

IPSWICH GEOLOGICAL GROUP

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NOTES ON THE GROWTH OF IPSWICH MUSEUMS,
WITH A FEW DIVERSIONS.

The Rev. William Kirby, rector of Barham, and natural historian and entomologist, suggested the formation of a Museum in Ipswich as long ago as 1791, but little is known of the result, if any, of this.

However, in the 1820s and 1830s, museums appear to have been flourishing. Ipswich Museum was in the Corporation's old Town Hall, in an upper room near the clock, and the Literary Institution and the Mechanics Institution also had 'museums', as did Mr. Simpson Seaman, an Ipswich natural history dealer.

1846 saw the start of a successful effort to establish a purpose-built Museum in Ipswich: the principal instigator of the plan was Mr. George Ransome of Ipswich. A Committee of Subscribers was formed, and the Committee rented a building (the first brick of which was laid the 1st. March 1847) in the then newly laid-out Museum Street.

On the ground floor was the Library, the Secretary's and Curator's Rooms, and Specimen Preparation Rooms. The principal Museum Room was up the staircase. Around this room were mahogany and glass cases for animals and two cases of mahogany and glass table-cases for insects and geological specimens. There was also a gallery with iron railings.

The museum was to open every day except Sundays, Christmas Day and Good Friday, from 11 a.m. to 4 p.m., and from 7 to 10 in the evenings. Annual subscribers (1 guinea and upwards) and Donors (upwards of £5) gained admission for their selves and families. Subscribers of 5/- per year were admitted in the evenings only. There was free admission for the public on Wednesdays and also Friday evenings; visitors on other days were charged 1/-.

The now aged Rev. Wm. Kirby was President of the museum and Dr. William Barnard Clarke, a well-known naturalist, Curator. Dr. Clarke took up residence at no. 14 Berners Street, to which address specimens were forwarded, in January 1847. The Museum was opened by the Bishop of the Diocese, Dr. Stanley, on the 15th. December 1847.

All suitable specimens were transferred from Ipswich Corporation's Museum Room, as were the contents of the museums of the Literary Institute and the Mechanics Institute. Many additions were made by numerous donors.

The lion "Wallace" was obtained for Ipswich Museum. For many years Wallace had travelled in Wombwell's menagerie, and had earlier been matched against six dogs at Warwick. He died in the summer-time in the south of England, and when the carcass reached Ipswich it was in a condition which the Curator described as decidedly unpleasant. However, it was tackled by the Curator and his assistant, producing a stuffed specimen to place on show. Wallace's skeleton is still in the Museum.

The primary object of the promoters of the Museum was to contribute "towards the free instruction of the working classes, in the science of Natural History, by providing for them a good museum, library, lectures, and classes".

During the first four months, 27,843 persons visited the Museum in the two evenings and one day per week that it was open to the public. In the evening a Committee member went round the room and explained objects to the working classes. The first Museum lecture (9th. March 1848) was delivered by Prof. John S. Henslow, rector of Hitcham, Suffolk, and Professor of Botany at Cambridge. He was followed by Prof. George Biddell Airy, the Astronomer Royal, whose lectures were published in a volume (price 10/6d.).

In July 1848 Professor Henslow brought his parishioners to Ipswich and the Ipswich Museum as a holiday treat. They were described as the best behaved party of the humbler classes to enter the Museum.

Rev. Win. Kirby, the President, died in 1850, and was succeeded by Professor Henslow.

The Curator, Dr. W. B. Clarke, resigned in 1850, that his salary might in part be used for the employment of a porter, because of the misconduct of visitors on free evenings, - it was stressed that the industrious working classes were not to be confused with the rabble.

Mr. David Wooster was appointed as the new Curator.

The Museum was much visited and was described as a Model Museum. However, it ran into financial difficulties as a private museum, there being insufficient income from Subscribers, and in 1853 Ipswich Corporation took over its management, the Museum now being supported by a public rate.

The Corporation continued to lease the Museum Street building from its owners, and increased the free opening times. Professor Henslow continued as President until his death in 1861.

Mr. D. Wooster, the Curator, resigned in 1853 because of ill-health, and Mr. George Knights was selected as the new Curator; the salary was £100 per year. An Attendant and Doorman, employed to preserve order by preventing the idle and dissolute from entering, was paid 10/- per week, and a Charwoman was employed twice a week, at 1/- each time.

The Museum was enlarged in 1868, by the addition of an adjoining house. Mr. G. Knights, the Curator, died in 1872, and Mr. (afterwards Dr.) John Ellor Taylor, a young scientist engaged as Sub-Editor to the Norwich Mercury, was appointed the new Curator.

In 1873 the Museum Committee assumed responsibility for the School of Art, then in Northgate Street, and Science subjects were introduced. There was by now a great want of room, and about 1875 two houses adjoining the Museum were secured. The larger was sub-let, and the smaller house was used for evening classrooms by the Science and Art Department -Animal Physiology Physics, and Mathematics being taught.

About 1877 the Northgate Street building was sold to the Girls' High School Company, and the Masonic Hall (later the Conservative Club) in Upper Brook Street was hired for the School of Art.

Because of the insecurity of tenure of the Museum Street building, the Corporation decided not to renew its lease, but to build its own premises. In 1878 a site for the new Museum, Library, and Schools of Science and Art building was found on the west side of High Street, - the present Museum site.

The new High Street building consisted of three parallelograms - a Centre Building open from the floor to roof, with two annexes, both with a ground floor and an upper floor.

The Centre building contained a Porch, Vestibule and staircase, and the Main (Central) Hall with a Gallery, much like the old Museum. Showcases were transferred from the old Museum to the new Main Hall, where they continued to be used

for natural history; the Gallery was used for archaeology and ethnology.

In the South annexe the ground floor was used for the Library and Reading Room, and the upper floor, with access from the Gallery of the Central Hall of the Museum, for geology. There was also a Curators Room in this annexe, with a basement below it.

The North annexe was used for the Schools of Science and Art, and had special north light windows.

The front of the building contained many terracotta motifs, including those of fossils.

During the removal to the new building, the old Museum was closed to the public for only eight weeks.

The new High Street Museum, and Library and Science and Art Schools building, was opened by the Mayor, Alfred Wrinch, on the 27th. July 1881. The new Lock Entrance to the Docks and the new Post Office on the Cornhill were opened the same day. In the evening a grand *Conversazione* was held at the Museum, under the auspices of the Ipswich Scientific Society.

In 1882 Mr. Alderman Packard presented the Institution with the entire fitting up of the Chemical Laboratory, for the use of students of the Science and Art Department.

In 1887 a single storey extension (South Wing) was added, between the Museum and the Art Gallery of the Ipswich Art Club. This was built as a memorial to the Jubilee of H.M. Queen Victoria, and used for the new Victoria Free Lending Library.

On the night of the 15th. April 1890 a great puddingstone boulder was deposited in the Museum grounds. It was brought in chains from a sandpit on Tuddenham Road, A dozen men helped Mr. Taylor, and it took five hours, finishing at midnight.

