Heron-Allen’s foraminiferal collections and associated library, bequeathed to The Natural History Museum, London, are now housed in a special room on the second floor of the Department of Palaeontology (The Heron-Allen Library), named in his honour. The strength of his library is not just the books, reprints and manuscripts in themselves, but the ephemera which Heron-Allen bound with them. For his own publications these include the associated correspondence, photographs, field-notes, the various proof stages, miscellaneous invoices, artwork, as well as postcards and letters from recipients of his reprints - we try to list the most important items in our annotations, below. Other items are contained in a series of bound volumes of his researches (all in Bookcase H), the full contents of which will be published elsewhere. Without doubt, this serves to make his library a very fertile archive for future research. Not only did Heron-Allen lavishly bind his books and reprints, but each contains a bookplate with the Heron-Allen crest and motto. So far, six different versions have been found.

In the bibliographic notes that follow, VO “Variorum de foraminiferis opuscula” and refers to bound volumes of foraminiferal reprints housed in the Heron-Allen Library, e.g. VO: 75.2 refers to volume 75, paper 2. All other bound reprints and books are to be found in Bookcase H in the same library (except where otherwise stated).

   **Notes:** It was published privately (price 2/-) after the manuscript had initially been turned down by the Royal Microscopical Society. Bound with Heron-Allen’s personal copy are two sets of proofs and numerous letters (many of these from Charles Elcock and Fortescue W. Millett). There is also a newspaper cutting from the Belfast News-Letter of 11 February 1910, recording the death of Charles Elcock.

   **Notes:** Contains the eight contributions (nos. 3-6, 8, 13-15 listed below) plus a copy of Prolegomena towards the study of the Chalk foraminifera (no. 1) (with a new title page as cited above, table of contents and map of the Selsey Peninsula, all specially printed by William Clowes). This seems to have been a special bound set of reprints (each retaining the original pagination) which had limited distribution. Another separately bound copy also contains the original drawings, proofs and correspondence.


Note: VO: 3.19.


Note: VO: 14.8.


Note: VO: 14.8.


Note: VO: 14.8.


Note: VO: 14.8.


Notes: The great book on Selsey, which perhaps ought to offer more credit to the role of the Rev. J. Cavis-Brown, vicar of Selsey, who had long planned such a book, to which Heron-Allen would contribute specific chapters. When the Rev. Cavis-Brown died in 1909 his widow passed over his researches to Heron-Allen who completed it in his own name. Contains particularly fine chapters on the geology, the palaeontology, the history, and the shore-sands and marine zoology (including the foraminifera) of the Selsey Peninsula.


   **Note:** VO 16.6.


   **Note:** VO: 26-19.


   **Note:** VO: 20.44.


   **Note:** VO: 31.24.


   Notes: The Heron-Allen Library has 4 copies. One bound copy contains much ephemera, associated correspondence, photographs taken at the time (including the Achill Island Parcel Postman on his donkey), and invoices associated with the cost of the illustrations which Heron-Allen kindly defrayed (Figure 2).

   **Note:** In this paper Heron-Allen and Earland (p. 26-32) give a preliminary report on the foraminifera from 24 canvas bags of mud and other dredged deposits collected by the S.Y. Runa off western Scotland. Preserved with the reprint are two letters from W. A. Herdman (dated 13 November and 2 December 1913). (VO 31.22).


   **Note:** VO: 35.5 and 35.18.


   Notes: Heron-Allen had bound together reprints of both parts (nos. 26 and 27, each containing the original pagination) and had a new title page printed, and as with the Selsey Bill papers (see no. 2) it had limited circulation. Heron-Allen's own personal copy contains a letter from the Zoological Society of London giving him permission do this, as well as all the correspondence pertaining to the production costs (which he again generously defrayed) and other business surrounding this publication. Also an original pen sketch of him by the celebrated Punch caricaturist, Harry Furniss, was found loose within the pages.


   
   **Note:** On the reading of the second portion of their memoir on the “Foraminifera of the Kerimba Archipelago, Portuguese East Africa” to the Zoological Society.

   
   **Note:** “The Chairman, E. Heron-Allen, thanked J.E. Barnard for his most interesting talk on X-rays in relation to the Microscope, adding many comments on their use in foraminiferology”. (VO: 64.4).

   
   **Notes:** A fuller working of his earlier (1914) paper in which his claim of “intelligence” exhibited by the agglutinating foraminifera (i.e. selection of grains in the construction of their tests) was subsequently considered controversial and “un-scientific” by his critics. There was certainly a robust debate between Ray Lankester and Heron-Allen when the former later read a rejoinder at the Royal Microscopical Society a year later (Lankester, 1916). Curiously, recent molecular analysis of these foraminifera has shown that species which select specific types of material with which to construct their (agglutinated) shells appear to warrant a higher level of classification than those that randomly agglutinate. Whether this selection equates in anyway to anything that could be classed as “intelligence” remains open to question. (VO: 74.2).

