

**TRANSACTIONS OF THE
EPIDEMIOLOGICAL SOCIETY
OF LONDON; NEW SERIES.
VOL. XI. SESSION 1891-92**

Published @ 2017 Trieste Publishing Pty Ltd

ISBN 9780649506729

Transactions of the Epidemiological Society of London; New Series. Vol. XI. Session 1891-92 by Various

Except for use in any review, the reproduction or utilisation of this work in whole or in part in any form by any electronic, mechanical or other means, now known or hereafter invented, including xerography, photocopying and recording, or in any information storage or retrieval system, is forbidden without the permission of the publisher, Trieste Publishing Pty Ltd, PO Box 1576 Collingwood, Victoria 3066 Australia.

All rights reserved.

Edited by Trieste Publishing Pty Ltd.
Cover @ 2017

This book is sold subject to the condition that it shall not, by way of trade or otherwise, be lent, re-sold, hired out, or otherwise circulated without the publisher's prior consent in any form or binding or cover other than that in which it is published and without a similar condition including this condition being imposed on the subsequent purchaser.

www.triestepublishing.com

VARIOUS

**TRANSACTIONS OF THE
EPIDEMIOLOGICAL SOCIETY
OF LONDON; NEW SERIES.
VOL. XI. SESSION 1891-92**

TRANSACTIONS
OF THE
EPIDEMIOLOGICAL SOCIETY
OF
LONDON.

NEW SERIES. VOL. XI.

SESSION 1891-92.



LONDON:
SHAW AND SONS, FETTER LANE, E.C.

MDCCXCI.

All rights reserved.

CONTENTS.

Inaugural Address of Session 1891-92. By JOSEPH EWART, M.D., F.R.C.P.	1
Famine: its Effects and Relief. By Surgeon-General Sir WILLIAM MOORS, K.C.L.E., Q.H.P.	27
What is Efficient Vaccination? By Brigade-Surgeon ROBERT PRINGLE, M.D.Edin., late Sanitary Department, H.M.'s Bengal Army	47
Is Influenza in Man and in Animals <i>Ætiologically</i> Distinct? By RICHARD SISLEY, M.D., M.R.C.P.	60
Bacteriology of Vaccine Lymph. By S. MONCKTON COPEMAN, M.A., M.D.(Cantab.), D.P.H.	70
On the Manifestations of Cholera in Ships at Sea, and their Connections with Outbreaks on Land. By ROBERT LAWSON, LL.D., Q.H.P., Inspector-General of Hospitals	81
The Seasonal Prevalence of Enteric Fever. (Abstract.) By LOUIS PARKES, M.D.Lond., D.P.H., Lecturer on Public Health at St. George's Hospital, Medical Officer of Health for Chelsea	108

EPIDEMIOLOGICAL SOCIETY OF LONDON.

OFFICERS AND OTHER MEMBERS OF COUNCIL FOR THE SESSION 1892-93.

President.

J. F. PAYNE, M.D., F.R.C.P.

Honorary Vice-Presidents.

THE RIGHT HON. THE EARL OF ABERDEEN.
THE RIGHT HON. THE EARL OF MEATH.

Vice-Presidents.

SIR JOHN SIMON, K.C.B., D.C.L., F.R.S.
SIR HENRY W. ACLAND, Bart., K.C.B., M.D., F.R.S.
SIR WILLIAM JENNER, Bart., G.C.B., M.D., D.C.L., F.R.S.,
Physician in Ordinary to Her Majesty the Queen.
BENJAMIN W. RICHARDSON, M.D., F.R.S.
ROBERT LAWSON, LL.D., Q.H.P., Inspector-General of Hospitals,
Royal Army (*retired*).
SIR JOSEPH FAYRER, K.C.S.I., LL.D., M.D., F.R.S., Q.H.P.
JOHN MURRAY, M.D., Surgeon-General (*retired*).
SIR GEORGE BUCHANAN, M.D., F.R.S.
J. BURDON SANDERSON, M.D., F.R.S.
SIR THOMAS CRAWFORD, K.C.B., M.D., LL.D.
WALTER DICKSON, M.D., R.N.
R. THORNE THORNE, C.B., M.B., F.R.C.P., F.R.S.
SIR W. A. MACKINNON, K.C.B., Director-General Army Medical
Department.
CHARLES A. GORDON, C.B., M.D., Q.H.P., Surgeon-General.