In 1892 a new, North, wing was added, with classrooms for the Science and Art Schools, which had outgrown their accommodation. Dr. J. E. Taylor (the Curator) retired in 1893. He had been a popular lecturer, his Winter courses of lectures in Ipswich being greatly looked forward to, and commonly attracting three hundred people.

During his Curatorship the scientific (natural history) collections had grown, and important collections of local Crag fossils had been presented, particularly when Sir Richard Wallace of Sudbourne Hall was President (1875 - 1890). Ipswich Museum now had one of the finest collections of local geology in Europe.

Mr. Frank Woolnough was appointed as the new Curator, and was soon to have to deal with the greatly increased secretarial work connected with the enlargement of the Schools of Science and Art.

With the still further development of technical teaching, the new North wing was soon inadequate, and use was made of the building generally known as Christchurch 'Mansion', presented to the town in 1894 by Mr. Felix Cobbold.

In 1896, Science classes, except for Chemistry, and Cookery classes were removed to Christchurch Mansion; a Picture Gallery was also opened there. Cookery classes (for female students) were divided into three grades, - high-class, middle, and artisan; a special class was held for factory girls at a charge of one penny (1d) per lesson.

In 1898 classes in Book-keeping, Shorthand, Dressmaking,

and Millinery were passed to the Ipswich School Board; this enabled six thousand volumes of specifications for Patents to be taken from the Lending Library to Christchurch Mansion.

The Ipswich Scientific Society demonstrated Wireless Telegraphy in 1899, when a set of instruments was used to transmit messages from the Curator's Office (in the Museum) to the Art Gallery.

The educational system of the Borough was re-organised in 1903-'04 With the establishment of the Education Committee, the Schools of Science and Art no longer came under the Museum Committee.

With the removal of Chemistry classes from the Museum (north side, ground floor), a vacant room was fitted with a platform and screen to convert it into the Museum Lecture Room, for use by the Museum and Societies, The Art School continued to occupy the north side (upper floor) of the Museum, and the North Wing.

All classes, except Cookery, were removed from the Mansion, and in 1904 Christchurch Mansion was brought into use as a museum of archaeology, as well as a picture gallery. To relieve overcrowding at High Street Museum, and also to furnish the rooms of Christchurch Mansion, Saxon, Roman and Medieval pottery were removed from the Museum to the Old Billiard Room, and the stocks and ducking chair from the Museum to the Great Hall.

In 1902 a new two storey extension (West Wing) was built at the rear of the Museum buildings and abutting on St. George's Street. On the ground floor was a new Reference Library Room, and a Curator's and Carpenter's Workshop. The upper floor became the British Bird Room, entered from the west end of the Gallery of the Central Hall. Birds from the Geology Gallery were moved into the new room, their space in the Geology room being taken by prehistory from the Gallery of the Central Hall, where more room became available for Ethnology.

At this time the Borough Rate covered both the Museum and the Library, and the new Reference Library meant additional expenses on the library side. The first Branch Library had been opened at Rose Hill in 1895, larger premises in Tomline Road opening in 1905.

A crowd of people gathered in front of the Museum on the afternoon of Friday 15th. March 1907 were able to witness something unusual. The Museum's Indian rhinoceros was unloaded from Messrs. Fraser's huge pantechnion van, 12 ft. in length, 121 in girth, and 6 ft. 6 in. high, some ten men laboured for about two hours before she was housed in the central hall.

The gorillas in the central hall are of interest in that they were the first ever brought into England.

The large case of African animals in the main hall was unveiled by the Mayor, Bunnell H. Burton Esq., on the 3rd. November 1906. The Mayor's previous appointment had been a meeting at the Town Hall to promote the establishment of a new Diocese for Suffolk, and he came to the Museum accompanied by the Bishops and many of the clergymen who had been attending the Church Conference, investing the event with an unexpected distinction.

The giraffe was obtained in 1909, travelling to Ipswich by rail. Stuffed and mounted it is 16ft.10in. tall, and as the Railway Company's load gauge from rail level was 13ft., it had to be propped leaning forwards on the lowest available truck. To see the load under bridges it was suggested

that a railway inspector should travel jockey position on the animal's neck; however, the inspector successfully pleaded age, weight, and non-training against the method.

In 1914 electric lighting was introduced in place of gas lighting in the Museum.

In 1918 Mrs. Ogilvie presented the collection of birds made by her late husband, Mr, Fergus Monteith Ogilvie. Over 230 habitat cases (the largest gift the Museum had received) were removed from Sizewell, and the Bird Room was entirely devoted to it.

Mr. Woolnough, the Curator, retired in 1920, and Mr. Guy Maynard (Curator of Saffron Walden Museum) was appointed to the post.

In 1924 two rooms of a timber-framed Tudor house from Majors Corner were re-erected as an additional wing on the north side (i.e. at the back) of Christchurch Mansion.

The long association of the Museum and the Free Library in the same building came to an end in 1924, when the Public Library department was transferred from High Street to new premises (the Central Library) in Northgate Street.

The Museum was now able to expand into the former Library Rooms at High Street. Within two years a new Gallery of Archaeology and Prehistory was opened (on the upper floor, in the former Geology Gallery); it included Prehistory already in the building, and Archaeology from Christchurch Mansion (the removal of which allowed extension of the Ceramic displays at the Mansion). Many specimens were the result of the work of a local Archaeologist, James Reid Moir.

The old Public Reading Room now became the Geology Gallery (specimens brought downstairs); structural alterations were necessary to provide direct access from the Central Hall of the Museum to the former Public Reading Room.

Central heating was introduced, and the old heating stoves removed.

The Wolsey Art Gallery, the Ipswich Memorial to Cardinal Wolsey, was built as an annexe to Christchurch Mansion, and opened in 1932. The pictures from the picture galleries in the Mansion were moved into the new Wolsey Gallery, and the rooms in the house now used for period pictures and furniture.

In 1934 the Old Reference Library became the Local Geology Gallery (now a separate unit from the Main Geology Gallery). . The skull and upper jaw bones of a whale, which had been in the courtyard between the Museum and Art Gallery for over twenty years, were removed to the Local Geology Gallery and suspended from the ceiling by metal girders and hoops.

The Workshop was moved to an old Baptist chapel building in St. George's Street, which had been the gift of Alderman W.F.Paul about five years previously, after having been used as a warehouse; it was now used also for storage of reserve material. A back stairway was built from the old workshop room to the Bird Room on the upper floor.

Having received many gifts from Miss Nina Prances Layard, a local archaeologist, the Museum was bequeathed the rest of her collection in 1935. It was soon afterwards displayed in a special room (the Layard Room, formerly the old workshop) at the foot of the rear stairs.

In 1934 the Museum took over the South Wing block, formerly the Free Lending Library and afterwards let to the Education Committee for additional space for the School of Art. In 1935 the main room was, as the Biology Annexe, devoted to nature study.

