

**LIVERPOOL GEOLOGICAL  
ASSOCIATION.  
TRANSACTION. VOLUME  
VII. SESSION 1886-7**

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ASSOCIATION.  
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VII. SESSION 1886-7**



LIVERPOOL  
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GEOLOGICAL ASSOCIATION.

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TRANSACTIONS.

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VOLUME VII.

SESSION 1886-7.

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1887.

COLLEGE OF CALIFORNIA STATE  
SAN FRANCISCO

# INDEX.

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*The Authors are alone responsible for the facts and opinions  
expressed in their Papers.*

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|  | PAGE. |
|--|-------|
| Action of Water in Mineral and Rock Formation, by H. T. MANNINGTON ..... | 44    |
| Address by the President on Geological Technology .....                  | 19    |
| Annual Report, Financial Statement, Rules, List of Members, &c.....      | 3     |
| Annual Meeting .....   | 17    |
| A Remarkable Valley .....  | 81    |
| Bank Holiday Trip to Castleton—August .....                              | 79    |
| Channel Islands, Geology of, by I. E. GEORGE .....                       | 34    |
| DONATIONS AND EXCHANGES. .18, 23, 27, 33, 35, 43, 54, 56, 66, 67, 74,    | 78    |
| Excursion Hints, by I. E. GEORGE .....                                   | 58    |
| Epitaph in Castleton Churchyard .....                                    | 81    |
| EXHIBITS—Contortion in Sandstone .....                                   | 24    |
| American Minerals .....  | 27    |
| Fossil Dragon Fly in Dolomite Slab .....                                 | 36    |
| Photographs of Devonshire.....   | 56    |
| Paving Stones, with Chemical Analysis .....                              | 43    |
| Isle of Man Minerals .....   | 56    |
| Fresh Water Shells from Submerged Forest ..                              | 56    |
| Volcanic Dust from Krakatoa.....   | 56    |
| Indian Marble .....  | 56    |
| Minerals from Queensland .....   | 75    |
| Natural Alum from Gilsland.....  | 90    |
| FIELD MEETINGS—  |       |
| Green Lane.....  | 75    |
| Hilbre Island.....   | 67    |
| Leasowe .....  | 75    |
| St. Helens .....   | 55    |
| Thatto Heath.....  | 102   |

|   | PAGE.                  |
|---|------------------------|
| Fossil Teeth, by CECIL F. WEBB.....                                       | 95                     |
| Geology of Rouen, by Rev. S. GASKING, B.A., F.G.S. ....                   | 23                     |
| Geological Ramble in the Isle of Man, A, by P. H. MARROW                  | 56                     |
| Geology of Deganwy, Notes on, by T. MELLARD READE,<br>C.E., F.G.S. ....   | 68                     |
| Geological Technology, by A. NORMAN TATE, F.I.C., F.C.S.                  | 19                     |
| Glacial Contortions .....   | 102                    |
| Hints for Holidays, by D. CLAGUE.....                                     | 63                     |
| Hints for a One-day Holiday, by P. H. MARROW.....                         | 77                     |
| Irish Scenery, described by the PRESIDENT .....                           | 35                     |
| James Nasmyth, a Study, by I. E. GEORGE .....                             | 76                     |
| Lantern Views, exhibited by B. CONLAN .....                               | 34                     |
| Maghull, Visit to, Study of Lunar Volcanoes .....                         | 18                     |
| Mersey Estuary, The, by C. E. MILES .....                                 | 85                     |
| MUSEUM VISITS—Coal Fossils, described by Rev. H. H.<br>HIGGINS, M.A. .... | 35                     |
| Iron Ores, described by H. T. MANNINGTON                                  | 27                     |
| The Life of the Lias Period, described by<br>D. CLAGUE .....              | 33                     |
| Silica Minerals, described by C. E. MILES                                 | 43                     |
| North Wales, Views of, described by D. D. PRITCHARD....                   | 34                     |
| Notes on some Weathered Rocks at Hilbre, by I. E. GEORGE                  | 92                     |
| NOTES—MONTHLY.....  | 39, 51, 64, 74, 82, 89 |
| Sand Dunes of Cheshire Coast, by C. POTTER .....                          | 28                     |
| Use and Abuse of Stone in Building, by JAS. WILDING....                   | 90                     |
| Visit to Chester.....   | 67                     |
| Wind Erosion, by I. E. GEORGE.....  | 36                     |

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 ERRATA.

