# Encyclopedia of INTERIOR DESIGN

Volume 1

*Edited by* JOANNA BANHAM

the façade which let in large amounts of daylight and which gave shoppers and passers-by a good view of the inside of the shop. The signs on the exterior had crafted lettering by Percy J. Smith and painted ironwork plaques by Joseph Armitage advertising the skills of Bedding Makers, Carpet Dealers, Cabinet Makers and Upholsterers; the centrepiece announces the catchphrase "At the sign of the four-poster."

With his fellow-director, Hamilton Smith, and Cecil Brewer, Heal was a founder-member of the Design and Industries Association in 1915 which became the Council of Industrial Design, and was later re-formed as the Design Council. Heal's became a "showcase" for the association with members' work on sale transmitting its ideals of "truth to materials" and "fitness of purpose" to a broad middle-class audience.

The Mansard Gallery, on the top floor, was a highly innovative and influential means of raising the profile of progressive art and design. Significant exhibitions such as Sacheverell Sitwell's show of Picasso, Derain, Utrillo, Matisse and Modigliani in 1919 and exhibitions of the early chromium-plated metal furniture by Mies van der Rohe and Marcel Breuer and works by other continental designers and the British firm Isokon, were displayed in the gallery. Indeed, it was the stylish metal furniture and lighting, often designed by Heal and manufactured by the company, which proved a commercial success during the tough times of the 1930s. By means of innovation and imaginative retailing the store survived a difficult period.

Scandinavian furniture was brought to Britain by Heal's throughout the 1920s and the store also launched the sale of Orrefors glass and Finnish furniture, including pieces by Alvar Aalto. Ambrose Heal produced one-off, "signed edition" examples of his finely crafted, detailed classics. Cleverly promoted, economy lines from Heal's in the 1930s anticipate the functional Utility designs of the next decade. Ambrose Heal was knighted in 1933, thereby raising the profile and status of the design profession and their work in Britain at this period.

After World War II Heal's was a significant presence at the Britain Can Make It exhibition of 1946 at London's Victoria and Albert Museum, and at the Festival of Britain of 1951 which included plywood and moulded furniture by Christopher Heal, son of Ambrose, and several designs from their textiles department which was rapidly gaining a name in the field. Striking and novel fabrics in the optimistic and gay spirit of the late 1940s and 1950s by designers such as Lucienne Day, Helen Close, and Jane Edgar eventually evolved into the vivid, explosive textiles of the 1960s designed by Barbara Brown, Howard Carter and Peter Hall. Heal's textiles were highly successful in the 1960s and Heal Textil GmbH was also established in Stuttgart. Heal's continued to promote contemporary and international design throughout this period under the chairmanship of Anthony Heal. A further extension was opened in 1962 with 11,000 square feet of open-plan showroom space.

The arrival of imitators and rivals, such as Habitat, on the furniture retailing scene increasingly threatened Heal's share of the market in the 1970s and 1980s and in 1983 the store was purchased by Sir Terence Conran's Habitat / Mothercare Ltd., later to become Storehouse Plc. After Storehouse's demise in the troubled 1980s, a management buyout acquired ownership of the store. The current Heal's (still at Tottenham Court Road, and with a new showroom in Fulham Road) aims to emphasise its core values of "style, quality and exclusivity" in the light of its impressive heritage.

SUSAN HOYAL

### Selected Works

The Heal's archive, containing several hundred volumes of press-cuttings, daybooks, catalogues, correspondence, ledgers and other company records covering the period from the late 19th century to the late 20th century, is in the National Archive of Art and Design, Victoria and Albert Museum, London. Examples of Heal's furniture are in the Victoria and Albert Museum; numerous illustrations appear in the firm's catalogues, reprinted 1972.

### Further Reading

An introduction to the company's work appears in their authorized history, Goodden 1984. For a more detailed and impartial analysis of Heal's between the wars see Benton 1978.


