- Harby 877708 — Tower.
- North Wheatley
- Sutton-in-Ashfield — High Pavement - stone tower. No floors.
- Sutton-on-Trent 799655 — Good Brick tower. Some floors, Millstones.
- Upton 736548 — Post mill. Only base left, 8ft. high and some machinery.
- Whatton 743392 — Brick tower. 5 good floors. Now residential use.
- Warsop 581664 — Stone tower. Good condition. Used as store.  
A Beaumont (AIA)

## DEVELOPMENTS

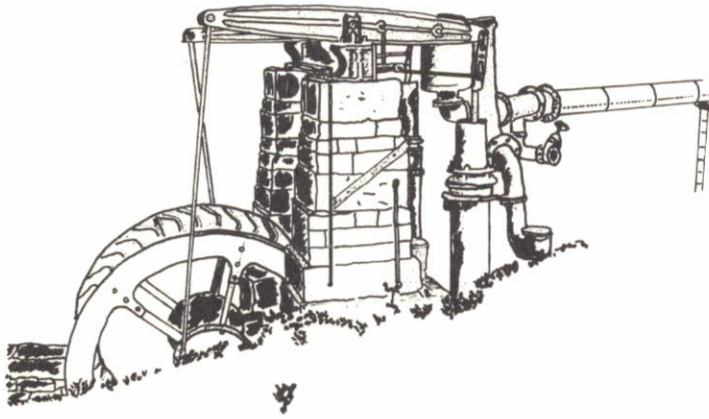
In Bristol a group of business men concerned about the future of the City Docks have formed a small company, City Docks Ventures Ltd., with a view to developing those aspects of the commercially redundant dock estate which the local authority as owners of the docks is unlikely to include in its plans for redevelopment. The group is made up of 35 people who are concerned that most of the dock's essential historic features will be lost if the normal commercial processes inherent in winding up a working entity of this kind are allowed to take their course. Three 3-tonne capacity cranes were sold to a Welsh scrap merchant, and one of the first acts of the new company was to buy back two of these, shortly before they were due to be dismantled, both to preserve a familiar feature of the Bristol skyline and to provide a facility for lifting pleasure boats in and out of the water, when, as is hoped, the city centre dock area is developed as a pleasure facility.

Another plan put forward by the Company is for a half-hourly waterbus service operating from Cumberland Basin to Temple Meads, with regular stops along the way to serve shoppers and tourists. Existing dockside railway line may be used for the display of steam railway equipment; at nearby Wapping Wharf the Bristol City Museum has already put back into steaming order an 1875 Fairbairn heavy-lift steam crane with a capacity of 35 tons, probably the only steam crane of this type in Britain still in working order (See AIA Bulletin 1 : 6). The River Frome which formerly ran through Bristol's city centre and the moat which surrounded Bristol Castle were culverted as part of the development of the City Docks along the original course of the River Avon during the 19th century and of the commercial spread to which this development gave rise, and the new Company is investigating the possibility of boat trips along these underground waterways; the bastions of the Castle are believed to be of particular interest. The Company is working on the basis that any of the assets which it acquires in anticipation of civic redevelopment may have to be sold again in due course if the hoped-for planning proposals do not materialise. It is to be hoped that their commendable foresight pays off in due course; had such thinking prevailed in Swansea ten years ago when commercial traffic ceased in the South Dock the local authority would not now be contemplating the expenditure of large sums of money to excavate infill from the dock basin (tipped there to provide building land which was, in the event, not required) where a maritime and industrial museum is now being established.

In Bath a Trust has been formed with the intention of establishing a museum based on the collection of engineering and mineral water bottling machinery salvaged when J B Bowler's factory at 12 Southgate Street was demolished in 1972 to make way for a car park. Part of a surviving Georgian riding school in the centre of Bath, used in latter years more prosaically as a church hall, has been purchased, and these premises could form a suitable home for the collection, which is at the moment in store. A BBC television film in the 'Chronicle' series, put out in October 1972, featured the collection of machinery and business records and included some poignant shots of the destruction of the building with its dignified Bath-stone pediment bearing the proprietor's name in incised Roman lettering. Further details of the Bowler Trust and its proposals are available from Russell Frears, 15 Lansdown Place East, Bath BA1 5ET.