Treasurer.

R. D. R. SWEETING, 39, Addison Gardens, W.

General Secretaries.

E. O. HOPWOOD, M.D., London Fever Hospital, N.
H. T. BULSTRODE, M.D., Local Government Board.

Secretary for Navy.

WALTER DICKSON, M.D., R.N., late Medical Officer to the Hon.
Board of Customs.

Secretary for Army.

ROBERT LAWSON, LL.D., Q.H.P., Inspector-General of Hospitals
(*retired*).

Foreign and Colonial Secretaries.

<i>France, Italy, and Spain</i> ...	B. A. WHITELEGGE, M.D.
<i>Germany and Russia</i> ...	ALEXANDER COLLIE, M.D.
<i>Sweden, Norway, and Denmark</i> ...	J. W. MOORE, M.D.
<i>Portugal and the Brazils</i> ...	J. J. L. DONNET, M.D., R.N.
<i>East Indies</i> ...	{ JOHN MURRAY, M.D. J. B. SCRIVEN.
<i>West Indies and South America</i> ...	G. C. HENDERSON, M.D.
<i>Indian Ocean and East Africa</i> ...	J. CHRISTIE, M.D.
<i>North America</i> ...	JOSEPH EWART, M.D.
<i>Polynesia</i> ...	BOLTON G. CORNEY.

Other Members of Council.

W. H. CORFIELD, M.D. (S.1871-2.)	Sir W. MOORE, K.C.I.E.
Surg.-Gen. W. R. CORNISH, C.I.E.	SHIRLEY F. MURPHY. (S. 1877-89.)
ROBERT CORY, M.D.	PROFESSOR LANE NOTTER, M.B.
Sir W. GUYRE HUNTER, K.C.M.G., M.D., M.P.	CHARLES E. PAGET. (S. 1883-90.)
G. B. LONGSTAFF, M.D.	Brig.-Surg. R. PRINGLE, M.D.
JOHN MACCOMBIE, M.D.	E. C. SEATON, M.D.
	MICHAEL TAYLOR, M.D.

LIST OF MEMBERS.*

(P) *President*; (T) *Treasurer*; (S) *Secretary*.

HONORARY MEMBERS.

- Elected
1888. Abbate Pacha, Cairo.
1867. Acland, Sir Henry W., K.C.B., M.D., F.R.S., Oxford.
1888. Amado, J. J. da Silva, M.D., Lisbon.
1888. Bacelli, Guido, M.D., Rome.
1888. Billings, J. S., M.D., War Dept., Surg.-Gen.'s Office, Washington.
1888. Brouardel, S., M.D., 195, Boulevard St. Germain, Paris.
1888. Carsten, B., M.D., The Hague.
1888. Colin, Léon, M.D., 17, Boulevard St. Germain, Paris.
1868. Guipon, D. J., M.D., Laon Aiane, France.
- c. 1888. Hirsch, A., M.D., 113, Pottsdamer Strasse, Villa 2, Berlin.
1885. Humphreys, Noel A., General Register Office, Somerset House, W.C.
1888. Hunt, Ezra M., M.D., Trenton, New Jersey, U.S.A.
1888. Koch, R., M.D., 36, Klosterstrasse, Berlin.
1888. Larrey, F. H., M.D., 91, Rue de Lille, Paris.
- c. 1888. MacLaurin, H. A., M.D., Macquarie Street, Sydney, N.S.W.
1888. Meijer, van Overbeck de, M.D., Utrecht.
- c. 1888. Molaschott, J., M.D., Rome.
1888. Pettenkofer, Max von, M.D., Munich.
1888. Proust, A., M.D., 9, Boulevard Malesherbes, Paris.
1852. Richardson, B. W., M.D., F.R.S., 25, Manchester Square, W.
1850. Simon, Sir John, K.C.B., D.C.L., F.R.S., 40, Kensington Square, W.

