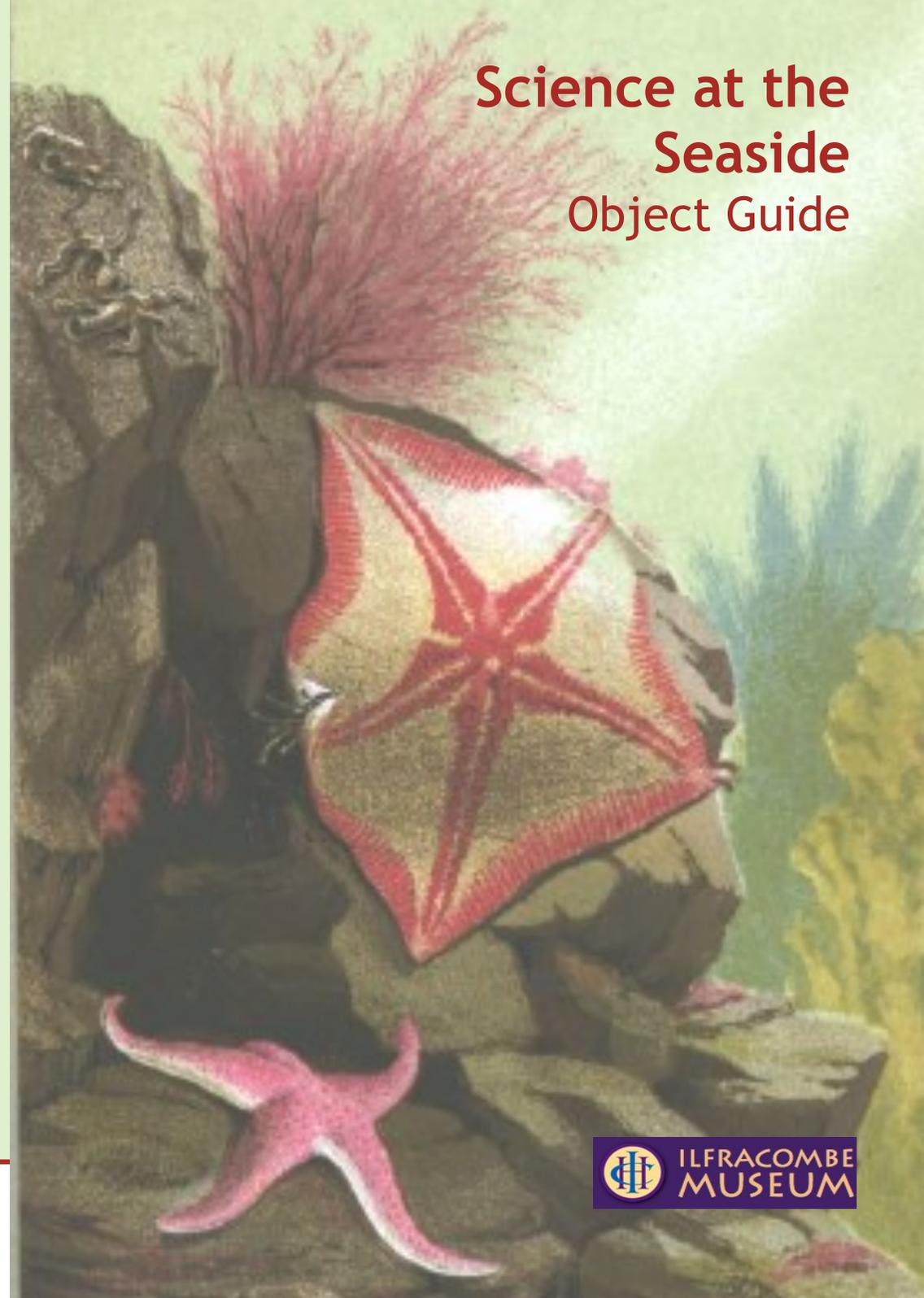


Science at the Seaside Object Guide





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Science at the Seaside

Object Guide

Kyriaki Hadjiafxendi
Sara Hodson
Anita Nathwani
John Plunkett



2015

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Curator's choice: Professor John Plunkett (Exeter University)

My favourite item is this bunch of flowers made from sea shells; I love the ingenuity, beauty but also the strangeness of this decorative object as you get up close to it and realise what it is actually made out of. For me, this artefact says a lot about the Victorians' creative yet contradictory attitude towards nature: in a world that was becoming increasingly urban, they sought to hold onto the natural world. Yet in this object the beauty of flowers has been reproduced in a way that is anything but 'natural': one material (shells) has been made to represent and simulate another. The ephemeral beauty of flowers has been made permanent: it would have been experienced and admitted in an elegant drawing room rather than in a field or hedgerow. I am always so impressed by the workmanship – the sheer number of hours – that went into creating such Victorian fancy-work, as this bunch of flowers; it is a piece of art with elements of the bizarre and quirky at the same time.