On the lower floor of the north side of the Museum, an enquiry office and public cloak room were introduced about 1935, and a raised gallery in the laboratory (allowing better lighting and giving more storage facilities) about 1936.

In 1934 the Museum Committee took over the remainder of the lease on the Art Club Gallery adjoining the Museum, the Art Club being granted facilities for their annual exhibition. About 1935 a room was set aside for Committee meetings, and in 1938 the Art Gallery was equipped for the production of Stage Plays. A stage was added, and also an emergency exit, -double doors leading into the southern court of the Museum.

A programme of free films was introduced on Saturdays in 1936. They were of nature study, industrial and other educational subjects, and were at 3p.m. for Children and 7p.m. for Adults. The programme of the 6th. November 1937 included 'Trapping the Skunk'.

An aquaria was introduced about 1938, in a former gloomy passage.

With the arrival in the Borough in 1939 of children evacuated from Ilford,- part of the Museum's collection was used to form a 'Children's Museum' in the Art Gallery.

During the 1939-145 War, pictures and furniture from Christchurch Mansion was stored at the National Library of Wales, Aberystwyth. Archaeology and local geology were stored in Suffolk.

Mr. J. Reid Moir, President of Ipswich Museum since 1929, died in 1944. The archaeology department was named "after him, and, as a memorial, an oak seat was placed near the large oak tree at the junction of Westwood Avenue and Valley Road, In 1934 Mr. Reid Moir had founded the body of subscribers known as the Friends of the Ipswich Museum.

Mr. Guy Maynard, Curator since 1920, retired in 1952, aged 74; his service was originally extended because of war-time conditions. Mr. Norman Smedley, Director of Doncaster Museum, was appointed the new Curator.

High Street Art Gallery (built 1880) reverted to Ipswich Corporation in 1954.

Also about 1954 a second storey (for a small Archaeology Gallery) was built over the South Wing. The ground floor of the South Wing (the Biology Annexe) was adapted as offices.

An exhibition of Victorian toys was held at Christchurch Mansion at Christmas time 1953, and was such a success it was repeated other years.

Shots for a children's film, 'The Ship in the Forest' were filmed in Ipswich Museum in 1955. One visitor who had come in to look at the butterflies admitted that he found this new activity 'much more interesting'.

In the early 1960s, two small rooms on the north side of the building were handed back by the School of Art. The insect collections of the Suffolk Naturalists Society (collected by Mr. Claude Morley, founder of the Society) were then placed in a room (the Morley Room) provided by the Museum.

Mr. N. Smedley (Curator) retired in 1965, and Miss Patricia M. Butler was appointed the new Curator.

An Educational Liaison Officer was appointed in 1972, and runs the school service, Saturday Club, and Holiday Activities Programme.

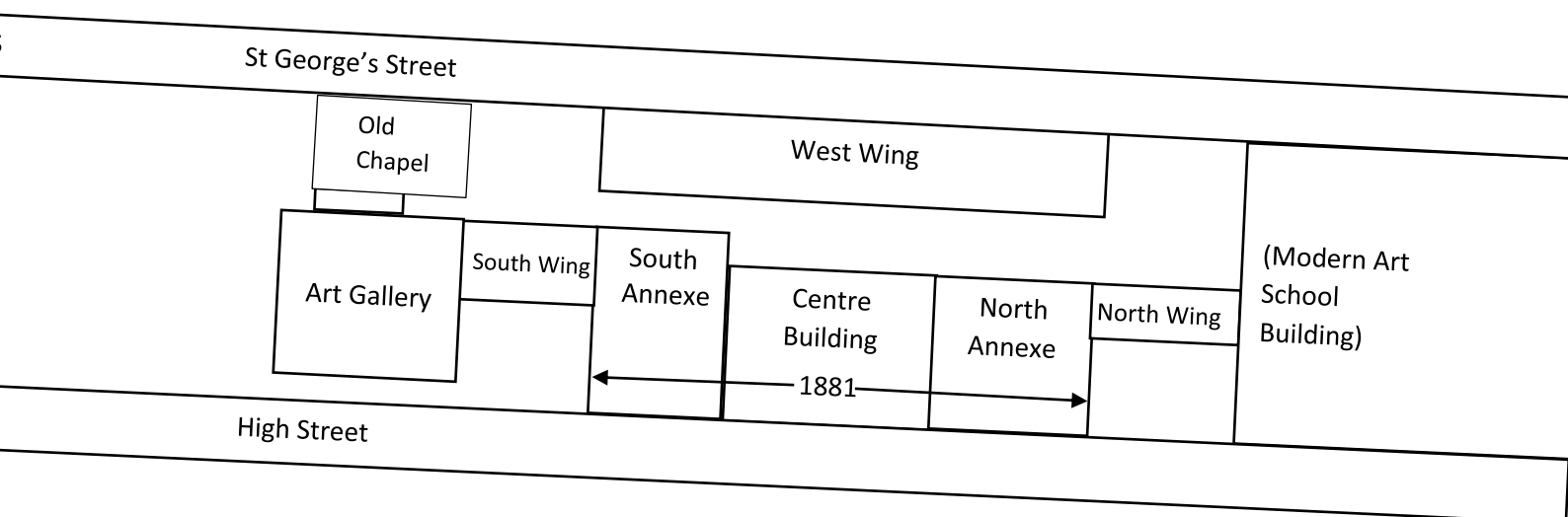
With the re-organisation of Local Government in 1974 the Museums became part of Ipswich Borough Council's Recreation and Amenities Department.

Miss P. Butler, the Curator, resigned in 1978, and Mr. Alfred Hatton was appointed the new Curator.

The Carpenter's Workshop and the Design and Display area have recently been moved to a new annexe in Charles Street. There have also been some recent improvements to storage, but there are still some outlying stores, including the old carriages kept at Holywells.

A new Ethnology Gallery was completed and opened in 1980, in a portion of the large Archaeology Gallery. The School of Art still uses the large rooms of the upper floor of the north side of the Museum, and also the North Wing.

R. A. D. Markham.



Plan of High Street Museum and associated buildings.

IPSWICH MUSEUM AND ITS FOUNDATION

A Study in Patronage

The Rev. W. Kirby of Barham was a keen entomologist and was also interested in the study of birds. He found some difficulty in following the latter interest as (1) shooting was not suitable for clergymen (2) the mounting of specimens was extremely costly. On the 5th December 1791 he wrote to the President of the Linnean Society in London suggesting the creation of a museum in Ipswich. The letter also mentioned two other collectors, one of whom was also a clergyman, of geological specimens, fossils and plants. He received a favourable reply and both he and the President spoke of the need of keeping out grandees - however the idea never got off the ground.

Apparently there was already a collection of curios in the Town hall, including objects presented by Admiral Page.

It was not until 1847 that Ipswich finally got its museum. Even so this is still one of the earliest provincial museums in the Country.

