

THE LATE LIEUT.-COL. R.B.S. SEWELL (1880-1964) : AN APPRECIATION, WITH A COMPLETE LIST OF HIS SCIENTIFIC WRITINGS.

By

M. L. ROONWAL*

Director, Zoological Survey of India, Calcutta

(With one Plate)

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I—GENERAL

Robert Beresford Seymour Sewell was born at Leamington, England, on the 5th of March, 1880, and died in Cambridge on the 10th February, 1964, at the age of 83. He was the second son of the Rev. Arthur Sewell and his wife Mary Lee. Robert Sewell married Dorothy, daughter of Frederick and Matilda Dean, of Chichester ; she died in 1931. From her he had two daughters who survive him.

II—EDUCATION AND SERVICE CAREER

After school Sewell attended Weymouth College from 1894-98 and then spent some months studying Zoology at the University College, London. Thereafter he entered Christ's College, Cambridge, as a Scholar and obtained a first class in both parts of the Natural Sciences Tripos, taking his degree in 1902. He then joined St. Bartholomew's Hospital, London, from where he became medically qualified in 1907.

In 1908 Sewell joined the Indian Medical Service in which he remained for the next 28 years. He was first appointed as a Medical Officer attached to 67th and 84th Punjab Regiments. Two years later he was appointed as Surgeon Naturalist to the Marine Survey of India, and he took full advantage of this opportunity to devote his energies to zoological as well as medical problems. For over a year he served on the Indian Marine Ship *Investigator*, surveying the Indian Ocean off the southern coast of Burma. There was a break of two years in his marine work, from 1911-13, when he served as Professor of Biology at the Calcutta Medical College. But he reverted afterwards to his post of Surgeon Naturalist.

*Present address : Vice-chancellor, University of Jodhpur, Jodhpur.

During the First World War, 1914-18, Sewell was on active service in the West Asian war theatre at Aden and in Palestine, and was mentioned in despatches (1917). On the termination of the War he returned to India and joined the Zoological Survey of India as Officiating Superintendent, but after sometime he again took up the original appointment as Surgeon Naturalist with the Indian Marine Survey where he continued his zoological work for a number of years. In 1925 he was appointed as the Director of the Zoological Survey of India, Calcutta, from which he retired in 1933. The rest of his life Sewell spent at the Zoological Laboratory of the Cambridge University where he continued to do active work for almost 30 years.

III—SCIENTIFIC CONTRIBUTIONS

Sewell's scientific contributions covered a period of 57 years (1904-60) and ranged over a wide field—from human anatomy, anthropology and archaeology to oceanography and zoology, including marine biology. He published a total of nearly one hundred papers several of which were large and monographic in scope. His earliest writings dealt with human anatomy, in particular the study of the astragalus. Thereafter, as a result of his association with the Indian Marine Ship, *Investigator*, he started a series of papers on the marine fauna of the Indian seas, especially the Copepoda (Crustacea) and fishes. His interest in the Copepoda was to last a life time, and he became a recognized authority on that group—until his last days he was busy writing up an account of the Indian Copepoda which was assigned to him in the *Fauna of India* series of monographs.

At the end of the First World War he took up the study of schistosomiasis, a helminthic disease which, it was feared, the Indian troops returning from the African and West Asian war theatres, might import into India. In this connection he undertook a comprehensive study of the immature stages (cercariae) of the Indian helminths, and this work resulted in his well known monograph on *Cercariae Indicae* published in the year 1922. About the year 1922, Sewell resumed his marine work, and a steady series of papers on that subject started flowing from his pen. He covered a wide area : the Andaman Sea, the Chilka Lake and other areas of the Indian Ocean.

The first portions of his large work on the Copepod Crustacea was published in 1929 and was completed in 1932 as a *Memoir of the Indian Museum*. In collaboration with the late Dr. B. S. Guha he published, in 1929, a report on the prehistoric bones excavated at Nal in Baluchistan. This was followed, in 1931, by the publication of a similar account of the bones excavated at Mohenjadarro in Sind. As a result of his work as the leader of the John Murray Expedition to the Indian Ocean, Sewell contributed a long series of papers (1934-56) on the marine biology and oceanography of that area. In addition to these specialised papers, he contributed valuable articles on general aspects such as evolution and zoogeography. From 1927-31 he contributed some observations on anthropology—Indian races of man and allied problems.

Sewell's scientific works are marked by accuracy, thoroughness and great depth of knowledge. A list of his papers, together with a subject index, will be found at the end of this article.