At Widnes the Cheshire County Council is pursuing plans for a site museum of the early chemical industry, in the area of Widnes known as Spike Island. Some remains survive of the factory established in 1847 by John Hutchinson which began the town's association with the chemical industry. In 1868-72 Ludwig Mond developed, on the same site, the first successful process for the recovery of sulphur from alkali waste, and in this way he partially solved one of the great problems of the 19th century soda industry. The Environment Rehabilitation Unit of the University of Liverpool is collaborating with investigations to redevelop this largely derelict area without entirely destroying its historical significance; it is intended to preserve and restore, for instance, the brick vaults which supported Hutchinson's vitriol chambers and were later used as a storage place for pyrites.

At Wigan the local Civic Trust has proposed to the town's Leisure Services Department that a 40 foot high mine pithead gear from Gautley Pit at Billinge should be preserved. Constructed principally of pitch-pine with wrought iron fastenings, it is thought to be the only wooden headgear surviving on its original site west of the Pennines. But if removed from its present site, which is owned by a brick and terra-cotta company, a suitable site for re-erection must be found locally. Wigan Pier has gone (together with the music hall jokes to which it gave rise) but the Pier area has strong industrial associations and has been suggested as a suitable focus for industrial preservation in the area.



Water driven pump at Mount Sion, near Bury.

At Bury investigations are being made to refurbish a remarkable water-pump driven by a waterwheel which, like the Melingriffith pump described in Bulletin 1 : 5, employed cranks on the water-wheel axle to operate rocking beams, in this case iron castings apparently made from the same foundry patterns as steam engine beams, which in turn drove 2 pumps which lifted the water to replenish a pond supplying a nearby bleach works. The local authority is co-operating with the owners of the site at Mount Sior. to secure the wheel and pumps against vandalism and make them more accessible to the public.

The Herefordshire Waterworks Museum successfully steamed two Worth Mackenzie vertical pumping engines to the satisfaction of the boiler inspector on 26 April and the engines were in steam again for public inspection over the Spring Bank Holiday. The earlier engine is a triple-expansion engine built in 1895 which drives both ram and bucket pumps and is rated at 120 h.p. Its running mate is a 40 h.p. duplex of 1906. The older engine has not worked for 25 years, but started up with remarkably little trouble, and now runs more quietly than the electric pump in the next room. A hand-fired Lancashire boiler by Riley and Company, also dating from 1895 has also been successfully restored to working order having been out of use since the large triple was retired. The 20 foot long boiler was originally rated at 160 p.s.i. but a steam supply at 90 p.s.i. is now sufficient to turn over both engines which are pumping against much reduced heads, for demonstration purposes. The boiler, fitted with Meldrum's patent forced draught arrangement, is fired with wood which proves to be the cheapest and most convenient fuel under present circumstances. Details of the Museum Trust's activities are available from J C Townsend, Didley Cottage, New Mills, Clehonger, Hereford, Tel: Madley 644 (evenings). For times of opening, see under "Sites to Visit".

At Radstock it had been hoped until recently to establish an industrial museum based on the recently-closed Writhlington Colliery. As well as preserving various features of the North Somerset mining industry (most of whose output in latter years went for fuelling power stations) the project would also have served as a focus for the Somerset and Dorset Railway Museum Trust, whose members have preserved a number of locomotives and items of rolling stock including the only surviving Somerset and Dorset Railway locomotive, a 2-8-0 built in 1925.

It was intended to purchase the last mile of the railway line from Radstock to Writhlington and to operate this with steam traction. The project foundered several months ago, due in part, it is thought, to the high price put on the trackbed and metals which the scheme's backers hoped to purchase.

