

THE ROYAL SOCIETY AND THE PROPOSED ACADEMY.

A COPY of the following petition referring to the proposed British Academy has been sent to us for publication :—

To the KING'S MOST EXCELLENT MAJESTY IN COUNCIL

The Humble Petition of

AVEBURY, F.R.S., P.C., Past President, British Association
 C. ROBERT SPENCER, P.C., M.P.
 WELBY, G.C.B., Past Permanent Secretary of the Treasury, Alderman L.C.C.
 G. F. BRISTOL
 ROWLAND BLENNERHASSETT, Bart., LL.D., President of the Queen's College, Cork; Senator of the Royal University of Ireland
 WM. DUNN, Bart., M.P.
 LOWTHIAN BELL, F.R.S.
 JOHN KIRK, G.C.M.G., K.C.B., F.R.S.
 W. B. RICHMOND, K.C.B., R.A.
 W. H. WHITE, K.C.B., F.R.S., Past Director of Naval Instruction
 W. H. PREECE, K.C.B., F.R.S., Past Engineer-in-Chief G.P.O.
 C. W. WILSON, R.E., K.C.B., F.R.S., Past Director-General Ordnance Survey
 J. NORMAN LOCKYER, K.C.B., F.R.S., Director Solar Physics Observatory, South Kensington
 R. GIFFEN, K.C.B., F.R.S., Past Controller-General of Commercial Labour and Statistical Department Board of Trade
 SPENCER WALPOLE, K.C.B., Past Secretary of the Post Office
 WM. TURNER, K.C.B., F.R.S., President of the General Medical Council; Past President of the British Association
 HENRY CRAIK, K.C.B., Secretary Scotch Education Department
 DONALD MACKENZIE WALLACE, K.C.I.E., K.C.V.O.
 B. BAKER, K.C.M.G., F.R.S.
 A. E. BATEMAN, K.C.M.G., Comptroller-General for Commerce, Labour and Statistics Board of Trade
 ARCHIBALD GEIKIE, F.R.S., Past Director-General of Geological Survey; Past President of the British Association
 WILLIAM CROOKES, F.R.S., Past President of the British Association
 H. T. WOOD, Secretary of the Society of Arts
 W. MARTIN CONWAY, Slade Professor of Fine Arts, Cambridge University; Past Chairman of the Society of Authors
 JOSHUA G. FITCH, Past Chief Inspector of Training Colleges
 LAUDER BRUNTON, F.R.S., Physician to St. Bartholomew's Hospital
 OWEN ROBERTS, Clerk to Worshipful Company of Cloth-Workers
 WEMYSS REID
 C. HUBERT H. PARRY, Professor of Music, Oxford University
 J. BENJAMIN STONE, M.P.
 WALTER PARRATT, M.V.O., Master of the King's Musick
 WALTER FOSTER, M.D., D.C.L., M.P.
 JOSEPH LEIGH, M.P.
 LEWIS MORRIS
 R. R. HOLMES, C.V.O., Librarian to His Majesty at Windsor; Fellow and Member of Council of the Society of Antiquaries
 E. ROBERT FESTING, F.R.S., Director Science Museum, South Kensington
 E. W. BRABROOK, C.B., Chief Registrar of Friendly Societies; F.S.A., Past President Anthropological Institute
 D. R. FEARON, C.B., Charity Commissioner
 EDWARD DICEY, C.B.
 A. SCHUSTER, F.R.S., Professor of Physics the Owens College, Manchester
 R. MELDOLA, F.R.S., Professor of Chemistry Finsbury Technical College
 HORACE T. BROWN, F.R.S.
 JOHN I. THORNYCROFT, F.R.S.
 T. G. BONNEY, F.R.S., Past President Geological Society
 SIDNEY LEE
 CECIL SMITH, Assistant Keeper Department of Greek and Roman Antiquities British Museum