Basket of flowers made from shells

In this object, three creative female occupations are combined: flower arrangement, natural history exploration and the making of ornamental objects for the drawing room. The creation of decorative objects with sea shells was a popular pastime for middle-class women during the late eighteenth-and-nineteenth centuries. An array of seashell flowers delicately crafted with wire and string and then housed under glass domes was typical of the types of ornamental shell-work produced. These shell-work flowers were part of a genre where objects were made to resemble and improve nature; wax-work flower and foliage could create displays that never spoiled or faded. In *The Young Lady's Book: A Manual of Elegant Recreations, Exercises, and Pursuits* (1829), there was a whole section on Conchology; the manual declared that 'One very general employment of shells is gone out of fashion; but we should like to see it revived among our juvenile friends; we allude to the imitation of flowers with shells' (86). It also noted that another favourite pastime with shells was for young ladies to turn them into decorated grottos.

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Finally, we feel honoured by the faith that not only Ilfracombe Museum but also the North Devon Biosphere Foundation, the Marine Biological Association, RAMM, and the local community as a whole have put in our endeavours to develop an increased awareness of the rich history of literary and scientific writing about the North Devon coast. To all the workshop leaders, speakers and museum volunteers, we owe an immense debt for their time and expertise, especially to the Ilfracombe Museum curator — Sara Hodson — for her unwavering commitment to seeing this project through to fruition.

skill in the drawing room. However, it was equally undertaken by working-class men. In 1827, a mechanic from Exmouth was reported to have constructed a model of King Solomon's Temple in shell-work, using 150,000 shells, which was 4ft 7 inches long. Later in the century, shell-work was promoted as healthy, improving activity for girls. In the *Girl's Own Paper* in 1880, articles described how to collect, display and beautify even the most common type of shells found on the English coastline; shells could be rubbed with emery and water and then oiled to bring out their colour; they could be put in a vinegar and water solution to eat off a rough, dingy exterior and reveal a mother-of-pearl surface. Shells could be used to make trinket or jewellery boxes by gluing them to plain wooden boxes. There were even 'Seashell Missions' where girls were to gather boxes of shells to be distributed amongst children in hospital for them to decorate and arrange. In the *Boy's Own Paper*, such decorative purposes were eschewed on the basis that its male readers would have more scientific aims; Rev. Theodore Wood's article on 'The Naturalist at the Seaside' (1900) complained that 'collecting empty shells is very poor fun, after the first novelty has worn off. No true naturalist ever does it; he wants to know something of the animals inside the structure' (670). While seaside science aimed to promote detailed scientific observation and active participation in natural history, tourists were sometimes more interested in gathering shells that simply caught their fancy.

A collector's exhibition drawer of local and imported shells



Collecting and displaying shells was both a science and an art during the Victorian period. The arrangement of this collection in its box exemplifies the Victorian drive to classify and define the characteristics of different types of local shells. Shell collecting was a pastime that could be undertaken by all; for middle-class women, it was a form of fancy-work, designed to show their creativity and

Introduction: Science at the Seaside

The exhibition cabinet 'Science at the Seaside' was launched in April 2014 to showcase the creative, commercial and scientific engagement with the North Devon coast from the 1830s onwards. Natural history, rational recreation, collecting and tourism were amongst the key passions, which underlined the gradual becoming of science at the seaside as a cultural phenomenon of the Victorian and Edwardian times. This guide provides an overview of such contributing factors to the popularisation of seaside science through the compilation of a series of object biographies of the artefacts on display in the exhibition cabinet; each object exemplifies a fascination with the natural world, even while showing how nature was very much part of culture and society.