* Members are requested to inform the Secretaries of any corrections when necessary.

- Elected
 c. 1883. Sonsino, Prospero, M.D., 11, Via San Lorenzo, Pisa.
 1863. Stark, J., M.D., Bridge of Allen, Stirlingshire, N.B.
 1888. Sternberg, Geo. M., M.D., Johns Hopkins University,
 Baltimore, U.S.A.
 1888. Stokvis, B. J., M.D., 26, Sarphatstraat, Amsterdam.
 1889. Tholozan, J. Désiré, M.D., Teheran, Phys. to H.M. the Shah.
 1888. Vallin, E., M.D., 5, Avenue de Messine, Paris.

ORDINARY MEMBERS.

1887. Abraham, P. S., M.D., 2, Henrietta Street, W.
 1878. Airy, Hubert, M.D., Local Government Board, Whitehall, S.W.
 1891. Anderson, A. J., M.D., Blackpool.
 1882. Armstrong, Henry E., D. Hy., Town Hall, Newcastle-on-Tyne.
 1888. Ashby, Alfred, M.B., Town Hall, Reading, Berks.
 1884. Atkinson, F. E., Whitefriars, Settle, Yorkshire.
 1882. Barry, F. W., M.D., Local Government Board, Whitehall, S.W.
 1889. Beardmore, G. R., Warwick House, Upper Street, Islington, N.
 1889. Boobbyer, Philip, M.B., Municipal Offices, Nottingham.
 1891. Braga, J. F., Glen Villa, Sunbury-on-Thames.
 1889. Brook, J. H. E., M.D., 115, Adelaide Road, Hampstead, N.W.
 1891. Bruce, R. M., Western District Hospital, Fulham.
 1870. Buchanan, Sir George, M.D., F.R.S., 27, Woburn Place, W.C.
 (P. 1881-83. T. 1871-81.)
 1889. Bulstrode, H. T., M.D., Hon. Secretary, Local Government
 Board, Whitehall, S.W.
 1887. Butterfield, Harris, Brynmawr, Sevenoaks, Kent.
 1888. Caiger, Frederick, M.D., South-Western District Hospital,
 Stockwell, S.W.
 1875. Collie, Alexander, M.D., 28, St. Swithin's Lane, E.C.
 1889. Cooper, C. H., A.M.I.C.E., Local Board Offices, Wimbledon.
 1891. Copeman, S. A. M., M.D., Local Government Board, Whitehall,
 S.W.
 1871. Corfield, W. H., M.D., 19, Savile Row, W. (S. 1871-72.)
 1885. Cornish, W. E., Surg.-Gen., C.I.E., 8, Cresswell Gardens,
 South Kensington, S.W.
 1888. Corrie, A. T., F.R.G.S., Fleet Surgeon, Junior United Service
 Club, S.W.
 1879. Cory, Robert, M.D., 73, Lambeth Palace Road, S.E.
 1863. Crawford, Sir Thomas, K.C.B., M.D., 5, St. John's Park,
 Blackheath. (P. 1889-90.)
 1891. Crook, H. E., M.D., Carlton House, Dalby Square, Clifton-
 ville, Margate.
 1892. Crosby, H., M.B., 21, Gordon Square, W.C.
 1884. Cullimore, D. H., M.D., 27, Welbeck Street, W.
 1863. Dickson, Walter, M.D., R.N., Fairfield, Belvedere Road,
 Upper Norwood. (President 1885-87.)
 1880. Duka, Theodore, M.D., 55, Nevers Square, S.W.
 1879. Ewart, Joseph, M.D., Dep. Surg.-Gen. Ind. Med. Dept.
 (retired), Montpelier Hall, Brighton.
 1875. Fayer, Sir Joseph, K.C.S.I., M.D., LL.D., F.R.S., Surg.-
 Gen. Ind. Med. Dept. (retired), 53, Wimpole Street, W.
 (P. 1879-81.)
 1892. Fletcher, W. W. E., Local Government Board, Whitehall, S.W.
 1890. Garrett, J. H., M.D., Municipal Offices, Cheltenham.
 1891. Goodall, E. W., M.D., Eastern District Hospital, Homerton.

