

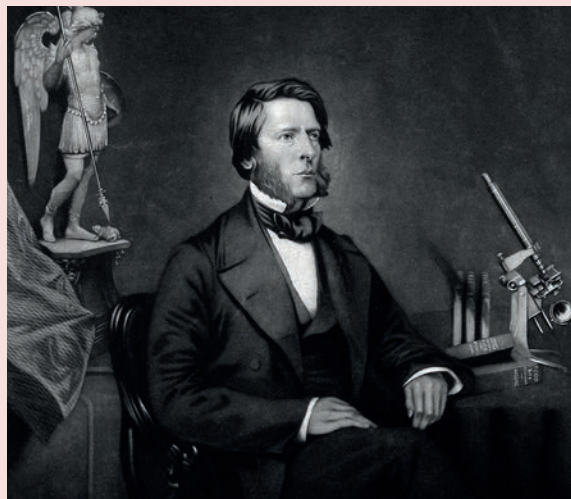
ARTHUR HASSALL'S REMARKABLE ILLUSTRATIONS OF THE FLORA AND FAUNA OF LONDON WATERS

by John R. Dolan FLS

Arthur Hill Hassall FLS is perhaps best known for his work in the sphere of public health. However, microscopy and a keen interest in aquatic microorganisms characterised his career. His first major publication at age 28, was the two-volume *A History of the British Freshwater Algæ, Including Descriptions of the Desmidiæ and Diatomaceæ* (1845), a classic monograph still regularly cited today. Only a year later appeared Hassall's *The Microscopic Anatomy of the Human Body in Health and Disease*, another large two-volume monograph; it was the first English-language book on microscopic human anatomy. It went through multiple printings, was published in both the UK and USA, and translated into German.

His 1850 study of drinking water supplied to Londoners brought him to public attention: *A Microscopic Examination of the Water supplied to the Inhabitants of London and the Suburban Districts, etc.* The book appeared during the cholera outbreaks in London amid suspicions, later confirmed, that contaminated water supplies played a role in such epidemics.

His sampling and analysis methods were simple and elegant. He filled a wine bottle with water, allowed material to settle (for an unspecified time) and microscopically examined a drop of the sedimented material. Hassall's striking and detailed illustrations showed an amazing variety of microorganisms crowded together in the circular field of the microscope.



His 1850 book was acerbically 'reviewed' in *Punch*: "A book has been lately published by a Dr. Hassell (sic), who favours the world not only with his own views, but the views of an artist, on the water we drink; and these views, painted literally in water colours, show us in all their disgusting variety of tint and form, the specimens of animal and vegetable matter we take in with every drop of aqueous fluid we imbibe."

His illustrations were also satirised in a cartoon with microorganisms replaced by dubious characters of London life.

Hassall later published more illustrations of organisms found in drinking water, as black and white sketches in his book "Food and its Adulterations" and as colour plates, engraved by the talented Tuffen West in an appendix to the 1855 Report on the Cholera-epidemic of 1854.

All of Hassall's works are now in the public domain and available in open repositories such as the Biodiversity Heritage Library (<https://www.biodiversitylibrary.org/>) or the Wellcome Library (<https://wellcomelibrary.org/>). However, obtaining the individual



illustrations can be cumbersome. One must download large volumes and extract the illustrations or search through the volumes online, find and then download individual pages of illustrations.

To facilitate usage of Hassall's illustrations I have created an image gallery of Hassall's illustrations. My hope is that Hassall's illustrations, if easily available, will be used and reach the wide audience they deserve: <http://gallery.obs-vlfr.fr/gallery2/v/Aquaparadox/LondonWater/>

TOP LEFT:

Plate 19 from Hassall's 1855 'Report of the microscopical examinations of different waters (principally those used in the metropolis) during the cholera-epidemic of 1845'. (Appendix VIII of 'Report of the Committee for Scientific Inquiries in relation to the Cholera-Epidemic of 1854', 1855.)

TOP RIGHT:

Cartoon from *Punch* (1850, Vol 18, pg 188) parodying Hassall's illustrations.

LEFT:

Arthur Hill Hassall M.D. FLS
© Wellcome Collection no. 40471 Society of London

AT LONG LAST, LINNEAN SOCIETY CHRISTMAS CARDS!

Send a part of our collections to friends and family this Christmas with a Linnean Society Christmas card.

Each card is printed on sturdy stock, with a little information about the species shown and where the image came from on the reverse. With four clean, bright, festive designs to choose from, cards are sold separately or in assorted packs of eight. Check www.linnean.org/christmascards or email info@linnean.org for more details on how to purchase yours.