The pursuit of scientific discovery, in all its forms, seeped into many aspects of Victorian cultural and civic life. As a leisure pursuit, popular science combined pleasure, curiosity and spectacle with an enlightenment desire to better understand the surrounding world. Its success was aided by a widespread belief in rational recreation; that is, in the idea that leisure time should be used for improvement as well as for amusement. Rockpool rambling or fossil hunting provided a hands on method of finding out more about the environment. Mechanics' Institutes, athenaeums and natural history societies were set up to cater for the interest in popular science and natural history. These local institutions and groups usually hosted a variety of 'improving' scientific shows, lectures, demonstrations and exhibitions, which reflected the investment of local audiences in modern technological and scientific advances. Following in their footsteps, Ilfracombe Museum hosted a range of family activities and events, which aimed to emulate the spirit of such seaside culture.

Victorian Collecting: Pleasure and Popular Science

Up until the nineteenth century, collecting was largely the preserve of the social and cultural elite. Scientific discoveries, however, transformed the Victorians' understanding of nature into an inexhaustible cabinet of curiosity — a wonder world that offered itself for exploration by the many, not the few, regardless of age, race, class or gender. Taking the museum to be, similarly, a cabinet of wonder and curiosity, the 'Science at the Seaside' project culminated with 'Curious Ilfracombe' — a symposium on 20 curious objects from Ilfracombe Museum's collections. Supplementary examples of seaside collecting and the rich coastal history of North Devon can be seen on the eHive section of the Ilfracombe Museum website, which contains digitised images of a several thousand artefacts. Museum visitors, whether young or old, professional or amateurs, are invited to indulge their curiosity in any and all aspects of the natural world from insects to sea shells, from fossils to fauna.

In the Victorian period, natural history was very popular because it was a means to explore the local environment. At a time when many more people were living in towns and cities, collecting offered the opportunity to individuals to observe, catalogue and engage with their local environment. In keeping with the democratic progress of the age, collecting became, in George Henry Lewes's words, a 'pleasure hunt' for life (see Erchinger 162), a physically and mentally invigorating pastime undertaken by all, from learned local gentlemen to amateur enthusiasts who spent their weeks working in offices and factories or looking after children. Many women enjoyed exploring seaside specimens as well as transforming them into decorative objects. In *A Naturalist's Rambles on the Devonshire Coast* (1853), Philip Gosse describes one beach at Oddicombe in South Devon, 'whither ladies so often repair to search for pebbles containing fossil madrepores, washed up by

George Tugwell. *A Manual of the Sea-Anemones Commonly Found on the English Coast*. London: John van Voorst, 1856.

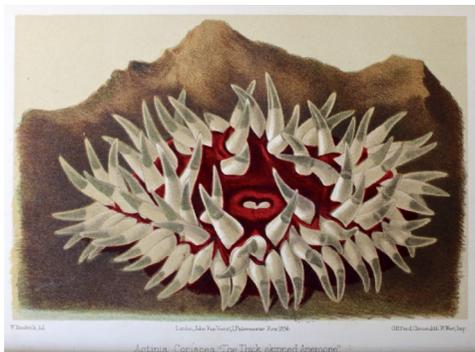
Reverend George Tugwell spent several years as a vicar in Ilfracombe before being appointed as Prebendary of Bath and Wells. He was buried in Ilfracombe on his death in 1910. Tugwell took advantage of the growing popularity of tourists visiting North Devon; his other publications included *The North-Devon Scenery Book* (1863), and *The North-Devon Hand Book: Being a Guide to the Topography and Archaeology and an Introduction to the Natural History of the District* (1859). Tugwell's *A Manual of the Sea-Anemones Commonly Found on the English Coast* is aimed at enthusiasts for natural history; the introduction declares that his observations were 'not, therefore, addressed to professed naturalists, but to that section of amateur rambles about our English coasts who take a pleasure in noticing every form of beauty which they may encounter in their wanderings' (1). Tugwell's work is as concerned with describing the colour, delicacy and beauty of sea anemones as their biological characteristics: 'Poets have sung their praises, and strong-minded naturalists in speaking of them have for once risen above the shackled routine of their ordinary scientific descriptions' (1-2). Anemones also had the advantage of being very easily collected and spotted by the amateur enthusiast and could be kept as souvenirs of a seaside visit.