GEORGE A. MACMILLAN, Hon. Sec. Hellenic Society
 CHARLES VILLIERS STANFORD, Professor of Music Cambridge University
 N. MACCOLL
 T. BAYLEY, M.P.
 A. SIEMENS
 A. A. COMMON, F.R.S., Past President Royal Astronomical Society
 EMANUEL GREEN, Vice-President Royal Archaeological Institute
 F. C. PENROSE, F.R.S., Past President Royal Institute of British Architects
 E. ROBERTSON, K.C., M.P.
 JOHN PERRY, F.R.S., Professor of Mathematics Royal College of Science
 T. BAILEY SAUNDERS
 A. CONAN DOYLE
 T. CLIFFORD ALLBUTT, F.R.S., Regius Professor of Physics in the University of Cambridge
 BENJAMIN KIDD
 C. H. READ, Keeper of British Antiquities British Museum; Secretary Society of Antiquaries and Past President Anthropological Institute
 G. HY. BOUGHTON, R.A.
 S. ALEXANDER, Professor of Philosophy at the Owens College
 ALFRED HOPKINSON, Principal of the Owens College
 SIDNEY J. HICKSON, F.R.S., Professor of Zoology the Owens College
 J. F. TOUT, Professor of History the Owens College
 HORACE LAMB, F.R.S., Professor of Mathematics the Owens College
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 ISAMBARD OWEN, Deputy Chancellor of the University of Wales
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 W. H. HADOW, Fellow of Worcester College, Oxford
 W. A. SPOONER, Fellow of New College, Oxford
 A. V. RICHARD, Fellow of New College, Oxford
 OLIVER J. LODGE, F.R.S., Principal, University of Birmingham
 J. H. POYNTING, F.R.S., Professor of Physics University of Birmingham
 BENEDICT W. GINSBURG, LL.D. (Cantab.)
 P. S. CRAIGIE, Hon. Sec. Royal Statistical Society
 R. HENRY REW
 G. GRIFFITH, Assistant General Secretary British Association
 E. RAY LANKESTER, F.R.S., Director of the Natural History Departments British Museum
 PERCY F. FRANKLAND, F.R.S., Professor of Chemistry University of Birmingham
 JOHN G. MCKENDRICK, F.R.S., Professor of Physiology University of Glasgow
 BERTRAM C. A. WINDLE, F.R.S., Professor of Anatomy and Dean of the Medical Faculty University of Birmingham
 DAVID FERRIER, F.R.S., Professor of Neuro-Pathology King's College, London
 O. HENRICI, F.R.S., Professor of Mathematics City and Guilds Central Technical Institute
 W. GREENWELL, F.R.S., Canon of Durham
 REGINALD L. POOLE, Lecturer in Diplomatic in the University of Oxford
 P. L. SCLATER, F.R.S., Secretary Zoological Society
 GEORGE BRODRICK, Warden of Merton College, Oxford
 ALEX. CRUM BROWN, F.R.S., Professor of Chemistry University of Edinburgh
 JAMES GEIKIE, F.R.S., Professor of Geology University of Edinburgh
 E. A. SCHÄFER, F.R.S., Professor of Physiology University of Edinburgh

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 W. BOYD DAWKINS, F.R.S., Professor of Geology and Palaeontology in the Victoria University, Manchester
 R. T. GLAZEBROOK, F.R.S., Director National Physical Laboratory
 H. B. TRISTRAM, F.R.S., Canon of Durham
 H. KYNASTON, D.D. (Camb.), Canon of Durham and Professor of Greek in the University of Durham
 L. C. MIALI, F.R.S., Professor of Biology Yorkshire College
 ARTHUR SMITHELLS, F.R.S., Professor of Chemistry Yorkshire College
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 ASTON WEBB, A.R.A.
 G. B. HOWES, F.R.S., Professor of Zoology Royal College of Science
 WM. GARNETT, Secretary Technical Education Board L.C.C.
 ADAM SEDGWICK, F.R.S., Reader of Animal Morphology University of Cambridge
 W. ALDIS WRIGHT, Vice-Master Trinity College, Cambridge
 THOMAS SHAW, K.C., M.P.
 WILLIAM RAMSAY, F.R.S., Professor of Chemistry in University College, London
 H. CHARLTON BASTIAN, F.R.S., Emeritus Professor of Medicine University College, London
 F. A. CHANNING, M.P., Past Lecturer in Philosophy University College, Oxford
 WM. ALLAN, M.P.
 ISAAC BAYLEY BALFOUR, F.R.S., King's Botanist in Scotland
 FRANCIS ELGAR, F.R.S., Past Director of H.M. Dockyards
 N. BODINGTON, Litt.D., Principal, Yorkshire College
 FRANK E. BEDDARD, F.R.S., Vice-Secretary Zoological Society

Sheweth

That Whereas His Majesty King Charles II., in order to prove that His Majesty did "look with favour upon all forms of Learning" and particularly "Philosophical Studies," and in order that such Learning and Studies should "shine conspicuously" among his People, did by Charters granted in the 14th, 15th and 21st years of His Reign found the Royal Society for the promotion of such Learning and Studies

And Whereas the progress of Learning and Philosophical Studies has been great, and scientific methods of inquiry have been applied to many new fields of knowledge since the time of His Majesty King Charles II.

