

tion, or the obstacles which arise when the whole economic basis of the community is disturbed by a cataclysm such as that which came upon us thirteen months ago. The sorry catchword "business as usual" must have sounded very ironically in the ears of many business men confronted with unforeseen and unprecedented difficulties on every side. The indomitable spirit with which they were met, the energy and determination with which they were overcome, afford further evidence of that which has been so gloriously demonstrated on land and sea, that the traditional courage and grit of the British race have not been lost.

To the question how have our oversea food supplies been maintained during the first year of the war, the best answer can be given in figures.

Imports of the principal kinds of food during the first eleven months of the war were as under, the figures for the corresponding period of 1913-14 being shown for comparison:

	1914-15, Thous- ands of Cwts.	1913-14, Thous- ands of Cwts.	Increase + or De- crease — Per Cent.
Wheat (including flour)	113,797	113,398	— 1.39
Meat.....	15,868	18,026	—11.97
Bacon and hams.	7,452	5,975	+24.72
Cheese.....	2,766	2,386	+15.93
Butter (including margarine) ..	5,376	5,748	— 6.47
Fruit.....	18,830	17,512	+ 7.53
Rice.....	9,573	4,840	+97.79
Sugar.....	35,029	38,356	— 8.67

In total weight of these food-stuffs, the quantity brought to our shores was rather larger in time of war than in time of peace. Yet one still occasionally meets a purblind pessimist who plaintively asks what the navy is doing. This is a part of the answer. It is also a measure of the success of the much-advertised German "blockade" for the starvation of England. So absolute a triumph of sea-power in the first year of war would have been treated as a wild

dream by the most confirmed optimist two years ago. The debt which the nation owes to our sailor-men is already immeasurable. That before the enemy is crushed the debt will be increased we may be assured. The crisis of our fate has not yet passed, and we may be called upon to meet worse trials than have yet befallen us. But in the navy is our sure and certain hope.

That which they have done is but earnest of the things that they shall do.

Under the protection of that silent shield the land may yield its increase untrodden by the invading foot, the trader may pursue his business undismayed by the threats of a thwarted foe, and the nation may rely that, while common prudence enjoins strict economy in husbanding our resources, sufficient supplies of food will be forthcoming for all the reasonable needs of the people.

R. H. REW

THE MANCHESTER MEETING OF THE BRITISH ASSOCIATION

In an account of the meeting *Nature* states that the number of members and associates (1,438), although satisfactory in the circumstances, was small as compared with previous meetings. But it is said that the section rooms were well filled both in the morning and afternoon sittings, and the proceedings were of exceptional interest.

The reception by the Lord Mayor in the School of Technology on Wednesday evening was the only general social function of the week, but being fixed on the second day of the meeting it gave a welcome opportunity to members to meet their friends as well as to inspect the machinery, appliances and lecture-rooms with which this great institution is equipped. The arrangements made by the committee for the visits of members to factories, warehouses, municipal undertakings and various places of special interest in Manchester and district worked well, and the short excursions were well attended. The citizen's lectures given in Manchester and other towns

in the neighborhood attracted large audiences. The subjects dealt with were: "Evolution and War," by Professor F. W. Gamble; "The Strategic Geography of the War," by Dr. Vaughan Cornish; "The Making of a Big Gun," by Dr. W. Rosenhain; "Daily Uses of Astronomy," by Mr. A. R. Hinks; "Health Conditions in the Modern Workshop," by Professor B. Moore; "Formation of the Sun and Stars," by the Rev. A. L. Cortie; "Some Lessons from Astronomy," by Professor H. H. Turner; and on "Curiosities and Defects of Sight," by Dr. W. Stirling, professor of physiology in the University of Manchester.

Grants of money appropriated for scientific purposes on behalf of the general committee are given below. The names of members entitled to call on the general treasurer for grants are prefixed to the respective committees. Of the forty-one committees receiving grants, only five are new.

SECTION A—MATHEMATICAL AND PHYSICAL SCIENCE

Professor H. H. Turner—Seismological observations	130
Sir W. Ramsay—Tables of constants	40
Professor M. J. M. Hill—Mathematical tables. 35	

SECTION B—CHEMISTRY

Professor H. E. Armstrong—Dynamic isomerism	20
Professor F. S. Kipping—Aromatic nitroamines	10
Mr. A. D. Hall—Plant enzymes	10
Professor H. E. Armstrong—Solubility phenomena	5
Professor H. E. Armstrong—Eucalypts	30
Professor Orme Masson—Influence of weather conditions on nitrogen acids in rainfall and atmosphere	20
Professor W. J. Pope—Crystalline form and molecular structure	10
Dr. F. D. Chattaway—Non-aromatic diazonium salts	8
Sir J. J. Dobbie—Absorption spectra, etc....	10

SECTION C—GEOLOGY

Professor Grenville Cole—Old red sandstone rocks of Kiltoran	7
Professor W. W. Watts—Critical sections in Paleozoic rocks	20

Professor P. F. Kendall—List of characteristic fossils	10
Dr. J. Horne—Old red sandstone rocks at Rhynie	25
Dr. R. Kidston—Lower Carboniferous flora at Gullane	8