Some of the effort devoted to the Writhlington scheme has since been transferred to the West Somerset Railway, based on the old G.W.R. line from Taunton to Minehead. The trackbed was purchased some years ago by a far-sighted Somerset County Council. A company backed by a charitable trust plans to restore a regular passenger service to this line. Early this year a steam train traversed the line on an experimental basis, and since April a regular service has been operating between Blue Anchor and Minehead at the northern extremity of the line. Traction is usually provided by one or two powerful Bagnall saddle-tanks VULCAN and VICTOR built in 1950 and 1951. They came from the British Leyland factory at Longbridge, and have Walschaerts valve gear, an unusual feature on this type of locomotive. Rolling stock, trackwork and pointwork belonging to the Somerset and Dorset Railway Museum Trust were moved to Taunton from Radstock last year and it is hoped that some of these may also be seen in regular service along the 24-mile track from Taunton to Minehead, which the County Council has agreed to lease to the operators for the new venture. A share issue to raise some of the finance required was recently heavily oversubscribed.

And near Blackburn The Turton Local History Society plans to move a 19th century waterwheel from Blackrock Mill, on the Bradshaw Brook at Turton to Turton Tower, where it is planned to re-erect it with some arrangement for putting water over the wheel. Blackrock Mill housed a bleachworks during the nineteenth century and the 14 foot diameter wheel, thought to have been made by Jackson and Mitchell of Bolton, was installed there about 1853. It ceased to work about 1890 and all of the drive gear was removed ten years later.

## A NEW GALLERY AT NOTTINGHAM INDUSTRIAL MUSEUM

Adjoining the Basford Beam Engine House at Wollaton Park a new Gallery has recently been constructed, similar in general appearance to the steel-and-glass showcase for the beam engine. This large shed, cleverly integrated with old farm buildings, has been built to house two huge Fowler 7 h.p. Steam Ploughing Engines and their associated tackle - ploughs, harrows, roller etc. - and a Marshall Threshing Machine, all of which worked until the 1960's at the Nottingham City Council's sewage farms at Stoke Bardolph and Bulcote, a few miles down the Trent from the city. One of the engines is currently being restored to steaming order and is being given a full cosmetic treatment; the second engine will have to wait until more funds become available as in its case a considerable amount of mechanical work will be necessary.

The museum is at present working on associated displays which will attempt to place the steam-powered era of agriculture in its historical context.

## EVENTS

A forum on 'The Archaeology of Industrial Scotland' was held at the University of Strathclyde in Glasgow on 6 March. Speakers included Geoffrey Hay on the work of the Royal Commission and National Monuments Record, David Walker of the Scottish Development Department on the listing of industrial buildings and Eammon Hyde of the Lothian Region Planning Department on 'Local Authorities and Industrial Archaeology'. Dr Peter Swinbank reported on excavations at Wanlockhead. The morning and afternoon sessions were chaired by Dr John Butt and Mr C T Abraham and the meeting concluded with an open forum. Discussions were continued over an informal wine party which has been arranged to follow.

Those interested in receiving details of future meetings organised by the Scottish Archaeological Forum should write to :- Dr J Close Brooks, Secretary, Scottish Archaeological Forum, National Museum of Antiquities, Queen Street, Edinburgh EH2 1JD.

## BOOKS

BURDETT'S MAP OF DERBYSHIRE 1791, intro by J. B. Harvey. D. V. Fowkes, J. C. Harvey, pub. by Derbyshire Archaeological Society 1975. Obtainable from the Arkwright Society Tawney House, Matlock, Derbyshire DE4 3BT

A fascinating map, surveyed between 1762 and 1767 which was revised by Snowden and Cary in 1791. The extremely informative introduction is complemented by the fine quality of the map. For those who do not know the country, the lack of a key map may be a problem.

THE SWEDISH BLAST FURNACE IN THE 19th CENTURY  
Ivor Bohm

pub. by the Historical Metallurgy Group 1974.

The lack of a similar book on British practice makes this book all the more readable. Well illustrated and clearly explained, the book will appeal to specialist and novice alike.

AIA Bulletin is published six times a year by the Association for Industrial Archaeology. The Association was established in September 1973 to promote the study of Industrial Archaeology and encourage improved standards of recording, research, publication and conservation. It aims to assist and support regional and specialist survey and research groups and bodies involved in the preservation of industrial monuments, to represent the interest of Industrial Archaeology at a national level, to hold conferences and seminars and to publish the results of research. Further details of the Association and its activities may be obtained from the Secretary, Association for Industrial Archaeology, Church Hill, Ironbridge, Telford, Salop, TF8 7RE, England (095-245 3522).