Who supported it, why, what were the ideas behind it? These are the questions we will be looking at.

It is easy enough to discover who supported the museum as all the fund raising, contributors etc were reported in detail in the Ipswich Journal which also published a list of those attending the opening of the museum. Of the 47 names, approximately one quarter were Church of England clergy

The Right Rev. Lord Bishop of Norwich
Very Rev. Dean of Westminster
Rev. Prof. Henslow (a keen naturalist)
Rev. W. Kirby (now very old and seeing his dream come true)
The Hon and Rev. F. de Gray
Rev. F. B. Zincke (author of a 'Description of Wherstead', also an amateur geologist)
Rev. R. Cobbold (author of historical romances, including 'Margaret Catchpole')
Rev. R. Barnes
Rev. S. Croft
Rev. R. Exton
Rev. W. Harbor
Rev. T. Mills

one sixth were Liberals with connections with Ransomes and their banker Alexanders

George Ransome
R. D. Alexander
J. B. Alexander
A. Ransome
R. Alexander
H. E. Adair
D. Alexander
P. B. Long
C. May (a partner in Ransomes)
Mr Sims (became a partner in Ransomes)

Cobbolds and Tory politicians made up only one tenth of the total

J. C. Cobbold M.P.
Chas. Lillingstone,
A. Cobbold
C. Steward, Tory
W. T. Cobbold
Baird, Tory (physician)
G. Josselyn
W. Rodwell, Tory (ran public library)
Sir W. F. F. Middleton, Tory
Geo. Bullen, Tory (surgeon, ran medical library)

Furthermore the Cobbolds had no connection with the projected museum before its opening when, as prominent local politicians, they could not be excluded.

It was the clergy, especially Kirby and Henslow, who provided the idea and promoted interest in the museum, and the Ransomes who provided the finance. A number of the nobility provided the necessary patronage and class. Patrons included Lord Rendlesham, the Marquis of Bristol (the most generous), the Marquis of Conygham and Sir Robert Harland - most of them taking out the cheapest membership with the greatest possible noise.

Like so much else in Ipswich at that time, the museum was greatly influenced by the local political rivalry. It was a Liberal/Ransome charity. This is not to say that the Cobbolds did not themselves have their own charities.

Basically we can say that Cobbolds supported the Shipwrecked Seamen's Society, sports societies (first boating only, later football) and the Volunteer Regiments. They also had a strong interest in the workhouse. The Liberal group had a greater interest in education of all sorts.

In a sense we can say that the Liberals and Tories differed in their attitude to the voteless poor, of whom they were both equally frightened. The Liberals took the line that they must be educated into respectables and in some ways recall the mission movements. The Tories tended to take the line that they must be controlled.

Secondly, the two families concerned were both in the same position, that of newcomers, not of the highest social standing, who had come into large fortunes which enabled them to support their political aspirations.

The Ransomes disqualified themselves from moving into the gentry by not being prepared to renounce their religion (Quaker). Furthermore unlike the North of England where there were several such families whose wealth was dependant on engineering and industry, they stood alone. They could have tried to become assimilated into the local upper class but this would have involved them in copying their way of life - that of the agricultural landowner. This was so different from their own way of life that they would have found the change very difficult.

No such problem stood in the Cobbold way. We can see them moving from St. Margaret's Old Manor House Rectory to Cliff House, Holywells, or Felixstowe where they built themselves mansions. These they decorated with a great amount of old woodwork, stripped from their inns. They gutted "The Tankard" of the Wingfield Room to line their library. "The Neptune Inn" panelling, the "Eldred" mantelpiece and "The Half Moon" mantelpiece were all built into Holywells so that even if they had not actually got an 'Old family' mansion they managed to create an Elizabethian home for themselves out of spare parts. They acquired a coats of arms and married into gentry. Finally they purchased Tattingstone and Little Glemham Halls and it is interesting to see how each generation moved further away from the town which provided their wealth and position.

Ransomes however chose to compete in the Dissenting goods works league.

1864 – Cobbolds;-

J.C.Cobbold – M.P.; charity trustee; trustee of Suffolk Savings Bank; treasurer Mutual Assistance Benefit Society and Suffolk and Ipswich Hospital; director Ipswich Waterworks Company.

J.P.Cobbold – Councillor

A.Cobbold – secretary Ipswich Maritime Assurance

Ransomes and Alexanders (and those directly connected with them);-

J.A.Ransome – Councillor

R.C.Ransome – Councillor, auditor Ipswich and E. Suffolk Hospital

F.Ransome – Councillor

R.D.Alexander – East Suffolk and Ipswich Hospital (1836); Museum Temperance Tract Society. J.Head – magistrate; cashier Ipswich Savings Bank; charity trustee: trustee Brames

Charities for the Poor; Ipswich Town Mission; auditor Ipswich and E. Suffolk Hospital; Ipswich Gas Company.

Steven's Directory of Ipswich in 1881 lists all the societies in the town, together with lists of their members.

Cobbolds

T.C.Cobbold - treasurer Ipswich Mechanic's Institute; treasurer Ipswich Shipwrecked Seamen's Mission; Church Missionaries Society's bankers (with A.Cobbold); President Gymnasium Drill Hall; C.O.First Suffolk Rifle Volunteers Corps; Ipswich Association Football Club.

A.Cobbold - secretary Ipswich Maritime Association; (see also T.C. Cobbold)

Mrs. J.P.Cobbold - secretary Ipswich Female Servants' Training Institution.

F.A.Cobbold - captain. Nautilus Boating Club; Lt.1st Suffolk Rifle Volunteer Corps

Mrs. J.C.Cobbold - Infant Charity; Ipswich Union Workhouse.

Ransoms & Alexanders etc;-

Ransome - chairman, Ipswich School Board; trustee Ipswich Penny Savings Bank, jointly with W.Alexander -- treasurer, Ipswich Nurses Home; Society of Arts, local Board of Examiners.

Sims - president, YMC.A.

J.E.Ransome - Ipswich and E. Suffolk Cricket Club Committee; Orwell. Works Cricket, Football and Athletic Club.

Later Cobbold donations include the Racecourse Recreation Ground,1897; J.D.Cobbold - St. Clement's Baths 1894; Felix T.Cobbold - Children's Wing of the E, Suffolk and Ipswich Hospital which drew funds from both families, its importance transcending party politics.

Having thus explained the differences between the two parties and families, let us look at how this is demonstrated by the funding of education.

Education

By 1752 there were in existence the Grammar School, Christ's Hospital. (which also looked after drunkards, harlots and idle persons), the Blue Coat School, the Red Sleeve School and the Green Sleeve School. All these were of course either paying or charity schools, having very small numbers. Thus in 1827 only 16 boys were receiving charity education at Christ's Hospital, while in 1739 the Blue Coat School had 50 boys and 20 girls. Nothing more was done for education until 1801 when Sunday schools were started in Tacket Street Chapel to teach the children of the poor to read and use the Bible. In 1809 Henry Alexander, a Quaker banker, started a Day School for Girls on the plan of the British and Foreign School Society in which 100 girls were educated in 'Reading, Writing and Arithmetic' and plain needlework. The expense was born entirely by Alexander and it was non-denominational.