SECTION D—ZOOLOGY

Dr. A. E. Shipley—Belmullet Whaling Station. 25	
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SECTION E—GEOGRAPHY

Sir C. P. Lucas—Conditions determining selection of sites and names for towns	15
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SECTION F—ECONOMIC SCIENCE AND STATISTICS

Professor J. H. Muirhead—Fatigue from economic standpoint	40
Professor W. R. Scott—Industrial unrest....	20
Professor W. R. Scott—Women in industry ...	90
Professor W. R. Scott—Effects of war on credit, etc.	25

SECTION G—ENGINEERING

Professor J. Perry—Complex stress distributions	40
Cr. Dugald Clerk—Gaseous explosions	50
Dr. H. S. Hele-Shaw—Engineering problems affecting prosperity of the country	10

SECTION H—ANTHROPOLOGY

Sir C. H. Read—Age of stone circles	25
Professor G. Elliot Smith—Physical characters of ancient Egyptians	15
Dr. R. R. Marett—Paleolithic site in Jersey..	25
Professor J. L. Myres—Archeological investigations in Malta	10
Professor J. L. Myres—Distribution of Bronze age implements	5

SECTION I—PHYSIOLOGY

Sir E. Schäfer—Ductless glands	20
Professor C. S. Sherrington—Mammalian heart. 20	

SECTION K—BOTANY

Professor F. O. Bower—Cinchona Station, Jamaica	12
Professor F. W. Oliver—Structure of fossil plants	2
Professor F. F. Blackman—Heredity	45

SECTION L—EDUCATION

Professor J. A. Green—Museums	15
Dr. G. A. Auden—School books and eye-sight. 5	
Dr. C. S. Myers—Mental and physical factors. 20	

Mr. C. A. Buckmaster—"Free-place" system. 10

CORRESPONDING SOCIETIES COMMITTEE

Mr. W. Whitaker—For preparation of report. 25

Total£968

SCIENTIFIC NOTES AND NEWS

DR. EDMUND B. WILSON, Da Costa professor of zoology, gave the annual address at the opening exercises of Columbia University on September 29, his subject being "Science and Education."

DEAN FREDERICK J. WULLING, of the College of Pharmacy of the University of Minnesota, was chosen president of the American Pharmaceutical Association, which held a session in San Francisco in August.

DR. THEOBOLD SMITH, director, and other members of the staff of the Rockefeller Institute for the Study of Animal Diseases which is being built near Princeton at a cost in the neighborhood of a million dollars, have started their work in a suite of four rooms loaned by the biology and geology departments of Princeton University. The buildings of the institute will be on a tract of 480 acres, lying near the Walker-Gordon farms and are expected to be completed within a year.

DR. A. F. BLAKESLEE, professor of botany and genetics, has taken up his work as plant geneticist at the Carnegie Institution Station for Experimental Evolution at Cold Spring Harbor, where he succeeds Dr. George H. Shull, who has become professor of botany at Princeton University.

THE Field Museum of Natural History announces the appointment of Dr. Berthold Laufer as curator of anthropology to succeed Dr. George A. Dorsey, resigned.

MR. W. G. CRAIB, assistant for India in the Kew Herbarium, has been appointed assistant to the professor of botany in the University of Edinburgh. Mr. J. Hutchinson succeeds Mr. Craib at the Royal Gardens.

R. A. JEHLE has been appointed plant pathologist of the Florida Plant Board. His work will be investigation of citrus canker, a serious disease of citrus fruits, which was

probably introduced into the United States from Japan a few years ago. His address will be Homestead, Florida.

PROFESSOR W. S. FRANKLIN will make a tour of the universities and technical schools of the south and west during the coming fall and winter; and he offers to give, in connection with this trip, a number of theoretical and experimental lectures. Professor Franklin may be addressed during October and November at Columbia University, New York City.

AT the forty-third annual meeting of the American Public Health Association, held in Rochester, N. Y., September 6 to 10, under the presidency of Professor William T. Sedgwick, of the Massachusetts Institute of Technology, the following officers were elected: President, Dr. John F. Anderson, director of the hygienic laboratory of the United States Public Health Service, Washington, D. C.; first vice-president, Dr. George W. Goler, health officer of Rochester, N. Y.; second vice-president, Dr. Charles J. Hastings, medical officer of health, Toronto, Canada; third vice-president, Dr. Omar Gillette, of Colorado Springs, Colo.; treasurer, Dr. Lee K. Frankel, of New York (reelected); secretary, Professor Selskar M. Gunn, of Boston (reelected). The following were elected to honorary membership in the association: Surgeon-General William C. Gorgas, United States Army; Dr. Stephen Smith, of New York, a member of the State Board of Charities; Dr. Frederick Montizambert, of Ottawa, director general of public health of the Dominion of Canada; and Dr. Henry D. Holton, of Brattleboro, Vt.

PROFESSOR HENRY R. FRANCIS, of the Landscape Extension Service of the College of Forestry at Syracuse, is completing a field study of the 300-mile highway which is being planned by the Massachusetts Forestry Association and which will run from Boston westward nearly to the New York line and then turn back eastward to Cambridge.

NELSON C. BROWN, professor of forest utilization in the State College of Forestry at Syracuse, has returned from a 6,000-mile trip