isting trees approach the age of two thousand years.

LOCAL DESCRIPTIVE FLORAS.

IT is a good sign of the progress of systematic botany in North America that there is an increase in the number of floras of restricted regions in preparation by local botanists. Of course the authors of such floras usually succeed in adding something to the burden of botanical synonymy, but this is more than balanced by the additions made to our knowledge of the particular distribution of the species, and the geographical variations which some of them show. The 'Flora of Northwest America,' by Thomas Howell, and the 'Manual of the Flowering Plants of Iowa,' by T. J. Fitzpatrick, now publishing in parts, are good illustrations of systematic work. Of the former three parts, and of the latter two parts have appeared.

Mr. Howell's publication is more radical in its treatment of species, many being recognized as distinct which are usually not separated by botanists. In his preface he says: "Believing that if a plant has one constant character that is different from any of its congeners it is sufficient for a species; and if that plant is sufficiently distinct from others to deserve a name it is better to have it described as a distinct species than as a variety of some other species. I have, therefore, raised nearly all published varieties of the region embraced in this work to specific rank."

Mr. Fitzpatrick is more conservative, and follows more closely the common usage in this regard. In one particular he is quite abreast of the most radical of botanical writers, namely, in decapitalizing all specific names, and the omission of the comma before the authority.

In both books the descriptions are well drawn, and good keys serve to guide the student. One or two more parts of each should finish these useful books.

THE MRS. CURTISS MEMORIAL.

MANY botanists remember with pleasure the dainty specimens of marine algæ collected by Mrs. Floretta A. Curtiss, for many years a resident of Jacksonville, Florida. Year after year the little fascicles of exquisitely prepared specimens were offered to those who were interested in algæ, and who wished them for their herbaria. On March 3, 1899, she died in the seventy-seventh year of her life. Her son, A. H. Curtiss, the well-known botanical collector, has prepared a memorial, including a biographical sketch, and an index to her collections of algæ. This is in the form of a twenty-page folio pamphlet printed on heavy paper and illustrated with half-tone reproductions of photographs of the places where she lived while in pursuit of her favorite plants.

Mrs. Curtiss was born in 1822, in what was then the wilderness of central New York, not far from the present city of Syracuse. She came from New England stock, both parents being natives of Massachusetts. Immediately after the Civil War she removed with her husband to Virginia, and in 1875 with her son she took up her residence in Florida. Here she soon began the work of collecting algæ,—which she continued to the close of her life. Science owes her a debt of gratitude for the years of painstaking labor which she gave to the gathering and preservation of specimens, which have enriched the botanical collections of the World's great herbaria.

CHARLES E. BESSEY.
THE UNIVERSITY OF NEBRASKA.

THE AMERICAN PUBLIC HEALTH ASSOCIATION.

THIS Association will meet at Indianapolis from October 22d to 26th, under the presidency of Dr. Peter H. Bryee. There is a special section of bacteriology and chemistry, of which Professor Theobald Smith is Chairman. The subjects on which special committees have been appointed to make reports are:

1. 'The Pollution of Public Water Supplies'; 2. 'The Disposal of Refuse Material'; 3. Animal Diseases and Animal Food'; 4. 'Car Sanitation'; 5. 'Etiology of Yellow Fever'; 6. 'Steamship and Steamboat Sanitation'; 7. 'Relation of Forestry to the Public Health'; 8. 'Demography and Statistics in their Sanitary Relation'; 9. 'Cause and Prevention of Infectious Diseases'; 10. Public Health Legislation'; 11. The Duration of Infectious Diseases'; 12. 'Cause and Prevention of Infant Mortality'; 13. 'Disinfectants'; 14. 'Municipal Sanitary Adminis-

tration'; 15. 'To Define what Constitutes an Epidemic'; 16. 'On National Leper Home'; 17. 'Dangers to the Public Health from Illuminating and Fuel Gas'; 18. 'Revision of Bertillon Classification of Causes of Death'; 19. 'Transportation of Diseased Tissue by Mail'; 20. 'The Teaching of Hygiene and Granting of Degrees of Doctor of Public Health.'