In 1811 the Lancasterian School was formed for the poor, again with Alexander backing and in 1812 the Church of England Poor School opened. In both these schools children were originally admitted free but later a charge was made. In 1849 R.D.Alexander financed Ragged Schools intended for a "class of boys and girls who are prevented, either by their debased condition, by the worthlessness or criminality of their parents or the tattered states of their garments, from receiving instruction". The children were collected by the teachers who went into the streets and persuaded them to come to school. All the people involved in funding this were Liberal Dissenters, mostly Quakers and connected with Ransomes.

Their notes on pupils includes :

"William Hunter,16, sells books etc. from Bury. Mother died when only 8 months old, 11 years since his father died, had been a tramp for four years, and 11 years in Bury Union Workhouse; can read and write; without shoes, and in a very ragged condition.

George Smith,16, sells matches, a chimney sweep by trade. Comes from Bermondsey. Mother in a London Workhouse, father died 2 years ago of drink. Has been on the tramp 8 months, troubled with the ague from sleeping under hedges and sitting in the sun to warm himself. Reads a little and writes well."

In 1850 there were 13 Church of England schools, 7 Sunday schools for Bible and Prayer book only, 13 Dissenters and 12 Sunday schools teaching on a wider basis. Again it was the Dissenters who opened the first Sunday School in 1801, the Church of England followed suit in 1815.

In 1850 there were estimated to be 7,350 children between the ages of 5 and 15 of which 3,980 were attending schools of all types (including one held in a pub). In 1824 the Mechanic's Institution, one of the earliest in the country, was founded by George Bayley and Habez Hare, both shipbuilders. Basically a reading room, library and lecture theatre, it still stands in Tavern Street to which it moved in 1840. It was supported by the Liberals Alexander, Ransomes, Sims and the Anti Slavery campaigner, Thomas Clarkson.

In 1836 a Mental Improvement Society was founded at Ransome and May foundry for their employees. By 1850 there were 2,000 members.

In 1848 the Young Men's Association, a Ransome's project, started.

In 1791 there was a Public Library in the Butter Market (£1 subscription).

In 1818 - Literary Institution £2. 2s subscription).

1842 - Ipswich Philosophical Society originally met at the (Liberal) Suffolk Chronicle.

1849 - Fine Arts Association.

It is understandable therefore that Ransomes, with their background in supporting educational charities for the poor, should support a museum that, in George Ransome's speech at its opening, was described as having:

"a primary object in its establishment to be to promote the instruction and rational amusement of the working classes, by presenting to them the means of acquiring a knowledge of natural history, which they could not so well obtain by any other mode. It is believed that a great amount of happiness could be conferred upon this portion of the community, and more particularly the rising generation, by thus presenting a rational and pleasing method of employing their time - the pursuit of these studies may be more generally facilitated in our local schools"

Education = moral uplift = end to working class problem. An almost irresistible combination for George Ransome, a Liberal Quaker employee wishing to advance his town and himself.

What then of the Clergy? Why were they interested? Before we look at Kirby and Henslow in detail, there are a number of basic points to remember concerning Church of England clergy at the turn of the 18/19 centuries.

- 1) They were educated - often the only educated person for miles around.
- 2) In villages at least, they belonged to the upper classes and could not easily mix with farm labourers etc.
- 3) In Suffolk a great number, probably the majority, of the villager' were either Dissenters or did not attend any church

- 4) They were involved, whether they wished or not, in the collection of tithes, unpopular anyway - doubly so in a non-conformist area,
- 5) They frequently encountered opposition amongst the farmers if they indulged in good works amongst the poor.

Thus they were terribly isolated men with time on their hands and it is not surprising therefore that so many became keen local antiquarians and naturalists.

William Kirby was Rector of Barham and later became Professor of Botany at Cambridge also. We know from his biography that he devoted Wednesday and Friday to 'systematic visitation in his parish', Sunday to his services (not even looking at his specimens) and thus four days of the week were completely his own. The mornings he devoted to reading the Bible in Greek or Hebrew and the rest of the time to natural history. He wrote a number of works on the principles set down by Linnaeus, the great 18th century naturalist who first began the systematic classification of species into genus, families -and classes. Kirby's best known work was "Monographia Apum Angliae" (Monograph on British Bees) , which was as being a work of natural history outstanding in its time, listed 153 species all within his own parish. It was typical of a sort of philosophy common at the time, before Darwin and the great Science/Religion battle. He thought he was working back to the true knowledge of nature which Adam had lost. As Kirby said : "The Great Parent of the universe, when he furnished this terrestrial globe with its inhabitants, caused the earth and its waters, as the sacred historian informs us, to produce everything according to its kind an expression which may be understood to signify the distribution of all created species, not only in Families and Genera, but also into Orders, Classes and Kingdoms, and so into a harmonious system, every member of which has a separate place and office assigned it. It is in our present degenerate state fallen from original knowledge as well as virtue, having lost that genuine Clavis Naturae which it is probably our primogenitur Adam possessed by the use of which in the creative he could discern the intention of the Creator,-(hopes for the day when Christ will restore that knowledge). May that day ever more and more approach. To hasten its dawn is the peculiar office and duty of the naturalist who is the Hierophant in the great temple of nature"

Or as he remarked in his speech at the opening of the Museum, more movingly and a little more comprehensively : "These cases that you see before you are filled with the works of God. He made them all, He is great, He is wise, He is good"

Unable to continue, overcome by his emotions, Kirby was a very old man he died shortly after the opening of the museum.

Rev. Prof. Henslow of Hitcham, though sharing the same basic ideas as Kirby, was not such a mystic. He was more of an organiser, with tremendous energy. He was also a Liberal unlike Kirby, a High Tory who had written and preached against Tom Paine's "Rights of Man".

When Henslow was appointed by the Crown to the parish of Hitcham in 1837, it had a population of 1000, a rateable value of £6000 but only one dame school. Most labourers were on relief and his biography describes the village thus: "Ignorance, crime and vice appear to have been rife - the worst characters were addicted to poaching, sheep-stealing, drunkenness; and all kinds of immorality. Even witchcraft is said to have been practiced by them."

This was also the time of rick-burning and great agricultural unrest.

Henslow started a proper school out of his own pocket, an allotment system, gave lectures on Scientific Manuring to farmers, and started ploughing matches and horticultural competitions. In Hitcham School he introduced his own, special system for teaching botany. For a long time he had set up a marque museum as part of his horticultural competitions,

in which he gave lectures on all subjects.

In 1843 he discovered coprolites at Felixstowe and realised the possibility of making fertilisers from them, thus starting Fisons though he received no thanks for it. Henslow was thus a walking example of education profit.