Anscombe, Isabelle, *Arts and Crafts Style*, London: Phaidon, 1991

Astley, Stephen, "Head Over Heal's" in *Traditional Interior Decoration*, 1, Autumn 1986, pp.162–72

Benton, Tim, "History of Taste 6: Up and Down at Heal's: 1929–35" in *Architectural Review*, February 1978, pp.109–116

Boumphrey, Geoffrey, "The Designers 1: Sir Ambrose Heal" in *Architectural Review*, LXXVII, July 1935, pp.39–40

Cooper, Jeremy, *Victorian and Edwardian Furniture and Interiors*, London: Thames and Hudson, 1987

Garratt, Pat, "The Stuff of Dreams" in *The World of Interiors*, May 1990, pp.47–54

Goodden, Susanna, *At the Sign of the Fourposter: A History of Heal's*, London: Heal and Son, 1984

Gloag, John (introduction), *A Booklet to Commemorate the Life and Work of Sir Ambrose Heal, 1872–1959*, London: Heal and Son Ltd., 1972

*Heal's Catalogues, 1853–1934* (reprint); Newton Abbot: David and Charles, 1972

Jackson, Lesley, *The New Look: Design in the Fifties*, London and New York: Thames and Hudson, 1991

*Thirties: British Art and Design Before the War* (exhib. cat.), London: Arts Council of Great Britain, 1979


## Health and Hygiene

All architecture is an index of attitudes towards health and hygiene as one of its basic functions is to shelter its users from physical and social danger. However, building interiors are particularly clear manifestations of the complex interaction between health and space. Such concerns have played an important role in shaping much progressive 20th-century domestic design, and since the 1920s Modernists such as Le Corbusier have championed an aesthetic of cleanliness in both the layout and planning of interiors and in the pared-down appearance of their decorations and furnishings. But an emphasis upon the need for more hygienic styles of living and a corresponding interest in healthier interiors pre-dates this period and has its origins in the sanitary and health reforms of the mid- and late 19th century.

Concerns about health peaked in the 1870s and 1880s following revelations about the direct connections between architectural design and illness. The "domestic sanitarians", as they were called in both England and North America, pointed

to the lack of ventilation, supposedly dangerous materials, and poor drainage to explain the spread of infection as the century progressed.

These concerns represented the second stage of the reformers' agenda. Sanitarians during the mid-century had concentrated their efforts on large-scale municipal improvements such as the sewers and the Embankment (in the case of London), and had focused on working-class housing. Edwin Chadwick's pivotal *Report on the Sanitary Condition of the Labouring Population of Great Britain* of 1842 had given credence to environmental explanations for health. It was not until after the postulation of the germ theory in the 1860s by Louis Pasteur that sanitarians pointed explicitly to the role of interior domestic space in disease transmission.

At the heart of the Victorian debate over health throughout the English-speaking world was the issue of ventilation, fired by a continued faith in the miasma theory of disease transmission even after the formulation of the germ theory. Tuberculosis and many other deadly diseases were thought to be spread through bad air; as a result, sanitarians prescribed well-ventilated rooms and corridors, insisting that both water closets and bedrooms have windows. The placing of sanitary facilities next to the exterior walls of houses was therefore also advised, as this allowed for windows and the thorough ventilation of drainage pipes.

In order to avoid drafts, architects also prescribed the use of the ventilating tube, a device which was first adopted by hospitals and schools. This tube or pipe was inserted directly into the exterior wall of a building and provided fresh air to interiors without the discomfort of drafts; the supply was regulated by a lid at the mouth of the pipe. The most popular model of ventilating tube was called "Tobin's tube".

The Victorian obsession with fresh air is perhaps most clearly illustrated by the history of hospital architecture. The ideas of Florence Nightingale, a dedicated miasmatist, led to the popularity of the "pavilion" plan hospital: a central administration building, flanked by long, narrow, open wards. This interior arrangement of alternating beds and windows was believed to reduce the transmission of disease among patients through the circulation of fresh air in the ward's interior.

The planning of middle-class houses in the 19th century also presupposed notions about health and hygiene, a factor reflected in the near obsessional interest in the growing specialisation of individual rooms. Most middle-class interiors, for example, included a special "sick-room" for use when family members were ill. Experts advised householders to furnish this room carefully, advocating simple textile and wallpaper patterns and quiet crockery that would not excite or disturb the feverish patient. Ordinary bedrooms were also considered particularly important to health as it was believed that people were most vulnerable to disease when they were asleep, and once again much attention was paid to the suitability of furnishings. Dust-retaining surfaces and materials were to be avoided and the elaborate bed-hangings and draperies fashionable in the second and third quarters of the 19th century were increasingly eschewed in favour of more simple treatments and beds made of polished oak, cast iron or brass. Brass and iron bedsteads had been in production since the 1830s but gained new popularity in the 1880s and 1890s in recognition of the fact that they did not harbour dust and could be easily cleaned.