It has been arranged to devote one day, Wednesday, October 24th, to the discussion of topics relating to sewerage and water supply. Special attention will be given to the engineering phase of this subject. The following subjects will be presented for discussion:

1. 'What Constitutes a Satisfactory Water Supply?' 2. 'The Value of Vital Statistics as an Index to the Pollution of Water Supplies'; 3. 'Comparative Statistics of the Water Supplies of the Leading American Cities as shown by Typhoid Fever Statistics'; 4. Conservation and Control of Water Supplies by State, Provincial and Municipal Authorities'; 5. 'The Relation of the Analytical Laboratory to Problems in the Pollution of Public Water Supplies'; 6. 'The Legal Aspect of Water Pollution'; 7. 'The Present Status of Methods of Purification of Sewage entering Public Water Supplies'; 8. 'Sewage Purification Plants now in Operation in America, with reference to Public Water Supplies'; 9. Methods of Purification of Water Supplies, with a Summary of Plants now in Operation in America'; 10. Recent Progress in Europe concerning the Purification of Water Supplies.'

SECTION ON BACTERIOLOGY AND CHEMISTRY.

1. 'On Standard Methods of Water Analysis'; 2. 'Laboratory Work on Tuberculosis'; 3. 'On Obtaining Experimental and Clinical Data on the Exact Mode of Infection in Rare and Unusual Cases'; 4. 'Study of the Causation of Cancer'; 5. 'Bacteriology of Milk in its Sanitary Relations'; 6. 'Variations of the Colon Bacillus in Relation to Public Health'; 7. 'Variations of the Diphtheria Bacillus'; 8. 'Bacteriology of Yellow Fever'; 9. 'Inter-Laboratory System of Card Cataloguing for Sanitary Bibliography'; 10. 'Use of Chemical Preservatives in Foods'; 11. 'Exhibition of Laboratory Apparatus and Appliances for Teaching Hygiene'; 12. 'Census of Laboratory Men engaged in Sanitary Work.'

SCIENTIFIC NOTES AND NEWS.

PROFESSOR GEORGE F. BARKER, LL.D., for twenty-eight years professor of physics in the University of Pennsylvania, has resigned his chair because of poor health. The corporation of the University has made him professor emeritus of physics and voted him a pension.

DR. N. F. DRAKE, of the Imperial Tien-Tsin University, whose explorations of the anthracite coal fields of China we recently noted, remained in Tien-Tsin during the late fighting in that city. German troops were finally stationed in the university buildings and completely destroyed the apparatus of the chemical and assay laboratories under Professor Drake's charge.

GENERAL A. W. GREELY, Chief of the Army Signal Service, has returned from Alaska. He was on board the steamer *Orizaba* which went aground at St. Michael, while laying a cable between that place and Nome.

PROFESSOR H. A. ROWLAND, of the Johns Hopkins University, was given at the Paris Exposition, in addition to the grand prize for his spectroscopic apparatus, which we have already noted, a second grand prize for his multiplex telegraph printing machine.

DR. E. W. SCRIPTURE, of Yale University, was awarded the gold medal of the Paris Exposition for methods of testing color-blindness.

PRESIDENT DANIEL C. GILMAN, of the Johns Hopkins University, who was granted a leave of absence last spring by the trustees, in commemoration of the twenty-fifth anniversary of his election, and has since been abroad, has returned to Baltimore.

THE College of Physicians of Philadelphia has awarded its Alvarenga prize for 1900 to Dr. David De Beck of Cincinnati for his essay entitled 'Malarial Diseases of the Eye.' Essays in competition for the prize next year must be received not later than May 1, 1901. The value of the prize is about $180.

THE daily papers report that the Mexican Government is considering the award of $100,000 to Dr. Angel Bellinzaghi, who was born in Italy in 1865, for his serum against yellow fever which is said to have proved successful in eighty-five per cent. of the cases in Mexican hospitals.

MR. JOHN E. HUDSON, president of the American Bell Telephone Company, died on October 1st. Under his management the com-