Brass microscope and slide

The provenance of this pocket microscope is unknown. Although this type was still being made in the early twentieth century, the particular one is almost certainly late nineteenth century in origin. Such portable devices were often described as 'field microscopes'. They were known for their drum-shape design, especially the French ones which have bigger drum-shaped bases. This one is like-



ly to be known as an English field microscope with condenser. Glass slides were standardised in 1839. Prior to this, they were made from materials such as bone, ivory or wood, with brass rings holding mica slides. Non-glass slides were still being made for a year or so after 1840 as they were thought more suitable for little field microscopes. They were called 'bone sliders'. The slide accompanying this microscope would certainly be dated pre 1850.



the tide' (21). Cataloguing and exhibiting specimens, preserving some seaweed or perhaps turning a group of shells into a beautiful ornament: these were all part of the joys of seaside collecting.

Victorian collections were created for fascination as well as for scientific interest: they often tell us as much about the collector as the diversity and beauty of the natural world. Ordinary people could feel part of the progress of the age. Discoveries from the immediate world around them could be used to test out modern ideas such as evolution or geological development. While grand London museums tended to create large scale spectacles, the making of one's own collection encouraged much more interactive, inexpensive, hands on attitude to popular science. It is precisely this investment of individuals — and of the local community more broadly — in their own heritage that the 'Science at the Seaside' project has tried to communicate.

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Tourism, Natural History and North Devon

During the nineteenth century, Ilfracombe grew into a thriving seaside resort. Its population grew quickly from 5,640 in 1851 to 16,064 in 1891. Improved transport links between Devon and the rest of the country meant that many more tourists were able to enjoy the delights of Ilfracombe. Exeter railway station opened on 1 May 1844, while the first railway line to Ilfracombe was put in operation in 1874. (This was upgraded to a double track in 1889.) The same steam technology that powered the railways had an equally revolutionary effect on shipping with the introduction of fast steamships and paddle steamers, by which many day trippers to Ilfracombe also arrived. Steamships and the railways were both instrumental in making Ilfracombe accessible to large numbers of ordinary men and women.

To take one example: Campbell's paddle steamer company re-located their operations from the Clyde to the Bristol Channel in 1888. For the next seventy years, they provided a paddle ship service, linking Ilfracombe with Weston, Clevedon, Minehead, Bristol, Cardiff, Barry, Porthcawl, Swansea and South Wales. On one trip at the end of August 1889, a special excursion ferry arrived from Sharkness in Gloucester. Three Ilfracombe policemen counted everybody off the boat: there were 1020 souls on board. With such numbers, it is unsurprising that John Bartholomew's 1887 *Gazetteer of the British Isles* declared that, 'The town has recently risen in importance, chiefly through its sheltered and picturesque position, as well as the salubrity of its atmosphere. These features attract an extensive floating population' (qtd. in GB Historical GIS/ University of Portsmouth). The period from 1890 to 1920 was the heyday of the North and South Devon seaside resorts.

Seaside tourism took many forms: not just ice-cream, Punch and Judy and slot machines. Natural history and maritime biology were

Curator's choice: Sara Hodson (Ilfracombe Museum Manager)

My personal favourite in the 'Science at the Seaside' exhibition cabinet is the wooden presentation box of seaweed, arranged as if spilling out of a rustic little basket, around a small print of Ilfracombe. It makes me think about the abundance of the sea — there is a generous outpouring of these delicate plants. It reminds me of the Victorians' enthusiastic relationship with nature — not only in wanting to know everything about all life forms, but also in believing, mistakenly, that their supply would never run out. 'Seaweed Basket' is a fitting memento of a seaside stay in Ilfracombe and evokes for me the hours spent here happily absorbed in harvesting these plants. Were they assembled by the gatherer as a personal token of their holiday? Or was this box purchased as a ready-made souvenir from an enterprising Ilfracombe seller keen to capitalise on the craze for collecting at the sea shore? Finally, I like the poem in praise of humble seaweed, so unappealing when stranded at low tide under the hot sun, yet in essence so delicate and beautiful: 'Call us not weeds, we are flowers of the sea.'

'Seaweed Basket': seaweed specimens arranged around a topographical print of Ilfracombe in a wooden box

Souvenirs and mementos of visits to Ilfracombe could come in many forms; seaside science was never exclusively about discovering new knowledge. Natural history specimens, whether shells or seaweed, were frequently turned into attractive forms of display for the drawing room. Hours could be spent in collecting, drying, and mounting seaweed into decorative scrapbooks or, as in the case of this artefact, placing them into a presentation box. Such an activity was part of the standard repertoire of feminine accomplishments: the arrangement was intended to show the creativity and skill of the female collector. Books of hobbies and recreation often described how to best display collections of natural history, and there were even specific manuals such as James Shirley Hibberd's *The Seaweed Collector: A Handy Guide to the Marine Botanist* (1872).



popular Victorian pursuits: the rockpools, beaches and picturesque coastline of North Devon was ideal for those enthused by seaside science. Ilfracombe attracted many visitors, literary and scientific, local and distinguished; these included well-known writers such as George Eliot and her partner George Henry Lewes, Charles Kingsley (best known as author of *The Water Babies, A Fairy Tale for a Land Baby* [1862]) as well as the naturalists Philip Gosse and the Reverend George Tugwell, all of whom explored, collected and displayed scientific specimens as well as published accounts of their visits.