Predictably, nurseries were also frequent targets for sanitarians' reforms and their recommendations included wipeable surfaces, such as oil-based paints and linoleum, for walls and floors, and plain painted furnishings. The important role played by bedrooms and nurseries in relation to health was underlined by publications such as Catherine Gladstone's *Healthy Nurseries and Bedrooms, including the Lying-in Room* of 1884.

However, it was not only the sleeping rooms, but the entire middle-class house that was affected by changing notions of health and hygience, particularly with regard to decorations and building materials. Up until the 1860s, wallpapers frequently used pigments that were manufactured with arsenic which heightened the brightness of the colours, particularly in shades of bright green. Experts believed that these papers emitted toxic fumes that were responsible for a long list of common illnesses. Several well-publicized cases of childhood sickness and even death resulting, so it was believed, from arsenic poisoning led to the introduction of non-arsenical or arsenic-free wallpapers. The invention of washable, so-called "sanitary" wallpapers, in the 1870s, whose designs were printed with oil based pigments that were impervious to water, was another welcome improvement, but many sanitarians still disapproved of wallpapers. W.H. Corfield, for example, recommended using tiles in every room; Douglas Galton, an expert on hospital design, proposed walls of metal or cement. In 1875, Benjamin Ward Richardson advanced an entire city, "Hygeia", built on subways carrying fresh air. The interiors of Hygeia's houses consisted of a washable glazed brick.

The promotion of healthier living environments was also a major concern in the work of many architects and designers associated with the Arts and Crafts Movement, concerned as they were about the effects of industrialization and urbanization on the home. Queen Anne style architecture, for example, placed a premium on natural illumination and materials, features that were admired not only for their picturesque appearance but also for their encouragement of supposedly healthier lifestyles. The Movement's emphasis upon handcrafted, vernacular interiors also marked a move away from the densely furnished and upholstered styles popular in the High Victorian period and fostered the use of simpler forms and finishes such as stained oak.

Poor drainage was considered the most dangerous of common building flaws and the most difficult to improve. This included everything from the inappropriate placement of water closets to the design of sewer traps. Sanitarians drew attention to the common mistakes in publications such as T. Pridgin Teale's *Dangers to Health: A Pictorial Guide to Sanitary Defects* of 1878. There is evidence that middle-class women were largely held responsible for the healthiness of their own homes; in America, this attitude was best expressed in Harriette M. Plunkett's *Women, Plumbers, and Doctors: or, Household Sanitation* of 1885.

In general, concerns about health affected every scale of decision-making about domestic architecture and its relation to the city. After about 1850, in fact, the row or terrace house was largely usurped in popularity by the detached, single-family house, especially in North America, fuelled by an attempt to escape the supposedly disease-ridden, crowded city, among other factors. Suburban development, resort architec-

ture, including both hotels and vacation houses, spas, athletic complexes, and the movement for public parks (especially in America) were also given a considerable boost by the assumption that nature and natural environments could function as spatial correctives to city living. Sleeping porches and plants in middle-class houses are among the material vestiges of this belief.

New suburban houses like those constructed in Bedford Park, London, in the 1870s were far less constrained by the size and shape of their sites than the row or terrace house of the central city. One of the healthier aspects of these houses was that the kitchens were located on the main floor, rather than in the basement. Advertising for Bedford Park and other Victorian suburbs emphasised the neighbourhood's healthy aspects and low death rates.

A major arena for the discussion of healthy interiors was the International Health Exhibition held in London in 1884 which included vast displays of heating and cooking equipment, clothing, machinery, food, ambulances, lighting, furniture and baths. A principal theme of this exhibition was the design of healthy houses and their contents, and among the most popular exhibits were the sectional models representing an "improved" and "ordinary" house which were open for public tours. One of the exhibition's organisers was the architect Robert Edis. Best known as the designer of the British pavilion at the World's Columbian Exposition in Chicago in 1893, Edis also had a substantial architectural practice in London and lectured and published widely on the subject of healthy furniture and decoration. In his most well-known book, *Decoration and Furniture of Town Houses* (1881), he insisted that the design of furnishings and wallpaper had a powerful impact on personal health. He detested commercially-produced furniture and warned against the dangers of deep carving and mouldings, the accumulation of useless ornaments, and the use of plush fabrics and upholstery as harbourers of dirt and dust. In their place he recommended fitted furniture with tops that reached to the ceiling to avoid dust traps, or furniture that stood on legs to facilitate dusting underneath, and loose floor-coverings that could be aired and beaten regularly. Edis's model room for the exhibition, displayed by the cabinet-makers Jackson and Graham, also exemplified his idea of treating rooms as a single architectural gesture rather than as a collection of isolated articles.