Elected

1880. Gordon, C. A., C.B., M.D., Q.H.P., Surg.-Gen., 25, Westbourne Square, W.
1889. Gruggen, W., Wandsworth Prison, S.W.
1892. Hamer, W. H., M.D., Ladywell, Dartmouth Park Hill, N.
1875. Hare, C. J., M.D., Berkeley House, 15, Manchester Square, W.
1887. Home, W. E., Surgeon H.M.S. *Briton*, Inverness.
1883. Hopwood, E. O., M.D., Hon. Secretary, London Fever Hospital, Islington, N.
1892. Hume, F. N., Northern District Hospital, Winchmore Hill.
1880. Hunter, Sir W. Guyer, K.C.M.G., M.D., M.P., Surg.-Gen. Ind. Med. Dep., 21, Norfolk Crescent, W.
1891. Hunter, W., M.D., 61, Wimpole Street, W.
1887. James, C. A., 24, Cazenove Road, Stoke Newington, N.
1863. Jenner, Sir William, Bart., G.C.B., M.D., F.R.S., Greenwood, Bishop's Waltham, Hants. (P. 1866-68.)
1892. Kenwood, H. R., M.B., 189, Adelaide Road, Hampstead.
1889. Lawless, E. J., M.D., Victoria Dock Dispensary, E.
1863. Lawson, Robert, LL.D., Q.H.P., Inspector-Gen., 20, Lansdowne Road, Notting Hill, W. (P. 1871-73.)
1884. Ligertwood, Thomas, M.D., Dep. Surg.-Gen., Royal Hospital, Chelsea, S.W.
1880. Longstaff, G. B., M.D., Highlands, Putney Heath, S.W.
1887. Low, R. Bruce, M.D., Local Government Board, Whitehall, S.W.
1878. MacCombie, John, M.D., South-Eastern District Hospital, Deptford, S.E.
1892. Mann, H. E., Eastern District Hospital, Homerton.
1885. Martin, Sydney, M.D., 10, Mansfield Street, W.
1890. Mason, J. Wright, M.B., Town Hall, Hull.
1891. Matthews, C. E., M.B., South-Eastern District Hospital, New Cross.
1889. Moore, Sir W. J., K.C.I.E., 15, Portland Place, W.
1872. Murray, John, M.D., Surg.-Gen. Ind. Med. Dept. (*retired*), 17, Westbourne Square, W. (P. 1877-79.)
1875. Murphy, Shirley Forster, 41, Queen Anne Street, Cavendish Square, W. (S. 1877-89.)
1891. Newsholme, A., M.D., Town Hall, Brighton.
1889. Notter, J. Lane, M.B., Prof. of Military Hygiene, Netley.
1891. Osborne, F., South-Western District Hospital, Stockwell.
1883. Paget, Charles E., Town Hall, Salford. (S. 1883-1890.)
1858. Paine, H. J., M.D., Elmsfield, Newport Road, Cardiff, South Wales.
1884. Parkes, Louis, M.D., 61, Cadogan Square, S.W. (S. 1889-1891.)
1883. Parsons, H. Franklin, M.D., Local Government Board, Whitehall, S.W.
1880. Payne, J. F., M.D., 78, Wimpole Street, W.
1889. Preston, Theodore J., Staff Surg. R.N., Avenue House, Northumberland Avenue, W.C.
1884. Pringle, R., Brigade-Surg., Lt.-Col., M.D., 4, Granville Park, Blackheath, S.E.
1885. Redmayne, Hugh, Ambleside, Westmorland.
1875. Reynolds, J. Russell, M.D., F.R.S., 38, Grosvenor Street, W.
1889. Roberts, Arthur, M.D., 85, Shipton Road, Keighley, Yorks.
1875. Roberts, F. T., M.D., 102, Harley Street, W.
1890. Roberts, R. Lawton, M.D., Ruabon, Denbighshire.
1873. Saunders, C.E., M.D., County Asylum, Hayward's Heath, Sussex.