The rich history of writing about the North Devon coast played an important national role in the growth of Victorian popular science. Ilfracombe was famous for its natural history pursuits, as described by one visitor in the *North Devon Journal* in 1871:

Like pebble-hunting at Hastings, Ilfracombe has also its speciality of amusement — natural history; everyone hunts for anemones, sea shells, and sea weeds, and everyone has got an aquarium. If you wish to stand well with Ilfracombe society you must, if not already in love with its marvellous beauties, go in for natural history. Bring your books by Gosse, — 'Sea and Land', 'A Year at the Sea Shore', your Catlow and Woodward; your 'Common Objects' and 'Common Shells', and, above all, Kingsley's 'Glaucus', and you will find work and use for all . . . If the visitor has no knowledge of the wonders of the deep, surely a perusal of these charming works will awaken a taste for their study. The neighbourhood is exceedingly rich in natural history, and both Gosse and Kingsley have made the Ilfracombe shores their favourite haunts for its study. It is the rocky and picturesque shores that have made Ilfracombe so famous; the contour of the coast is most varied, now rising in the bold headlands of rock now broken into uneven terraces, varied by miniature bays of yellow sand (6)

Popular interest in natural history was encouraged by the availability of devices, books and equipment. Microscopes became

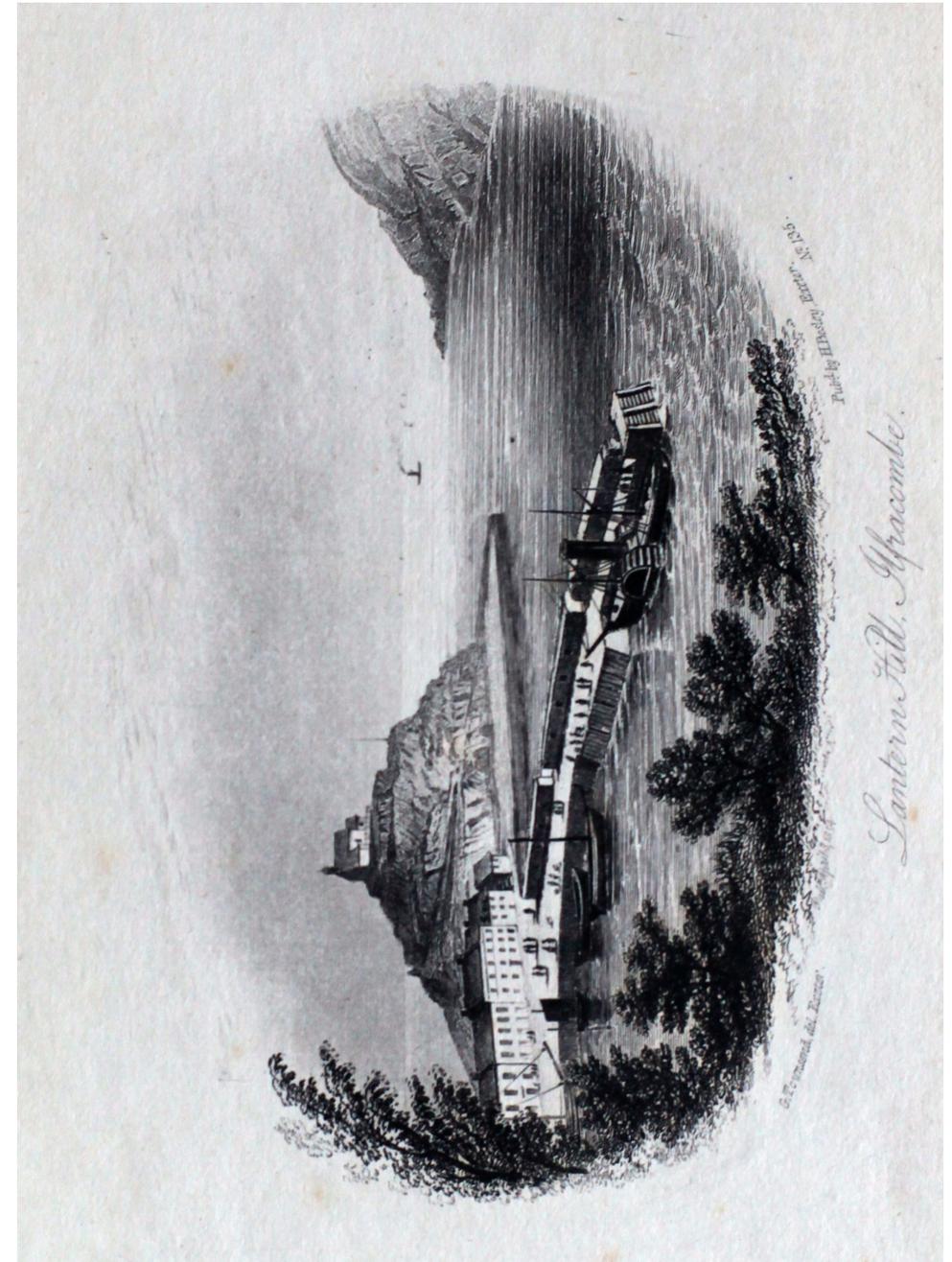
inexpensive and allowed users to experience the physical world in new and exciting ways: seeing the teeming world of life in a drop of water was a popular attraction at shows and bazaars. Guides such as Rev. J. G. Wood's *Common Objects of the Microscope* (1853) were very successful. Photography, which became an affordable pursuit for many by the 1880s and 1890s, also encouraged an impulse to record and detail the physical world.