   
   **Note:** VO:34.16 and 35.6.

   
   **Notes:** Also presented as a lecture to an Evening Meeting of the Royal Institution of Great Britain, Friday, 21 May 1915. (VO: 75.28 and 80.1).

   
   **Note:** There are several copies. The bound folio copy also contains correspondence and notes (some particularly associated with the death of Sir John Murray and the disposal of his collections). (Folio bookcase and VO: 78.12)

   
   **Note:** Minchin was a particular friend and eminent protozoologist who died at Heron-Allen’s house, “Large Acres”. (Obituary box - Bookcase O)

   
   **Note:** VO: 74.4.

Notes: This is the formal write-up of the material briefly reported earlier under no. 23. There are several copies. Heron-Allen’s bound volume contains letters from W. A. Herdman and his secretary H. Mabel Lewis; also photographs of the S.Y. *Runa* which was owned by Herdman. (Folio bookcase; VO: 31.22; 78.13 and 197.12).

   
   Notes: See also remarks under: Foraminifera of the Plymouth District - 1 (1930), entry 65, below. (VO: 74.5)

   
   Notes: Apart from a reprint (VO: 76.7), there is another bound copy containing correspondence (some from the d’Orbigny family), as well as d’Orbigny’s genealogy.


   Note: VO: 76.7.


   Note: VO: 76.7.


   Note: VO: 76.5.


   Note: VO: 76.6.


   Note: VO: 76.2.

44. 1918. [with BARNARD, J.E.] A demonstration on the application of X-rays to the determination of the interior structure of microscopic fossils, particularly with reference to the dimorphism of the nummulites. *Geological magazine* (decade 6), 5: 90-92.

45. 1918. [with BARNARD, J.E.] A demonstration on the application of X-rays to the determination of the interior structure of microscopic fossils, particularly with reference to the dimorphism of the nummulites. *The Naturalist, 1918*: 86-88.

   Notes: This is identical text to the previous two citations, except it lacks the discussion at the end. (VO: 206.19).


Notes: The material on which this paper was based was sent to Heron-Allen for appraisal by W. M. Tattersall, Keeper of the Manchester Museum, since in 1915 it was (wrongly) assumed that Halkyard had died and had left an unfinished manuscript; an embarrassing misapprehension swiftly rectified in 1916. Apart from the reprint (VO: 77.1), there is another bound copy containing correspondence, photographs, a statement about the delay of publishing, Halkyard’s Will, etc. We know that Heron-Allen himself visited Biarritz and amongst other things, did some collecting of echinoids for F. A. Bather (of The Natural History Museum) in 1920.


Note: VO: 80.9A.

49. 1920. [with EARLAND, A.] An experimental study of the foraminiferal species Verneuilina polystropha (Reuss), and some others, being a contribution to a discussion “on the origin, evolution, and transmission of biological characters”. Proceedings of the Royal Irish Academy (section B), 35: 153-177.

Notes: Heron-Allen and Earland had earlier submitted the paper to the Zoological Society of London but it got adverse reviews and was ultimately rejected even though Heron-Allen was prepared to defray the cost of printing the plates. Apart from two reprints (VO: 82.6 and 84.12), there is another bound copy containing associated correspondence.


Notes: Both Heron-Allen and Earland were not overly keen to undertake this project, possibly because they had been fully stretched with the same type of work for the past decade with Kerimba and the Runa. Kirkpatrick acted as liaison between them and The Natural History Museum (memorandum dated 12 June 1914) and agreement was reached that they should start in 1915. The material was sent to Earland for initial preparation. The correspondence on this matter is fascinating and cannot all be reproduced here. A bound volume contains the correspondence with Sidney F. Harmer, then Keeper of Zoology at the British Museum (Natural History), London, who also with D. G. Lillie compiled the List of Collecting Stations (Harmer and Lillie, 1914). In 1914 the Trustees accepted the proposal that the Foraminifera should be worked on by Heron-Allen and Earland and all the conditions for their involvement are itemised. Heron-Allen defrayed the cost of the original drawings. He also became so frustrated with the penny-pinching that he almost offered the text to the Smithsonian Institution, in Washington, D.C. (letter to Cushman, 1921). He also said that Station 270, for instance, took him 42 hours to pick. There are also letters from R. Kirkpatrick, A. W. Waters, Rudolph A. Peters (Biochemical Laboratory, Cambridge), and Mary H. Brooks who made the drawings (with her invoice). Finally, included is an “Ad opus nostrum” to Sir Sidney Harmer in 1922, which sums up the whole project.


Notes: On 16 November 1921, they volunteered to re-examine the fauna from
55cc of material, re-illustrate the foraminifera (the artist's fees were, 2/10/5) and have a completed manuscript ready within 10-15 days. (VO: 86.18).


   **Notes:** In the bound copy there is a typescript, the proofs and postcard correspondence. There is also a note by the authors explaining why the work was undertaken and two Errata slips (one provided by the authors to accompany the reprints) listing the considerable corrections. Although a actual date of publication is not given it must have been 1923 as Earland corrected a final set of proofs on 28 December 1922; moreover, Heron-Allen’s bound volume has the date 1923 inscribed on the spine.