Elected

1882. Scriven, J. B., Brigade-Surgeon Ind. Med. Dept., 95, Oxford Gardens, Notting Hill, W.
 1873. Seaton, E. O., M.D., 36, George Street, Hanover Square, W.
 1887. Shaw, C. Knox, 2, Pevensey Road, St. Leonards-on-Sea, and 19, Upper Wimpole Street, W.
 1891. Shaw, W. N., F.R.S., Emmanuel College, Cambridge.
 1891. Sisley, R., M.D., 11, York Street, Portman Square, W.
 1878. Smee, A. H., The Grange, Hackbridge, Surrey.
 1892. Stewart, W. J. J., St. Saviour's Infirmary, Dulwich.
 1880. Sweeting, Richard D. R., 39, Addison Gardens, W. (T. from 1887.)
 1888. Sykes, J. F. J., M.B., 171, Camden Road, N.W.
 1886. Taylor, M. W., M.D., Kenmure House, 202, Earl's Court Road, S.W.
 1889. Thompson, T. W., Local Government Board, S.W.
 1888. Thomson, Theodore, M.D., Local Government Board, S.W.
 1871. Thorne, R. Thorne, C.B., M.B., F.R.C.P., 45, Invernes Terrace, W. (S. 1879-81. T. 1881-87. P. 1887-89.)
 1889. Thresh, John C., M.B., Town Hall, Chelmsford.
 1876. Turner, George, M.D., Rosslynn, Broxbourne, Herts.
 1888. Walford, Edward, M.D., Cardiff.
 1891. Washbourne, J. W., M.D., Guy's Hospital, S.E.
 1891. Whiston, P. H., Surgeon-Captain, Wellington Barracks.
 1882. Whitelegge, B. A., M.D., Wakefield, Yorks.
 1892. Wilde, L., M.D., 323, Vauxhall Bridge Road, S.W.
 1883. Willoughby, Edward F., M.D., Bratton Lodge, Green Lanes, N.
 1888. Wilson, J. Mitchell, M.D., 51, Hall Gate, Doncaster.
 1892. Woodhouse, F. D., Western District Hospital, Fulham.
 1883. Young, Keith Downes, F.R.I.B.A., 17, Southampton Street, Bloomsbury, W.C.

NON-RESIDENT SUBSCRIBING MEMBERS.

(LAW III, 8.)

1875. Armistead, W., M.B., Great Shelford, Cambridge.
 1888. Blaxall, F., M.D., B.N., Clan Lodge, Bathwick, Bath.
 1875. Coffin, R. J. M., Alwington House, Baron's Court, West Kensington.
 1891. Davies, D. S., M.D., Sanitary Offices, Bristol.
 1864. Donnet, J. J. L., M.D., R.N., 5, Park Road, Bognor.
 1887. Harvey, W., M.D., St. Eveste, Newton Abbott, Devon.
 1882. Hobley, S. H., 49, Bellevue Road, Southampton.
 1866. Home, A. H., M.D., Hullerhurst, Steventon, Ayrshire.
 1887. Kelly, C., M.D., Ellesmere Road, Worthing.
 1889. McVail, John C., M.D., Kilmarnock, Ayrshire.
 1872. Moore, J. W., M.D., 40, Fitzwilliam Square West, Dublin.
 1879. Ransome, W. H., M.D., F.R.S., Nottingham.
 1875. Ransome, Arthur, M.D., F.R.S., Devisdale, Bowdon, Cheshire.
 1875. Russell, J. B., M.D., 1, Montrose Street, Glasgow.
 1890. Smith, P. C., Motherwell, Lanarkshire.
 1887. Weleh, H., M.D., Blackpool, Lancashire.
 1865. Williams, C., 48, Prince of Wales's Road, Norwich.
 1884. Williamson, R. E., M.B., Brookfield, Lymm, Cheshire.