And Whereas Your Petitioners are of opinion that it is desirable that all the Intellectual forces of the Realm should be so organised as to promote the greatest advancement of Scientific Studies within the Empire

And Whereas a large and influential group of representatives of Studies connected with History, Philosophy and Philology have lately presented a petition to Your Majesty praying to be embodied under Royal Charter as an Academy or like institution

And Whereas Your Petitioners are of opinion that such incorporation can be most efficiently provided for in some relationship to the Royal Society

We Your Petitioners humbly pray that Your Majesty may be graciously pleased to cause an Inquiry to be made with a view of instituting a general and formal organisation of all the Studies depending upon Scientific Method now carried on similar to that inaugurated for the Philosophical Studies of the 17th century by the Charters of His Majesty King Charles II.

And Your Petitioners will ever pray,

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POSITION AND PROMISE OF WIRELESS TELEGRAPHY.

THE meeting of Marconi's Wireless Telegraphy Company held last week was of more interest than such meetings usually are, as Mr. Marconi made use of the opportunity by replying in a long speech to the many adverse criticisms which had been passed on his work. No new development has ever been brought about without having to encounter a certain amount of opposition; wireless telegraphy is no exception to the general rule, and the criticism which it has had to meet has been accentuated on account of the magnitude of the interests vested in cable enterprise. But wireless telegraphy has also enjoyed more than its share of popular enthusiasm, and it is perhaps partly on account of the unreasoning nature of this enthusiasm that technical writers have thought it desirable to sound a warning note. It is doubtless unnecessary to sell out cable shares immediately because the signal "S" has been successfully transmitted across the Atlantic, but it is equally unnecessary to assume that the result is not genuine before the details of the experiments have been published. With reference to these recent experiments, and the suggestion put forward by some of the technical papers that Mr. Marconi was deceived by atmospheric disturbances, he appeals, we think with justice, to his long experience in the matter as sufficient guarantee of the genuineness of the result, and points out that in his first successful experiment over 200 miles it was the same signal that was received.

The question has often been asked, Why is it that, if a distance of 2000 miles can be bridged, the system is not in actual commercial operation over shorter distances?

To this Mr. Marconi replies that the Post Office monopoly prevents its adoption round the coasts of this island, but that it is in continuous and perfectly satisfactory work in connection with more than seventy ships and twenty-five land stations, as readers of NATURE are aware from paragraphs which have appeared from time to time in our Notes columns.

The greatest interest, however, centres around the questions of the speed and the secrecy of signalling. Mr. Marconi states that with his latest apparatus a speed of twenty-two words a minute is obtainable. For short distances much higher cable speeds are possible, but in Transatlantic work the speed of signalling under the best conditions is only about forty words per minute, so that in this respect wireless telegraphy can certainly become a serious competitor. Distance, it is stated, has no effect on the rapidity of signalling by ætheric waves, a result which was, of course, to be anticipated on theoretical grounds.

As to secrecy, Mr. Marconi asserts that the development of his syntonic system has been carried so far that no interference troubles need be feared, and quotes an interesting example in support of this contention. The permanent station at the Lizard is at present able to work with ships without suffering any interference from the working of the big-power station at Poldhu, only seven miles distant, from which the signals were transmitted to Newfoundland. The solution of the problem of tuning has always been seen to be of fundamental importance to wireless telegraphy, and if Mr. Marconi has successfully achieved this result, it is a development greater and more far-reaching than even the Transatlantic signalling. That he is himself confident of having done so may be inferred from the challenge which he issued to Sir W. Preece and Prof. Lodge to intercept and read any of his messages, for which purpose he offers to put any of his adjacent stations at their disposal.

At the present day, when the general public takes