The equipment used by George Eliot and George Henry Lewes while in Ilfracombe in 1856 was typical. Eliot and Lewes climbed on the rocks, rowed out in a boat, and carried baskets and jars of natural history treasures back to their rooms. In her diary, Eliot describes the clutter surrounding naturalists' field research:

You would laugh to see our room decked with yellow pie-dishes, a *footpan*, glass jars and phials, all full of zoophytes or molluscs or annelids and still more to see the eager interest with which we rush to our 'preserves' in the morning to see if there has been any mortality among them in the night. (*Letters 2*: 252)

The sea shore was a biological treasure trove and, as Eliot records in her 'Recollections of Ilfracombe, 1856', she and Lewes spent many hours observing and writing descriptions of their specimens.

Natural history exploration in Ilfracombe was encouraged by a number of extremely successful books including, among others, Charles Kingsley's *Glaucus; Or, The Wonders of the Shore* (1855), Charlotte Chanter's *Ferny Combes: A Ramble after Ferns in the Glens and Valleys of Devonshire* (1856), George Tugwell's *A Manual of the Sea-Anemones Commonly Found on the English Coast* (1856) and Philip Gosse's *A Year at the Shore* (1865). These publications inspired readers to visit North Devon and recreate these authors' rockpool rambles, and other scientific adventures. By 1856 Tugwell himself was complaining that natural history enthusiasts were 'swarming on our coasts like blow flies in summer time'



**Souvenir guides of Ilfracombe: *Besleys' Views*.
Ilfracombe. Exeter: H. Besleys, c.1890; *Reminiscences of
Ilfracombe*. Ilfracombe: Mrs Twiss, c.1890.**

The growth of North Devon seaside resorts in the latter decades of the nineteenth century went hand in hand with the increasing number of souvenirs for tourists. The picturesque views of North Devon provided an obvious source for many commemoratives, including souvenir guides from local publishers like Besleys' and Mrs Twiss. Besleys' was a prominent printer whose firm had been founded in 1750 and is still based in Exeter. Besleys' published individual views of Devon, which were sometimes compiled together in volume form; as for example, *Views of Devonshire* (c.1860). Many of these guides were fine steel-engravings first sketched by the local artist George Townsend. *Besleys' Views. Ilfracombe* included Lantern Hill, Tors Park, Coombe Martin and Westward Ho! Similarly, Mrs Twiss (later Messrs Twiss and Sons) was an Ilfracombe printing and publishing firm based in the Arcade: they published various guides to Ilfracombe and North Devon and did a thriving trade in picture postcards up until the outbreak of World War One.



from the 'desire of being thought scientific' (255).