   **Note:** VO: 87.11.


   **Note:** VO: 87.29.


   **Note:** VO: 87.6.


   **Note:** VO: 162.17.


   **Note:** VO: 93.26.


   **Note:** VO: 162.17.


   **Note:** VO: 95.1.


   **Note:** VO: 95.2.


   **Notes:** Another good friend and supporter. He was an eminent zoologist and former Director of The Natural History Museum, London. (VO: 111.16).


   **Notes:** A rather critical review of J.A. Cushman’s (1928) famous book *Foraminifera: their classification and economic use*. Sharon, Massachusetts: Special Publication no. 1 of the Cushman Laboratory for Foraminiferal Research; sold in the UK through Thomas Murby & Co., London, for 22/6d. Heron-Allen, although respecting Cushman both as a friend and for his “invaluable work”,…”seriously deplores the overloading and confusion of the already unwieldy nomenclature of the Foraminifera in this care-free and distracting manner”.
Earland (in a letter also pasted in the book), tried to dissuade Heron-Allen from publishing this review, adding that he would not review the book himself, even though requested to do so by the Royal Microscopical Society. *(Bookcase C, pasted in Cushman’s book as frontispiece).*

63. 1930. The further and final researches of Joseph Jackson Lister upon the reproductive processes of *Polystomella crispa* (Linné). *(An unpublished paper completed and edited from his note-books)*. *Smithsonian miscellaneous collections* **82** (no. 9): 1-11.  
**Notes:** The reprint of this paper is accompanied by a preamble, a “Note from the Editor” (Heron-Allen) which gives the background to its rejection by the Linnean Society and subsequent publication in the USA. It caused Heron-Allen so much annoyance that he resigned almost all his fellowships of learned societies, apart from the Royal Society and the Royal Microscopical Society. On the death of Lister he arranged for all his collection and notebooks to be presented to the British Museum (Natural History) *(see Blayre, 2000)*. Bound with this reprint is also a letter (date 1 March 1931) from E. J. Allen FRS who worked in the same laboratory with Lister in 1893-94 and 1904 and saw him making these experiments. He remarks that Lister was a charming man, an inspiration to him and of great help in his own work. *(VO: 97.13; 172.22)*

**Note:** VO: 35.3.

65. 1930. *[with EARLAND, A.]* The Foraminifera of the Plymouth District. 1. *Journal of the Royal Microscopical Society* **50:** 46-84.  
**Notes:** It is possible that their manuscript notes made on the “Genera and species of Britain” was associated with this. The full study was never completed. *(VO: 95.4)*

**Note:** VO: 95.4.


68. 1932. *[with EARLAND, A.]* Foraminifera. Part 1. The ice-free area of the Falkland Islands and adjacent seas. “discovery” reports **4:** 291-460.  
**Note:** Although Heron-Allen and Earland prepared the samples and manuscript together, a rift in their 25 year-long partnership resulted in Heron-Allen removing his name from the subsequent publications so that the Parts 2-4 appear under Arthur Earland’s name alone. At the beginning of Part 2 (Earland, 1933: 28) is the printed note: “Owing to illness my colleague Edward Heron-Allen was unable to take as large a share as usual in the preparation of the Report. At his own request, and against my wish, his name is omitted from the authorship”. This “official line” is at variance, however, with a handwritten note of Heron-Allen’s on his own copy (subsequently hidden by several layers of paper pasted over it): “I had my name removed from the titles of this paper, when, on my return from Ceylon in 1931 I found that Earland had claimed all my work upon it as his own, and that, not having knowledge of the German language, he had ignored Hans Wiesner’s report on the ‘Sud-Polar Expedition’ [Wiesner, 1931], in which (in my opinion) most of his ‘new genera and species’ are described and figured”.

**Notes:** A review of J.J. Galloway’s (1933) book *A manual of foraminifera*. Bloomington, Indiana: Principia Press; sold in the UK through Williams &
Norgate Ltd., London for 25/-. In this review Heron-Allen rails, amongst other things, against the “American school of commercial protozoology”. *(Bookcase G, pasted in Galloway’s book as frontispiece)*

   **Notes:** Written as a Postscript to “The economic importance of the Foraminifera” by H. Dighton Thomas (1935). *(VO 108.27 and 108.26)*

   **Notes:** Outburst on the proliferation of names triggered by the books of the American foraminiferologists Cushman (1928) and Galloway (1933) (see above). Bound with this reprint is a letter from H. Thalmann in Palembang, Sumatra supporting Heron-Allen’s stance on this proliferation of names and from R.A. Gregory, as the Editor of *Nature*, asking how this letter should be used. A subsequent note was indeed published in 1938, see below (no. 73). *(VO: 108.28)*

   **Note:** Apart from the reprint (VO: 108.4) another bound copy contains the original drawings and letters and also a copy of Brady’s original description.

   **Note:** VO 108:28.

[Adapted from: