

MEMBERSHIP IN THE NATIONAL ACADEMY OF SCIENCES BY

STATES			
New York	41	Pennsylvania	4
Massachusetts	39	Ohio (Cleveland dis-	
Washington, D. C.	27	trict)	4
Illinois	23	Rhode Island	3
California	21	Michigan (Ann Arbor) ..	2
Connecticut	18	Missouri (St. Louis)....	2
Maryland	14	Arizona (Flagstaff)	1
New Jersey	8	Indiana (Bloomington) ..	1
Wisconsin	8	Iowa (Iowa City)	1
		Total	217

MEMBERSHIP IN THE NATIONAL ACADEMY OF SCIENCES IN

INSTITUTIONS OF LEARNING			
Harvard University	27	University of Michigan	2
University of Chicago....	17	Northwestern Univer-	
Yale University	17	sity	2
Columbia University	15	Washington University	2
Johns Hopkins Univer-		Case School of Applied	
sity	13	Science	1
University of Califor-		University of Indiana....	1
nia	8	University of Iowa.....	1
Princeton University	7	Vassar College	1
Stanford University	7	Carnegie Institution	9
University of Wiscon-		Smithsonian Institution	
sin	7	and National Mu-	
Cornell University	6	seum	8
University of Illinois....	4	Rockefeller Institute	6
California Institute of		U. S. Geological Survey	5
Technology	3	Bureau of Standards....	3
University of Pennsyl-		American Museum of	
vania	3	Natural History	2
Brown University	2	U. S. Department of	
Clark University	2	Agriculture	2
Massachusetts Institute		Miscellaneous	32
of Technology	2		
		Total	217

If on the map of the United States a broken line be drawn from Salem, Massachusetts, on the Atlantic Coast through Schenectady, Ithaca, Pittsburgh and back to the Coast through Washington, D. C., the area defined will contain the residences of 154 out of the 217 members of the academy, or 71 per cent. A broken line from Cleveland through Ravenna (Ohio), Bloomington (Indiana), Urbana (Illinois), Chicago, Madison and Ann Arbor will enclose the residences of 38 members, or 17.5 per cent. A line in California starting at Berkeley, and passing through Palo Alto, Mt. Hamilton, Pasadena and ending at La Jolla will carry 21 members, or 10 per cent. Only 4 members are left to represent the remainder of our country: 2 at St. Louis (Missouri) and 1 each at Flagstaff (Arizona) and Iowa City (Iowa); in other words, excepting 21 members in California there are only 4 members living west of a north and south line drawn through Madison (Wisconsin). There is no member

in the part of the country lying east of the Mississippi and south of a line drawn from St. Louis through Bloomington (Indiana), Pittsburgh and Washington, D. C., and there is no member in the three New England States north of Massachusetts. Six states and the District of Columbia contain 183 members, and 10 states contain the remaining 34 members; 32 states out of the 49 divisions have no members.

It should be said that the policies of the National Academy of Sciences have limited its memberships to representatives of the physical and biological sciences, with very few exceptions. The distribution of memberships seems to be worthy of the thoughtful consideration of all who are in any way responsible for the higher educational interests of the nation.

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SCIENTIFIC EVENTS

THE LIVERPOOL MEETING OF THE
BRITISH ASSOCIATION¹

THE meeting of the British Association which concluded on September 19 was in many ways notable, and marked the successful introduction of various changes in the local and scientific proceedings. In point of numbers it was the third largest meeting (Australia in 1914 excepted) in the long history of the association, but the actual number of tickets taken is not the only criterion for success. Figures are, however, of some value; for one of the objects of the association, namely, to spread knowledge of science and what it stands for, can be most successfully accomplished by an appeal to the public receiving ready response.

While the membership numbered 3,296, not less than 15,000 people attended the free public lectures in Liverpool and the surrounding boroughs, while more than 7,000 paid admission to the Scientific Exhibition held under the auspices of the association in the Central Technical School on September 10-22, and this number does not include members of the association itself, who were admitted free.

Further, the sectional meetings were almost all not merely well attended but often overcrowded, a condition which spoke well for the enthusiasm for scientific knowledge among the members, but also illustrated the attractiveness of the programs.

The inaugural meeting, when the president delivered his address, was remarkable for the fact that the whole proceedings were broadcasted, and in two halls in Liverpool the wireless version was accompanied by lantern illustrations identical with and shown simul-

¹ From an article in *Nature* by Dr. Alfred Holt.

taneously with the originals shown during the address itself in the Philharmonic Hall. The address was well heard in most parts of the British Isles, and was even picked up so far away as Switzerland. This is, indeed, an example of the development of physical science since the last Liverpool meeting held in 1896.

The place of the customary second evening lecture was taken by a most successful scientific soirée given by the local committee at the university. A wonderful series of experimental and other exhibits had been arranged and a most comprehensive program had been prepared, but unfortunately, owing to the awkward lay-out of the university buildings, it must have been nearly impossible for very many of the large and enthusiastic gathering to see properly one half of all the interesting things on view or to hear many of the excellent series of lecturettes. Such a soirée, however, is full of value and was greatly appreciated, and the excellence of all the arrangements at it reflected the greatest credit on all those concerned in its organization.

EXPEDITION FOR THE STUDY OF TROPICAL DISEASES IN SAMOA

ACCORDING to the London correspondent of the *Journal* of the American Medical Association a new expedition to the tropics for the study of disease is about to start for Samoa under the auspices of the London School of Tropical Medicine. Its main object is the study of filariasis, which affects eighty-five per cent. of the natives of the Pacific Islands. The expedition will be under the direction of Dr. Buxton, a fellow of Trinity College, Cambridge, who is well known for his work in entomology, performed in Mesopotamia during the war, and later as entomologist for the Palestine government in Jerusalem. The expedition will be away for two years and will have its headquarters at Apia. It will work in cooperation with the New Zealand government, which is responsible for the administration of the Samoan group. It is thought that the susceptibility of the Polynesians to disease, especially to tuberculosis, and the decline of their numbers to the extent of threatened extinction, may be due to filariasis. Infection seems to be due to a *Stegomyia* mosquito which is apparently confined to the Pacific Islands. An attempt will be made to eliminate the disease by exterminating the mosquito on lines similar to those that were adopted in Panama and other places. It is thought that the problem is comparatively simple, as the mosquito lives in and around coconut trees and is found in the empty coconut shells, which are stacked in the making of copra. It is proposed to take over a small island a mile or so in diameter, where every breeding place of the mosquito will be effectively dealt with. The native method of storing water is in artificially hol-

lowed coconut trees. It is proposed to substitute, for these, properly constructed cisterns. Moreover, the mosquito does not seem able to exist where the dense undergrowth has been properly cut down. If airways or rides are cut through the dense jungle and the insect is exposed to the trade winds of the Pacific, it may be blown away. An object lesson of this kind can then be applied to the larger islands. Other parasitic diseases prevalent in Samoa, particularly ancylostomiasis, will also be studied. Finally, the effects of the tropical climate on Europeans will be investigated more minutely than has been done previously. The finer methods available since the recent development of biochemistry will be used. Thus, the effect of the sun's rays on the human skin will be investigated with the catathermometer. As an expert ornithologist and entomologist, Dr. Buxton also hopes to bring back a collection of birds and insects (many of which are becoming extinct) for the British Museum.

THE ADJUSTMENT OF AUTOMOBILE HEADLIGHTS

THE Bureau of Standards is conducting work on the better adjustment of automobile headlights. In addition to that carried out locally in the District of Columbia, the bureau is sponsoring a national movement to secure headlight adjustment. A representative of the bureau emphasized the importance of the member club activity in this matter at a meeting of officials of the National Motorists Association in Cleveland, September 20, 21 and 22. This association and the American Automobile Association, as well as all similar organizations, are in a particularly favorable position to place before motorists the necessity for headlight adjustment. The problem has also been discussed in the broadcasting programs which the American Automobile Association sends out through radio station WRC.

The National Automobile Chamber of Commerce is calling the attention of motor car manufacturers to the necessity of closer supervision of their dealer and service activities so that the two or three million new cars turned out annually will have properly adjusted headlights. The Motor and Accessory Manufacturers' Association has made a similar offer to get in touch with headlight manufacturers to insure the furnishing with all headlight devices of simple and adequate instructions for their adjustment. The Society of Automotive Engineers is giving active support through its Standards Committee, particularly along the lines of standardizing and improving headlight construction.

If all headlights could be focused in the same manner, this would simplify the instructions required and facilitate adjustment. In fact, any action taken which may make adjustment easier will be a step forward.

All the national associations approached have