In some ways 20th-century interiors have generated less concern about health issues than the previous era, probably due to stricter municipal codes preventing the widespread transmission of foul air and sewage. By about 1900, floor plans of houses in England and North America were typically much more open, allowing the free movement of air between rooms and an increased transmission of light.

The 20th-century hospital, too, has been shaped by large-scale social reforms. Its plan, however, has become more closed. An arrangement of cellular rooms along a double-loaded corridor has replaced the open wards of the pavilion plan and medical technology and pharamaceuticals have largely displaced fresh air and sunlight as general treatments for disease. Nevertheless, light-coloured walls and easily washable materials are still used in hospitals.

Healthier living conditions were promised by the architects of the International Style during the 1920s, such as Le Corbusier and Richard Neutra. In retrospect, however, their buildings offered few real innovations in terms of health and hygiene. The sleek, undecorated surfaces of Modernism, popularized after World War II in the ubiquitous ranch house, were showcases for high standards of housekeeping. In the name of health, a near mania for domestic appliances developed in the decades following World War II.

Our current debate over "sick building syndrome" – modern buildings that unintentionally generate illnesses – recalls in many ways the destructive powers attributed by Victorians to houses and cities. An "environmental" approach to health thus predates modern architecture by several generations, rather than emerging, as is often implied, from the energy crisis of the 1970s.

ANNMARIE ADAMS

## Further Reading

A stimulating discussion on the relation of notions of health and hygiene to design appears in Forty 1986.


Adams, Annmarie, *Corpus Sanum in Domo Sano: The Architecture of the Domestic Sanitation Movement, 1870–1914*, Montreal: Canadian Centre for Architecture, 1991

Adams, Annmarie, "The Healthy Victorian City: The Old London Street at the International Health Exhibition of 1884" in Zeynep Celik, Diane Favro and Richard Ingersoll (editors), *Streets: Critical Perspectives on Public Space*, Berkeley: University of California Press, 1994, pp.203–12

Cassedy, James H., "Hygeia: A Mid-Victorian Dream of a City of Health" in *Journal of the History of Medicine and Allied Sciences*, 17, 1962, pp.217–28

Douglas, Mary, *Purity and Danger: An Analysis of Concepts of Pollution and Taboo*, 1966; reprinted London and New York: Routledge, 1992

Edis, Robert W., *The Decoration and Furniture of Town Houses*, 2nd edition 1881; reprinted, with introduction by Christopher Gilbert, Wakefield: EP, 1972

Forty, Adrian, "The Modern Hospital in France and England" in Anthony D. King (editor), *Buildings and Society: Essays on the Social Development of the Built Environment*, London: Routledge, 1980, pp.61–93

Forty, Adrian, *Objects of Desire: Design and Society, 1750–1980*, London: Thames and Hudson, and New York: Pantheon, 1986

Girouard, Mark, *Sweetness and Light: The Queen Anne Movement, 1860–1900*, Oxford: Clarendon Press, 1977; New Haven: Yale University Press, 1984

Long, Helen C., *The Edwardian House: The Middle-Class Home in Britain, 1880–1914*, Manchester: Manchester University Press, 1993

Muthesius, Stefan, *The English Terraced House*, New Haven and London: Yale University Press, 1982

Neale, Shirley, "Robert William Edis, 1839–1927, Decorator and Furnisher" in *Victorian Society Annual*, 1985–86, pp.12–20

Stevens, Edward F., *The American Hospital of the Twentieth Century*, revised edition New York: Dodge, 1928

Stone, May N., "The Plumbing Paradox: American Attitudes toward Late Nineteenth-Century Domestic Sanitary Arrangements" in *Winterthur Portfolio*, 14, Autumn 1979, pp.284–309

Tomes, Nancy, "The Private Side of Public Health: Sanitary Science, Domestic Hygiene, and the Germ Theory, 1870–1900" in *Bulletin of the History of Medicine*, 64, Winter 1990, pp.509–39

Wright, Gwendolyn, *Moralism and the Model Home: Domestic Architecture and Cultural Conflict in Chicago, 1873–1913*, Chicago: University of Chicago Press, 1980