His was the first lecture at the Museum and was on how science and religion were not incompatible. (1848 - Darwin published in 1859).

Ransome also mentioned the "thousands of beautiful forms that were designed by the All-wise Creator to raise the contemplation of man from earth to heaven"

When we look again at Kirby's views, remembering that he was an isolated man living in times with a ferocious rate of change and political upheaval caused by industrial and agricultural revolution, they become more comprehensive as a product of their time.

The naturalist was to restore the original knowledge and order given by God but lost by Adam. This order was the distribution of all created species into orders, classes and kingdoms (technical biological terms to be sure, but why use those words?) into a harmonious system where each had its place and office.

This passion for boxes full of drawers, each drawer with its species pinned neatly down with its label in its proper place in the series seems to me to be the scientific equivalent of "the rich man in his castle, the poor man at the gate" (from 'All things bright and beautiful' a Victorian hymn). An attempt to build an orderly, tidy and manageable world in the face of chaos (i.e. people no longer staying in the proper places).

What was the Museum like?; this strange brainchild of Quaker industrialists and Church of England clergymen.

It stood, not surprisingly, in Museum Street, which was only then being built, on the site of Mr. Rodwell's house. It was alleged at the time that the reason that a new building was planned instead of using an old building like Blackfriars was to enable Mr. Rodwell to find a buyer for his house. The stairs of his house were preserved in the original museum building.

The newspaper (11.12.1847) describes it as follows:

"The front elevation of the museum is of a composite character, a kind of mixture of orders, not amenable to any rules of Grecian, Roman, or Palladian architecture. The visitors will enter a vestibule and ascend a spacious staircase, where there are niches and other spaces set apart for the reception of specimens. The museum which is entered by a pair of folding doors of plate glass, is a noble apartment being 26ft in width and 70ft in length, it is lighted from the roof by a lantern sky-light, so arranged as admirably to answer its purpose, an equal amount of light being admitted to the whole of the apartment. Three pendant gas burners of chaste design are placed at equi-distant. Around the room the Committee have provided the most elegant mahogany glass cases, while running parallel the length of the apartment are in rows of mahogany cases, equally elegant, the former for the reception of animals, the latter for entomological specimens. A gallery has also been constructed upon the principle of the Royal Adelaide Gallery at Charing Cross with an iron railing of tasteful design - no doubt that Ipswich Museum will be pronounced entitled to the hearty approval and support of the public."

The displays were worked out by Prof. Henslow; in theory commencing with the elements, proceeding to minerals, crystals and fossils, then to plants, followed by animals, a system he used in Kew and Cambridge as well showing his belief that Darwinism was consistent with the Bible.

However this system did not exclude a large amount of material which did not fit into this scheme so neatly, and indeed the reality was more haphazard than the theory.

5.6.1847

"The Committee purchased from Mr. Wombwell the fine full grown Barbary lion, Wallace, long celebrated as perhaps the finest animal in Wombwell's collection and the veritable cub of the lion Wallace, which about 20 years hence was matched against 6 dogs at Warwick. The body was forwarded to Ipswich during the present hot weather, the lion having died in the south of England. This fact will show the public who are uninitiated in such matters, the kind of task which a Curator sometime, has to perform." Other objects even more bizarre "piece of olive tree from Mount Olive" "model of a design of a monument to the late Thos. Clarkson" "Egyptian figure from Central America" "2 skulls of Chinese pirates executed at Kowloon Beach for piracy of S. S. Momoa in 1891". Also Stuffed spaniels, an albino brown bear, a piglet with one head and two bodies, and a model of a Malay prahu-boat in cloves.

Non-European objects are mainly from China and the South Seas, those from China being exclusively presented by sailors, Capt. D. Jeffries, Cap Mason R.N. and Lt. Ethersay R.N. There were other objects with special connections i.e. fossils from Stoke Tunnel.

The sort of talks given and the event taking place were as follows :

1851 - Prince Albert was made patron and the British Association met in the museum while the Astronomer Royal was president.

1853 - taken over by the Corporation, open free 4 days weekly instead of 2.

1880 - new museum built which housed the museum, library and science and art schools, along with the Pine Arts Society gallery.

Reid Moir and Lankester changed the emphasis from natural history to archaeology at the turn of the century and in 1924 the library was moved to Northgate Street.

What was the Museum's success? In reaching the working classes- very little even at the height of its popularity. In 1850 Glyde reports "Considerable difficulty is also found in inducing working men to attend the valuable lectures that are delivered. They have hitherto been delivered in the Temperance Hall and a certain number of tickets for free admission of the working classes are regularly issued- but the reluctance with which they accept a ticket and the small number that is found to attend, are strong proofs of the little interest they feel in the subjects that are brought before them."

To be honest, since 1850 the museum has never regained the popularity it had then. It is easy enough to see why the working man was not interested.

1. The museum was the scene of social junketing among a particular group who derived a great deal of personal entertainment from soiree speeches and lectures. No worse way of spending time than ballroom dancing or football, but they felt obliged to justify their enjoyment by long addresses to each other on the good they were doing for the -working classes. No one wants to be patronised.
2. The language habitual to Kirby and Henslow was unintelligible to the working classes. They could not understand a word! I have purpose!; quoted Kirby at some length and many people today would be perplex, by the words "clavis naturae" "hierophant" "primogenitor" if they were to be honest. Moreover his style is not English but Latin. "I the creature he could discern the works of the Creator". Both Henslow and Kirby's biographers mention that in their sermons they generally lost their audience by talking above their heads.
3. The working man was being preached at. Henslow said at Hitcham that he was trying "to remove hindrances to the spread of knowledge and truth arising from vulgar errors and vulgar prejudices". Rev. Zincke of Wherstead said about customs concerning bees "these superstitions diverted thought from the consideration, discovery and provision of

natural means for strengthening the hives and increasing the produce of honey and put in their place practices that appeared to ignorant minds likely and fitting, but 'were in fact, absurd and useless". He further spoke about local dialect "words that have about them a strong odour of the yeoman's farmyard and of the parlour of the village public house. Such works as those would be no enrichment of our cultivated English".

4. Talks were held in the Temperance Hall.

As to the further decline of the museum's popularity, or at least its failure to maintain its initial momentum one can suggest:

- 1 The clergy after Darwin became markedly more suspicious of giving approval to science, especially natural history and geology.
- 2 As other towns gained museums so Ipswich became less unique, was by passed and less a source of civic pride.
- 3 As the century wore on it became harder for museums to make scientific contributions of the same level of importance once biology and natural history moved beyond the numbering, collecting and cataloguing of species. Local history and folk life at that time were infant studio with nothing like the same prestige. Only now are they coming into their own.
- 4 It is much harder to maintain interest and support than it is to rally it for a set target.
- 5 Once it had been transferred to council hands it became the preserve of councillors and professional staff. There was no longer a direct role for many of its amateur backers to play.
- 6 It had become carried away by its own rhetoric. Because it SAID it was educating the working classes it believed it actually WAS, making no attempt to find out whether this was so or not. Because Henslow believed he should lay out the museum according to a programme which excluded bizarre curiosities, he then believed it had in fact been laid out in that way. They thought it scientific to display animals against a panorama giving a 'natural' setting and since they were presented with a case by the Marquis of Bristol it became scientific to display a Barbary lion, a tiger and a brown bear in this same case, against a painted backdrop of South Africa.