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Object Biographies

**Francis George Heath. *The Fern World*.
London: Sampson Low, Marston and Co., 1879.**

Francis George Heath (1843-1913) was born in Totnes and spent most of his professional life as a Surveyor in the Customs Department. He was a well-known supporter of the Open Space movement as well as a prolific author of books and reviews such as *The Fern Paradise: A Plea for the Culture of Ferns* (1875), *Our Woodland Trees* (1878), and *Fairy plants: A Fern-Book for Children* (n.d.), which mainly aimed at popularising natural history and botany for an increasingly urban society. *The Fern World* became extremely popular because of its attention to every detail of the fern venation. Its first edition was exhausted within a week and went through four editions between August and December in 1877, its first year of publication, as well as reached 12 editions by 1910. Heath promoted Devonshire, as he put it in *The Fern Paradise*, as the 'home of our native Ferns' (66). Similarly, in *The Fern World*, he includes chapters on 'Rambles in Fernland', which take readers through Devon, the 'veritable paradise' of the fern lover (85). Heath's interest in the life of the rural poor in the South West is further evident in publications such as *Peasant Life in the West of England* (1880) and his editorship of *The Journal of Forestry and Estates Management* from 1878 to 1883. Later in life, Heath moved back to Silverton in Devon; aptly enough, he died at Weymouth after attending the annual Devonian Society dinner.

**Curator's choice:
Dr Kyriaki Hadjiafxendi (Bath Spa University)**

My favourite item in the 'Science at the Seaside' exhibition cabinet is this collection of objects of fernware, loaned by The Museum of Barnstaple and North Devon. The two plates, the needle case, the letter opener, the calling-card case and the cribbage board – all domestic objects covered with fern design – say a lot about the way in which ferns were incorporated into the Victorian middle-class parlour and were coveted for aesthetic purposes. In my view, the fern craze, which started to gather momentum in the 1840s, testifies to the pleasure that the mid Victorians took in producing a man-made world, which had the power to dominate nature by processing it into decoration. The modern age, the age of cities and machines, seemed to be the antithesis to the pastoral world of idyllic life of the Romantic period with its peripatetic attachment to nature. Yet, when we look at some of these everyday objects we see the Victorians' fascination with conquering the environment through the commemoration and preservation of the kind of beauty that emanates from organic rhythms of life. While the two plates and the cribbage board try to hold onto the world of nature through their realistic fern design, the remaining objects in the collection (the needle case, the letter opener and the calling-card case) overtly manifest a desire to turn the natural into the cultural. Whether it is through the photographic verisimilitude of a bunch of ferns, their

**Notebook of Mervyn G. Palmer, 'Rambling Notes' (1904),
together with specimen pots**

Notebooks were an important tool for nature study; they were used for sketching and describing the habits and appearance of the various specimens. Mervyn G. Palmer's 'Rambling Notes' is typical in containing his observations of North Devon. Palmer founded Ilfracombe Museum in 1932; he also published *Through Unknown Nicaragua: The Adventures of a Naturalist on a Wild-Goose Chase* (1945) and *The Fauna and Flora of the Ilfracombe District of North Devon* (1946). In addition to being the museum curator, Palmer was president of Ilfracombe Field Club, founded in 1933; in 1939, the Club still managed 15 rambles during the year. Palmer's insect specimen boxes testify to the popularity of entomology as a pastime, which became a scientific pursuit in the Victorian period following the appearance of William Kirby's and William Spence's *An Introduction to Entomology*, published in four volumes between 1815 and 1826. Part of the Victorian fascination with insects was the human-like social organisation of ants and bees, which was used to explain or justify the natural order of society and government, and which continued well into the twentieth century.



Microscope slides in a wooden box, owned by Mervyn G. Palmer

During the Victorian and Edwardian periods, lens technology improved significantly and microscopes became part of the standard kit of the natural history enthusiast working in the field. Many households had their own set of microscope and slides for the drawing room. Mounting slides (usually 1" x 3" piece of glass or wood) were often covered either wholly or in part with colourful lithographed papers, or had space for collectors to write labels for the specimens they gathered. Mervyn G. Palmer, the founder and first curator of Ilfracombe Museum, was one of these natural history enthusiasts who travelled widely with his set of microscope and slides (for example, South America), collecting specimens (for instance, butterflies) for the British Museum.



to the display of particular specimens, ferns also proliferated as a design motif. Several items in the 'Science at the Seaside' exhibition cabinet (loaned by The Museum of Barnstaple and North Devon) testify to the fact that ferns were everywhere. Fern patterns could be found on everyday objects: glassware, carpets, textiles, china, tiles and ironwork. Wedgwood, for example, made transfer-decorated plates using illustrations from Anne Pratt's 1855 publication *The Ferns of Great Britain, and their allies the club-mosses, pepperworts, and horsetails*. Finally, the shape of ferns made them ideal for pressing into albums; for instance, Henry Fox Talbot made shadowgraphs of ferns in his experiments with photography.