IV—HONOURS AND OTHER DISTINCTIONS

Sewell received many well deserved honours. On his retirement from service in India, in 1933, he was awarded the C. I. E. The Cambridge University gave him its highest science degree, the Sc.D. In 1934 he was elected to the fellowship of the Royal Society of London, and in 1936 to the fellowship of the National Institute of Sciences of India. During 1933-34 he led the John Murray Expedition to the Indian Ocean. He was the President of the Indian Science Congress (1931), the President of the Royal Asiatic Society of Bengal (1931-33), the President of the Ray Society, London (1950-53), the President of the Linnaean Society of London (1952-55) and an Honorary Fellow of the Zoological Society of India. His many degrees and honours included : M.A., Sc.D. (Cantab.), M.R.C.S., L.R.C.P., F.R.S and F.N.I. For nine years Sewell was, as the Director, Zoological Survey of India, the editor of the *Records and Memoirs of the Indian Museum*. After retirement and on the death of Col. Stephenson, Sewell was appointed in 1933 as the sole Editor of the *Fauna of British India* series of monographs until 1947 when, with the India's Independence, the *Fauna* was transferred to India and given a new title, the *Fauna of India*, with the Director, Zoological Survey of India, as the editor. Sewell, however, remained the editor in England for those volumes which had already been commissioned in that country ; from this position he resigned in 1963 due to ill health.

Sewell's passing away is a great loss to Indian Zoology. It would be difficult to find a man who could cover so many diverse fields with so much distinction and thoroughness.

ACKNOWLEDGMENTS : It is a pleasure to acknowledge with thanks the assistance received from Dr. A. P. Kapur and Mr. D. P. Bhattacharjee of the Zoological Survey of India, respectively in the procurement of certain materials and in the preparation of the list of papers of Lieut.-Col. Sewell.

V—APPENDIX

1. *List of the scientific papers of the late Lt.-Col. R. B. Seymour Sewell (1904-1960).*

1. SEWELL, R. B. S. 1904a. A study of the astragalus. Part I.—*J. Anat.*, London, 38 (3), pp. 233-247, 4 pls.
2. SEWELL, R. B. S. 1904b. A study of the astragalus. Part II.—*J. Anat.*, London, 38 (4), pp. 423-434, 7 pls.
3. SEWELL, R. B. S. 1904c. A study of the astragalus. Part III.—*J. Anat.*, London, 39 (1), pp. 74-88, 4 pls.
4. SEWELL, R. B. S. 1905. The small or superficial thyroarytenoideus muscle.—*J. Anat.*, London, 39 (3), pp. 301-307.
5. SEWELL, R. B. S. 1906a. A study of the astragalus. Part IV.—*J. Anat.*, London, 40 (2), pp. 152-161.
6. SEWELL, R. B. S. 1906b. Anatomical notes. I. Phalanx, possessing two epiphyses.—*J. Anat.*, London, 41 (1), pp. 45-48.

7. SEWELL, R. B. S. 1912*a*. Notes on the deep-sea fish obtained by the R. I. M. S. S. "Investigator" during the survey season 1910-1911.—*Rec. Indian Mus.*, Calcutta, 7 (1) pp. 1-14.
8. SEWELL, R. B. S. 1912*b*. Capture of *Limulus* on the surface.—*Rec. Indian Mus.*, Calcutta, 7 (1), pp. 87-88.
9. SEWELL, R. B. S. 1912*c*. Note on the development of the larva of *Lingula*.—*Rec. Indian Mus.*, Calcutta, 7 (1), pp. 88-89.
10. SEWELL, R. B. S. 1912*d*. Notes on the surface-living copepoda of the Bay of Bengal. I and II.—*Rec. Indian Mus.*, Calcutta, 7 (4), pp. 313-382, 11 pls.
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15. SEWELL, R. B. S. 1914*a*. Notes on the surface Copepoda of the Gulf of Mannar.—*Spolia zeylan.*, Colombo, 9 (35), pp. 191-263, 5 pls.
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17. SEWELL, R. B. S. 1914*c*. Notes on Indian fish. I. Notes on the genus *Malthopsis*.—*Rec. Indian Mus.*, Calcutta, 10 (2), pp. 131-134, 1 pl.
18. SEWELL, R. B. S. 1914*d*. Notes on Indian fish. II. A new species of *Cryptocentrus*.—*Rec. Indian Mus.*, Calcutta, 10 (2), pp. 134-135, 1 pl.
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