David L. Jones

This issue of the Ipswich Geological Group Bulletin contains articles to commemorate and celebrate the Centenary of High Street Museum, Ipswich, - 1881 to 1981.

THE NON-LOCAL PALAEOLOGY DISPLAY AT IPSWICH MUSEUM, 1871.

(taken from 'A Guide to the Ipswich Museum', 1871, pp. 52-56.)

We commence therefore with the various organic remains found in peat-bogs and old river-beds. The former are remarkable for the number of antlers and bones of deer and other animals which they contain-, Perhaps the finest geological specimen in the Museum is the skull, with two magnificent antlers, of the Irish Elk (Cerous megaceres), which is placed above the door-way of the Museum- room. It can be seen to best, advantage, however, from the Gallery. This is an extinct species of Deer, whose remains are generally found in the lowest part of the Irish peat-bogs. In No.64 Wall-case we have peat-bog fossils from Suffolk. Next comes a fine series of subfossil land and fresh-water shells from Copford, in Essex. The shelf below is devoted to the bones and teeth of the Elephant, Rhinoceros, Bear, Hyaena, Badger, Boar, Horse, Deer, etc. from Kent's Cavern, Torquay, remarkable for the thickness of stalagmite beneath which the fossils are found and still more so for the remains of man found associated with them. Among other remains there is the portion of a lower human jaw, with one of the incisor teeth. Below these we have specimens from the 'Drift' beds, those deposits of sand, gravel and clay, which cover Norfolk, Suffolk, and indeed the greater part of England. They are chiefly of the Mammoth, and were all found in Suffolk, most of them being exhumed during the boring of the Stoke railway tunnel. A small boulder, scratched and polished by glacial agency, is in the same Case. The lower part contains the cast of the lower jaw of the Mastodon, an extinct type of Elephant. Several portions of tusks etc. are close by. We have now come to end of the Pleistocene formation, frequently separated from the other Tertiary formations, and regarded as forming a distinct period, the Post-tertiary. After these should follow, according to geological order, the Crag fossils; but as these deposits are peculiar to Norfolk and Suffolk, and as the Museum collection of them is an excellent one, they have been placed separately in the side-room leading out of the large Museum Room. These Pliocene remains, therefore, will be detailed at greater length in a section by themselves. The Miocene formation is unrepresented, but in Wall-case 65 we come to the highest beds of the Eocene formation. Their fossils are represented by the fine plant remains, chiefly of laurel from Bournemouth. Afterwards we come to the fossil Marine Shells from the Bracklesham beds, many of which are extinct, though others are allied to forms now living in warmer seas. The second shelf is

fresh-water remains from the London Clay, a deposit which underlies a great part of Suffolk, The fossil Turtles, one of which stands on the first landing of the stair-case, are obtained from this deposit at Harwich. On the next shelf we have this series continued with Fish, crustaceous Shells, wood perforated by the Teredo etc. all from the London clay. The Fossils from this formation are very nearly allied to animals and plants now living in tropical & subtropical latitudes.

The above fossils complete the Tertiary series, and we next come to those of the Secondary Period, which commences with the fossils of the Upper Chalk. The whole of the chalk strata bear evidence of deep sea origin. One of the most interesting fossils is the tooth of a large and extinct species of Marine Lizard (Mososaurus), found in the chalk at Norwich. Teeth of fish are very abundant in that deposit, and here we have some illustrations of them embedded both in the chalk and in the flint nodules. The most common fossils, however, are the Belemnites, of 'Thunder-bolts', as they are commonly termed, which are nothing more nor less than bones of an extinct species of Cuttlefish. Next come the characteristic shells of the formation, such as the Plagiostoma, Pecten, etc. The next shelf continues the series with fossil oysters and Brachiopodous shells, types very rare nowadays, although exceedingly abundant in the seas of the Cretaceous epoch. The 'Fairy-loaves', or Helmet-urchins (Ananchytes) the 'shepherd's crown' (Cidaris) follow next, concluded by the Ventriculites and Sponges, both in chalk and flint. The Upper Greenland is remarkable, near Cambridge, for its phosphatic or coprolitic deposits, and here we have the fossil Ammonites, Inocerami, teeth and bones of extinct Reptiles (Saurocephalus), as well as fish remains, arranged in serial order. Next follow the fossils of the Lower Chalk, such as Ammonites, Pectens, Terbratulæ, etc. Those from the Lower Greensand are arranged along the floor, and are chiefly remarkable for the peculiar kinds of fossil sponges (Siphonia and Polypothecia), which occur plentifully in Wiltshire.

Wall-case 66 commences with the Wealden, a formation now ranked as the lowest of the Cretaceous series. Its beds were formed chiefly under fresh-water conditions, probably as the Delta of a large river. Here are remains of fresh-water shells, cypris, etc. The Wealden is remarkable for the number of remains of huge land Lizards, Hylæosaurus, Megalosaurus, etc of which we have various remains on the upper shelf. That below commences the Oolite, one of the most interesting of the geological formations, from the number and variety of fossils it contains. The commonest and most abundant of these is the Ammonite, a large coiled shell, nearly allied to the existing Nautilus. Several specimens show the internal chambers. The Belemnites are also common, and there are several very fine specimens of Cidaris, showing spines, etc. Trigonia and certain

species of Terebratulæ are also characteristic of this formation. In the Inferior Oolite we have the same abundance of different species of Ammonite, etc., as social remains of the great 'Fish-lizard' (Ichthyosaurus). Here is also a fine specimen of a fossil Star-fish. The fossil Mussels (Modiola), Pectens, Pholadomya, Terebratula, etc. are common, as are also the large univalve shells, such as Trochus, Pleurotomaria, etc. The Lias formation, a sub-member of the Oolitic series, comes next: its fossils include an amazing number of species of Ammonites, far greater than even the Oolite. Here also the remains of great marine reptiles are abundant, and the head, teeth, etc. of several are exhibited in this Case. A great many of the Ammonites have been cut and polished in order to show the chambers of the shell. The fossil fish of this formation are very remarkable, chiefly for the peculiar character of their scales, which were not horny, like those of the Salmon, Herring, etc., but consisted of bony plates, covered with an enamelled surface. There is a very fine series of these fossil fish (Dapedius arranged here.

Wall-case 67 continues the Lias fossils with characteristic forms such as Ammonites, Gryphae, or fossil Oysters, Pectens, etc. to about half the shelf. After this there commence the Rhaetic beds, a sub-division of the Lias, which links it on to the Trias formation. Their fossils are not numerous, and consist of fragments of fish bones and teeth, wings of beetles and other insects fossilized, etc. The Trias also is scantily represented by Estheria, or fossil 'water fleas'.