Barnstaple fernware

The pastime of collecting, displaying and exhibiting ferns came to the fore in the 1840s and 1850s and remained popular until the 1890s. Charles Kingsley coined the term 'Pteridomania' to describe this fern craze in *Glaucus; Or, The Wonders of the Shore* (1855): 'Your daughters, perhaps, have been seized with the prevailing "Pteridomania" and are collecting and buying ferns' (4). While the fashion for ferns was part of the popularity of natural history, its appeal was aided by the newly found ability to grow them inside poorly-lit Victorian homes through the introduction of the miniature glaze case for the drawing room (known as the Wardian Case after botanist Nathaniel Bagshaw Ward). Edward Newman's 1840 publication of *A History of British Ferns* similarly helped popularise interest in the different varieties of native ferns. In the opening of his book, Newman declared that 'The cultivation of ferns is becoming a fashionable pursuit. It is no longer confined to the botanist and horticulturalist; almost everyone possessing good taste has made, more or less successfully, an attempt to rear this tribe of plants' (viii). Glass fern cases featured in numerous manuals of interior design such as Shirley Hibberd's *Rustic Adornments for Homes of Taste* (1856). A number of types of outdoor and conservatory ferneries were also popular. There is an excellent example at Bicton Park in South Devon, which has an almost primeval appeal. Ferns had a broad social attraction because they could be collected by both men and women of different classes. In addition

Brass microscope, mid-to-late nineteenth century

As microscopes became more available, they were embraced as essential tools for natural history enthusiasts as well as elegant pieces of drawing-room furniture. The Victorian fascination with the miniature worlds they portrayed seeped into popular culture (think of Lewis Carroll's *Alice's Adventures in Wonderland* [1865]). Books such as Reverend J.G. Wood's *Common Objects of the Microscope* (1853) became bestsellers. Scientific devices like the microscope did not necessarily challenge established beliefs about religion and the natural world. Wood declared that the microscope could help reveal the 'living and ever-changing light with which God wills to imbue even the smallest of his creatures, whose very existence has been hidden for countless ages from the inquisitive research of man, and whose wondrous beauty astonishes and delights the eye, and fills the heart with awe and adoration' (iv). Microscopes were also exhibited at numerous events in the Ilfracombe civic calendar. In 1883, the Ilfracombe branch of the YMCA held an annual Christmas conversazione at Oxford Hall, which was attended by over 200 people. In addition to the fancy goods from all over the world, a number of microscopes, telescopes, stereoscopes, photographs and electrical machines were put on display together with a piece of pottery said to be 3000 years old from the City of Troy, and a cork model of St Sidwell's Church.

Philip Gosse, *A Naturalist's Rambles on the Devonshire Coast*. London: John van Voorst, 1853.

Philip Henry Gosse (1810–1888) was an influential naturalist whose work did much to help raise the profile of marine biology and the North Devon coast through accessible descriptions and beautiful illustrations of his sea shore discoveries. Gosse's fascination with natural history stemmed from his childhood, growing up by the sea in Poole. At the age of 17, Gosse sailed for Newfoundland to take up a job in a counting house. Over the next seven years he travelled and worked in Lower Canada, Alabama and Jamaica, while continuing his study of natural history. Having returned to London, Gosse worked as a nature writer and teacher. Following the breakdown of his health in 1852, he moved to St Marychurch in South Devon and then to Ilfracombe in North Devon, where he made his exploration of local marine life the subject of his sea shore book. Gosse's emphasis on the wild beauty of the coastal landscape announces a journey away from London — epitome of unhealthy city life — towards a more primal form of existence in Devon, devoid of the pressures and concerns of modernity. In *A Naturalist's Rambles on the Devonshire Coast*, Gosse sets out his design for a seawater tank 'having its sides formed of plate-glass, and its whole contents therefore clearly visible' (441). Gosse's book popularised the invention of the aquarium (then a new word), making vivaria into a common drawing-room attraction.