Page 53, line 25 from top, for "Percy Street," read "Hope Street."

Page 75, line 22 from top, for "east," read "north-west."

LIVERPOOL  
GEOLOGICAL ASSOCIATION.



ANNUAL REPORT,

1886.



# LIVERPOOL GEOLOGICAL ASSOCIATION,

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AND W. H. MILES.

# Liverpool Geological Association.

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## ANNUAL REPORT,

SESSION 1885-6.

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4th OCTOBER, 1886.

At the close of another year your Council have to report that 8 new members have joined the Association. On the other hand, our numbers have been reduced in various ways by 26 names, leaving the number now on the books at 136. Amongst our losses we regret to have to record the removal by death of the following gentlemen, viz. :—Messrs. F. J. Lawrenson, R. G. New, and Capt. Shilston.

During the year we have held 11 Ordinary Meetings, at which the following papers were read :—

“THE TRIAS SANDSTONE,” by P. H. Mallow.

“THE GEOLOGY OF SOUTH EAST ENGLAND,” by C. Potter.

“FOSSIL REPTILES,” by T. Brennan.

“MICRO-PHOTOGRAPHY, AN AID TO GEOLOGICAL STUDY,” by E. Dickson.

“REPORT OF A MICROSCOPIC EXAMINATION OF CERTAIN LIMESTONES,” by H. C. Beasley.

“ALPINE PICTURES AND GEOLOGICAL NOTES FROM SWITZERLAND,” by T. S. Hunt.

“WORK DONE IN THE BOULDER CLAY,” by H. F. Hall, F.G.S.

“CARBONIC ACID, AND ITS WORK IN NATURE,” by H. Robson, B.Sc.

"THE BRONZE AGE." Communicated.

"STRONTIA, ITS MINERALS AND THEIR USES," by H. Fox.

"GIBRALTAR," by W. H. Quilliam, B.A.

Besides these papers many interesting communications were made; and objects of interest, gathered during the rambles of our members, have been exhibited at the meetings, adding much to their success.

During the winter months a series of meetings were held in the Museum, on Saturday afternoons, when the following subjects were studied from the objects in the cases:—

"THE CEPHALOPODA," explained by Rev. H. H. Higgins, M.A.

"BONES OF THE HAND," A. W. Auden.

"CORALS, AND KINDRED ANIMALS," P. H. Marrow.

"SPONGES," D. Clague.

"THE ECHINODERMATA," W. Narramore.

"THE LIMULUS, AND ALLIED FORMS," Prof. Herdman, D.Sc.

These meetings were well attended and proved to be very instructive; arrangements will be made to resume them during the ensuing winter.

During the summer months FIELD MEETINGS were held as follows:—

April 26. Broxton. *Conducted by* C. E. Miles.

June 21. Carnforth. ,, C. Ricketts, M.D., F.G.S.

Aug. 2. Llangollen. ,, J. Brown & I. E. George.

,, 28. Dawpool. ,, C. E. Miles.

Sept. 11. Lea Green Colliery. A joint excursion with the Science Students' Association.

These proved to be very successful, and our thanks are due to Mr. George for the efficient manner in which he has arranged and carried out these series of Museum Visits and Field Meetings.

THE LIBRARY, under the care of Mr. E. Evans, is in good condition, and it is much appreciated by the members, as is shown by the increasing number of readers. It has been enriched by donations of books from Dr. Ricketts, F.G.S., and