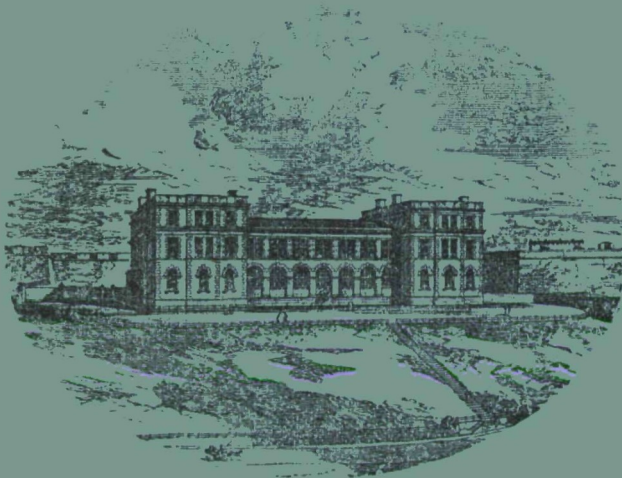


New Series.—Vol. XII., No. 3—issued September, 1921.

[Price Five Shillings, net.]

Journal
OF THE
MARINE BIOLOGICAL ASSOCIATION
OF
THE UNITED KINGDOM.



THE PLYMOUTH LABORATORY.

PLYMOUTH:

PRINTED FOR THE MARINE BIOLOGICAL ASSOCIATION AT THE MAYFLOWER PRESS
BY W. BRENDON & SON, LTD.,

AND

PUBLISHED BY THE ASSOCIATION AT ITS OFFICES ON THE CITADEL HILL.

SENT FREE BY POST TO ALL MEMBERS OF THE MARINE BIOLOGICAL ASSOCIATION:
ANNUAL SUBSCRIPTION FOR MEMBERSHIP, ONE GUINEA.

AGENTS IN LONDON: MESSRS. DULAU & CO., LTD., 34-36 MARGARET STREET, CAVENDISH SQUARE, W. 1.

PATRON.
HIS MAJESTY THE KING.

OFFICERS AND COUNCIL.

President.

Sir E. RAY LANKESTER, K.C.B., LL.D., F.R.S.

Vice-Presidents.

The Duke of BEDFORD, K.G.
The Earl of DUCIE, F.R.S.
The Earl of STRADBROKE, C.V.O., C.B.
Viscount ASTOR.
Lord MONTAGU OF BEAULIEU.
The Right Hon. A. J. BALFOUR, M.P.,
F.R.S.

The Right Hon. Sir ARTHUR GRIFFITHS
BOSCAWEN, M.P.
The Right Hon. AUSTEN CHAMBER-
LAIN, M.P.
G. A. BOULENGER, Esq., F.R.S.
Sir ARTHUR STEEL-MAITLAND, Bart.,
M.P.
Prof. W. C. MCINTOSH, F.R.S.

COUNCIL.

Elected Members.

Prof. W. M. BAYLISS, D.Sc., F.R.S.
L. A. BORRADAILE, Esq.
W. T. CALMAN, Esq., D.Sc.
Prof. F. W. GAMBLE, D.Sc., F.R.S.
Prof. J. STANLEY GARDINER, F.R.S.
J. GRAY, Esq. [F.R.S.
Sir SIDNEY F. HARMER, K.B.E., Sc.D.,

E. W. L. HOLT, Esq.
JULIAN S. HUXLEY, Esq.
Prof. F. W. KEEBLE, Sc.D., F.R.S.
Prof. E. W. MACBRIDE, D.Sc., F.R.S.
H. G. MAURICE, Esq., C.B.
T. H. RICHES, Esq.
Prof. D'ARCY THOMPSON, C.B., F.R.S.

Governors.

G. P. BIDDER, Esq., Sc.D.
E. T. BROWNE, Esq.
LÓTHIAN D. NICHOLSON, Esq. (Prime
Warden of the Fishmongers'
Company).
W. T. BRAND, Esq. (Fishmongers'
Company).
GEORGE EVANS, Esq. (Fishmongers'
Company).

E. H. CHAPMAN, Esq. (Fishmongers'
Company).
Major NIGEL O. WALKER, O.B.E.
(Fishmongers' Company).
Prof. G. C. BOURNE, D.Sc., F.R.S.
(Oxford University).
Sir ARTHUR E. SHIPLEY, G.B.E., D.Sc.,
F.R.S. (Cambridge University).
Prof. W. A. HERDMAN, C.B.E., D.Sc.,
F.R.S. (British Association).

Chairman of Council.

Sir ARTHUR E. SHIPLEY, G.B.E., D.Sc., F.R.S.

Hon. Treasurer.

GEORGE EVANS, Esq., 1 Wood Street, London, E.C. 2.

Hon. Secretary.

E. J. ALLEN, Esq., D.Sc., F.R.S., The Laboratory, Citadel Hill, Plymouth.

PERMANENT STAFF.

Director.

E. J. ALLEN, Esq., D.Sc., F.R.S.

Head of Department of General Physiology.

W. R. G. ATKINS, Esq., M.A., Sc.D., F.I.C.

Naturalists—J. H. ORTON, Esq., D.Sc.

R. S. CLARK, Esq., M.A., B.Sc.

Miss M. V. LEBOUR, D.Sc.

E. FORD, Esq., A.R.C.S.C.