

giving them the opportunity for promotion as those in the higher positions leave or are promoted. In order to show what these higher salaried positions are, a list of the positions now authorized in the Bureau of Laboratories is given:

BIOLOGICAL LABORATORY.

Director, Biological Laboratory.....	\$3,500
Pathologist and investigator.....	2,750
Pathologist	2,250
Pathologist	2,000
Bacteriologist	1,800
Entomologist	1,800
Bacteriologist	1,500
Assistant bacteriologist (two).....	1,200

CHEMICAL LABORATORY.

Chemist and investigator.....	2,500
Chemist, Economic Products Division.....	2,250
Analyst	2,000
Botanist	2,000
Physiological chemist	1,800
Assayer	1,800
Chemist (two)	1,600
Analyst	1,600
Chemist	1,500

SERUM LABORATORY.

Director, Serum Laboratory.....	3,000
Assistant director	2,500
Veterinarian	1,600
Assistant	1,400
Assistant bacteriologist	1,500

Vacancies are liable to occur in this list, and the employees who are at present in the bureau, if fit for the work, will, step by step, be promoted as the opportunity arises. Energetic young men who are willing to work up in the service are desired. Colleges and universities which are able to train properly qualified men are requested to submit lists of candidates each year so that a sufficient number of names may always be on hand. Facilities for all classes of work will be of the best, and an adequate library will be available.

THE CAMBRIDGE MEETING OF THE
BRITISH ASSOCIATION.

As we have already reported the British Association will meet this year at Cambridge, under the presidency of the Honorable A. J. Balfour, the British premier, from August 17

to 24. We take from *Nature* the following facts in regard to the meeting:

In 1833, the third year of its existence, the association met at Cambridge under the presidency of Professor Adam Sedgwick; Sir J. F. W. Herschel presided over the second meeting in 1845, and the third Cambridge meeting was held in 1862 under the presidency of Professor Willis.

The sectional meetings will in most cases be held in the buildings of the several science departments. The sections are the following: A, mathematical and physical science, president, Professor Horace Lamb, F.R.S.; B, chemistry, president, Professor Sydney Young, F.R.S.; C, geology, president, Mr. Aubrey Strahan, F.R.S.; D, zoology, president, Mr. William Bateson, F.R.S.; E, geography, president, Mr. Douglas W. Freshfield; F, economic science and statistics, president, Professor William Smart; G, engineering, president, Hon. Charles A. Parsons, F.R.S.; H, anthropology, president, Mr. Henry Balfour; I, physiology, president, Professor C. S. Sherrington, F.R.S.; K, botany, president, Mr. Francis Darwin, F.R.S.; L, educational science, president, the Right Rev. the Lord Bishop of Hereford.

A 'Handbook to the Natural History of Cambridgeshire' specially written for the meeting under the editorship of Dr. J. E. Marr and Mr. A. E. Shipley, will be published by the University Press; the syndics of the press have decided to present a copy to each ticket-holder, provided that the number to be supplied for the purpose does not exceed 2,000 copies. A special edition of Mr. J. W. Clark's 'Guide to the Town and University' will be presented to each member of the association, also a series of excursion guides, together with a colored map of East Anglia supplied by the director-general of the ordnance surveys.

Emmanuel College has agreed to entertain the secretaries of sections. The majority of the colleges have expressed their willingness to entertain free of charge a limited number of distinguished guests, and some of the colleges have agreed to place rooms at the disposal of members of the association, making a charge for meals and attendance. Girton and

Newnham Colleges, and the Ladies' Training College, have also agreed to extend hospitality and lodging accommodation to British and foreign visitors.

A considerable number of favorable replies have been received in answer to invitations issued to American and foreign men of science; it is expected that at least 100 visitors from abroad will be present.

The master and fellows of Trinity College have granted the use of the college for a *conversazione* and reception to be held on Thursday, August 18. The Lord-Lieutenant of Cambridgeshire and the Mayor of Cambridge will entertain the members and associates at a garden-party in the Botanic Garden on Monday, August 22. The High Sheriff of Cambridgeshire has also expressed his intention of giving a garden-party during the meeting. On Friday, August 19, a garden-party will be given by the principal of Girton College, and on Tuesday afternoon, August 23, members of the association will be entertained at Newnham College.

It is hoped that a *table d'hôte* lunch will be served on week-days in certain college halls. Light refreshments will be served each day (including Sunday) in the Masonic Hall, adjoining the museums and close to the reception room, from 12 to 8 P.M. It has also been arranged to have an open-air café and beer-garden on ground adjoining the museums, which will be open on week-days from 11 to 6.

The committee has provisionally arranged eleven excursions for Saturday, August 20. These include Audley End and Saffron Walden, Brandon and Diddington Hall (flint-knapping industry and Lord Amherst's collection of Egyptian antiquities), Cromer (geological), the Dykes of Cambridgeshire; Ely, Hatfield and St. Albans, Lincoln, Lynn, Castle Rising and Sandringham, Norwich, Wicken Fen, Wisbech and Woad Works.

On Thursday afternoon, August 18, the registry of the university, Mr. J. Willis Clark, will deliver a lecture on 'The Origin and Growth of the University.' The evening lecture on Friday, August 19, will be on 'Ripple-marks and Sand-dunes,' by Professor George Darwin, and on Monday, August 22,

the second evening lecture will be delivered by Professor H. F. Osborn, of New York, who will give an account of 'Recent Explorations and Researches on Extinct Mammalia.' On Saturday, August 20, Dr. J. E. Marr will lecture to the operative classes on 'The Forms of Mountains.'

A classified list of lodgings and hotel accommodation is now being prepared for the use of intending visitors. Information in regard to lodgings may be obtained from Mr. A. Hutchinson, Pembroke College. General inquiries should be addressed to the local secretaries, British Association, or to Mr. A. C. Seward, Emmanuel College, Cambridge.

SCIENTIFIC NOTES AND NEWS.

DR. JOHN M. CLARKE, paleontologist of the state of New York, has been appointed by the regents of the University of the state of New York to succeed Dr. Frederick J. H. Merrill as geologist and director of the State Museum.

DR. F. S. EARLE, assistant curator of the New York Botanical Garden, has resigned to accept the office of director of the new agricultural station in Cuba. The station will occupy a farm and buildings at Santiago de la Vegas, about twelve miles from Havana. The sum of \$75,000 has been appropriated for the establishment and maintenance of the station for the first year.

DR. HERBERT HAVILAND FIELD, director of the Concilium Bibliographicum, has been elected an honorary member of the Leipzig Society of Naturalists.

SIR GUILFORD L. MOLESWORTH has been elected president of the British Institution of Civil Engineers.

PROFESSOR V. L. KELLOGG, head of the department of entomology of Stanford University, will spend the greater part of next year in Germany, Italy and England.

DR. M. P. RAVENEL and Dr. Leonard Pearson, of the University of Pennsylvania, are about to go to Italy to undertake researches on tuberculosis in the laboratory of Professor Maragliano, at Genoa.

DR. R. HOERNES, professor of geology in the University of Graz, has been sent by the