The Permian formation, the latest of the Primary formations, is illustrated even more scantily with fragments of Breccia, etc. The next formation, however, atones by its abundance of interesting organic remains for the scanty nature and condition of the last two. This is the Carboniferous or 'Coal-measures', so called on account of its being that in which our coal beds are chiefly found. The upper part of the formation is that in which the coal seams are usually worked and the beautiful species of fossil ferns displayed in this Case are usually obtained from the shale or roof of coal seams. In addition to such species as Sphenopteris, or 'wedge-leafed' fern, Alethopteris, or 'tree' fern, Neuropteris, or 'nerve-leafed' fern, Cyclopteris, or 'round-leafed' fern, and others, we have also the stems and roots of extinct genera of fossil trees. Most of these are flattened by pressure, but they still retain the scars and markings left by the fallen leaves. Among the commonest of these stems are Lepidodendron, or 'scaly' tree, and Sigillaria, so called on account of the seal-like impression on the bark. Both these kinds of fossil trees were really gigantic club-mosses, which grew to the height of fifty or sixty feet. The roots of the latter genus, called Stigmaria, are also in the Case. Next most abundant, if not sometimes more so, in the roofs of coal mines, is the fossil

plant termed Calamites. This greatly resembles a Bamboo or cane, whence its name. It was nearly allied, however, to the little Mare's-tail, now to be found growing in our marshes. Asterophyllites, Sphenophyllum, etc. are rarer species of fossil ferns. The Mountain Limestone is a Sub-division of the Coal Measures occupying the lower parts. It is generally crowded with fossils, and in this Case are most of the commoner and more characteristic species. Among them are Bellerophon, Euomphalus, etc univalve shells now extinct. Next come Producta, Spirifera, Rhynchonella, Terebratula, etc., all of them Brachiopods, and the three first, extinct genera. There is also a series of fossil corals, of several species, and of Encrinites or 'Sea-lily' stems, all of which are common in the Mountain of Carboniferous limestone of Derbyshire and elsewhere.

The Old Red Sandstone, or Devonian formation, succeeds the Coal Measures, and is here represented by a specimen of the Caithness flags, on which are fossil ganoid fishes. There are also slabs of Sandstone containing fucoidal markings, and a series of polished Corals, from Devonshire, showing structure. These are arranged along the floor of the Case. The Silurian formation commences with its upper beds on the same floor, with Orthoceras, an extinct species of Cephalopod allied to the Nautilus, only not coiled up. Specimens of the Ludlow fish-bone bed are close by, as well as those characteristic fossils termed Cornulites.

Wall-case 69 continues the series with examples of the Dudley Limestone, a formation even more crowded with organic remains than the Carboniferous Limestone. Most interesting among them is the family of Trilobites, or 'Three-lobed' crustaceans, which became extinct before the introduction of the Upper Coal Measures. Other fossils, such as Pentamerus, Euomphalus, Rhynchonella, Strophomena, etc. are peculiar to this formation. At the further end of the second shelf is a fine specimen of one species of Trilobite (Phacops caudatus). On the third shelf are arranged such Brachiopods as Lepaena, etc. Trilobites of the following genera, Phacops, Bumastas, etc come next. The fossil Corals are numerous, and belong to the genera Cyathophyllum, of 'Cup-coral', Halysites, or 'Chain-coral', Monticularia, Favosites. The next shelf contains various casts of shells, such as Atrypa, Pentamerus, Lingula, Orthis, etc. The lower part of the Case continues the fossils with Trilobites of the genera Asaphus, Ogygia, Trinucleus, etc. and with various species of fossil Corals, Serpulites, Graptolites, or fossil 'Sea-pens', etc. The Cambrian formation, which is older than the Silurian, is sparsely represented, and the Laurentian, which is the oldest system of stratified rocks, not at all. Indeed, the fossils in the last mentioned formation are very rare, on account of the changes from heat and other causes having almost obliterated them.

A NOTE ON GEOLOGY AT IPSWICH MUSEUM

The geological collections contain many thousands of specimens of fossils and rocks. These were donated by numerous people, including Edward Packard (of Messrs. Packard and Co., the artificial fertiliser manufacturers). Sir Richard Wallace (through whom the collection of the Rev. Henry Canham of Waldringfield was obtained), Alfred Bell, James Reid Moir, and Nina Layard.

The local series of fossils is particularly fine, especially in molluscs and mammals, and there is a general series which is fairly representative of British geology. Fossils from the local Chalk beds include a large number of sea-urchins from Bramford, collected by Mr. R. M. Brydone. There are numerous fossil mollusc shells from the local Crag deposits, sites at Sutton, Ramsholt, Waldringfield, Foxhall, and Southwold being well represented. Other remains from the Crag include the teeth of mastodon, walrus, tapir, three-toed horse, gazelle, porcupine, and sabre-tooth cat. Mammals from 'Ice-Age' sites such as Stoke (Ipswich) and Barham, include elephant, rhinoceros, and hyaena.

Whilst most specimens are relatively stable from decay, conservation work has to be carried out on others. The tusks and teeth of mammoths readily crack and split, and therefore need treatment such as impregnation with plastic, to arrest this.

During 1981 the displayed specimens in the galleries have continued to be sorted and re-arranged preparatory to proposed future new displays. There are also many interesting fossils in the stores, and these are gradually being introduced into the public display areas. Cases showing local fossil shark teeth and amber are always popular -with young and old alike.

Some specimens are obtained by donation, and others by staff fieldwork. Sites collected from in recent years include excavations for the Orwell Bridge, Alton Water Reservoir, and Sizewell Atomic Power Station. Special '-digs' are sometimes carried out, recent ones being at Battisford and Tattingstone.

Specimens have to be sorted, identified, labelled and stored. Failure to do this properly means the loss of valuable scientific information, and leads to the statement 'Locality Not Known' on the label of many a fine specimen collected in the past.

The enquiry service sees a great variety of specimens and queries brought to the Museum. As well as identifications, information may be required on topics such as the geology of Needham Market, or what can be found during a holiday in Norway. In one year recently, geological enquiries included 236 opinions (mainly identifications) on specimens answered directly to the visitor, 211 other direct enquiries (e.g. about maps, fossil localities), 177 telephone enquiries, numerous specimens left (with written enquiry forms) for identification, and also postal queries. Sometimes, bibliographies (e.g. on the Suffolk Coast) have been made which may help certain types of enquiry

Fieldtrips are also led from time to time, mainly for Geological Societies, and occasional talks are given to similar bodies. Staff hobbies may even be called upon, as when a contribution was made to the recent Ipswich Transport Centenary.

Specimens in the geological collections are studied by many people, from the casual visitor in the gallery to the research worker (very often from overseas) visiting for a specific project.

Have you visited the fossils yet?

R. Markham.