was a revelation to those who did not know how much of this work was being done. The symposium on Wednesday evening, on the relation of the medical services of the Government to the profession, was also most interesting and instructive. Such a symposium tends to bring the profession and the services together as nothing else can. We all realize, to a certain extent at least, what the U. S. Public Health and Marine Hospital Service and the Medical Department of the Army have done and are doing, but we have been very unfamiliar with the work of the Medical Department of the Navy. Surgeon Stokes, in his part of the symposium, showed that the medical officer of the Navy has a wider field of usefulness than is usually supposed. The last symposium, that of Thursday evening, was also valuable and instructive, and brought to the attention of the profession other work that is being done by the government that is of special interest to medical men. While the building in which these meetings were held was a large one, standing room was at a premium on each occasion. President Musser deserves the thanks of the profession for having arranged for these symposia, and those who took part in them are also entitled to thanks for what they did to make them so successful.—*Journal of the American Medical Association.*

DEDICATION OF THE MEDICAL LABORATORIES OF THE UNIVERSITY OF PENNSYLVANIA.

The dedication of the new medical laboratories of the University of Pennsylvania, which took place on Friday, June 10, constitutes an epoch in medical education in America. The ceremonies were dignified and simple, and were attended by a large number of physicians, principally members of the American Medical Association that had accepted the courteous invitation extended to them by the university to be its guests. A special train brought the visitors from Atlantic City and took them back at night. To those that had not previously visited Philadelphia, as well as to the old graduates of Philadelphia's medical schools, their visit to the university must have been a revelation. Dr. Horatio Wood, in his eloquent address at the dedication of the new laboratories, alluded to the magnificent material progress that the university has made in the last generation—a progress, one may add, in which Dr. Wood has been an important factor. The new laboratories are intended for the departments of pathology, physiology and pharmacology, and everything has been done to give these important departments an ideal home. The building is architecturally attractive, and is in harmony with the general plan of the newer buildings, especially the dormitories. Mr. J. Vaughn Merrick, in the absence of Dr. S. Weir Mitchell, the chairman of the medical committee, delivered the presentation address, to which Provost Harrison responded. Dr. H. P. Bowditch, professor of physiology at Harvard University, spoke for physiology, and emphasized the importance of the physiologic laboratory in medical instruction, although he did not fail to say a good word for didactic teaching, which must still have a place in the medical curriculum. It should be borne in mind, he said, that it is quite as possible to abuse the laboratory as the didactic method of instruction; and that in all schemes of education a good teacher with a bad method is more effective than a bad teacher with a good method. Professor R. H. Chittenden, director of the Sheffield Scientific School of Yale University, dwelt upon the importance of physiologic chemistry to medicine, and illustrated it by describing the epoch-making work of Hoppe-Seyler and his school. Dr. George Dock, professor of medicine at the University of Michigan, decried the tendency to magnify the place of the laboratory, and to encourage students to do advanced original work before the foundation is laid. He also spoke of the neglect into which pathologic anatomy has fallen, and urged the importance of performing autopsies whenever possible. The difficulty in regard to autopsies does not depend upon public sentiment alone, but upon a certain neglect upon our own part. He thought that as pathology gets everywhere out of cellars and back rooms and has a local habitation like the new laboratories, its cultivation would assume a broader and more independent character. The laboratory building is quadrangular in shape, two stories in height

above a high basement, and measures 340 feet front by nearly 200 feet in depth. All along the front are arranged small rooms for research, rooms for the professors and assistants, a library, etc.; these open into a private corridor, so that the men employed in these rooms may pursue their work without interruption from students passing through the main halls. The second floor is devoted exclusively to pathology. The entire north front of the building is devoted to laboratories for advanced students in pathology and pathologic bacteriology, and to the special research and assistants' rooms.—*American Medicine.*

BOTANICAL NOTES.

ADIRONDACK PLANTS.

MRS. ANNIE MORRILL SMITH publishes in the 'Adirondack League Club Year Book' a corrected and enlarged list of plants found on the Adirondack League Club Tract, in which are enumerated 455 species, distributed as follows: Lichens, 29; hepatics, 40; mosses, 82; ferns and their allies, 27; conifers, 11; flowering plants, 266. The nomenclature of the higher plants is that of Britton's 'Manual.' The list has been reprinted in a neat twenty-page pamphlet. The botanists of the club are to be congratulated upon this evidence of their activity in the field.

ALGAE IN WATER SUPPLIES.

GEORGE T. MOORE and Karl F. Kellerman, of the Division of Plant Physiology of the United States Department of Agriculture, have prepared a bulletin on the algae in water supplies which has been issued by the Bureau of Plant Industry (as No. 64). It appears that the investigation was first begun in order to find some cheap and practical method of preventing or removing the algal contamination of cress beds. This naturally extended to all cases of algal contamination of waters, including such growths in reservoirs in connection with water supplies for cities and towns. The importance of the matter is such that a preliminary publication is made in this bulletin in order that what has been found out as to preventives and remedies may be laid before boards of health and officers in charge of public water supplies.

It is here shown that 'it is entirely practicable to cheaply and quickly destroy objectionable algæ in small lakes, ponds, storage reservoirs and other similar bodies of water by the use of extremely dilute solutions of copper sulphate or of metallic copper.' Although copper sulphate is a poison it is to be used in such very dilute solutions as to render it harmless to man or other higher organisms. In the tests made in the cress beds it was possible to kill all of the algæ without injuring the cress, and still the solutions were so dilute that they were 'not considered injurious to man or other animals.'

The bulletin devotes some pages to the microscopical examination of drinking water, the wide distribution of trouble caused by algæ, the methods hitherto used for the abatement of the nuisance, the difficulties encountered, and then takes up the examination of the effects of various strengths of copper sulphate on different organisms. Among the organisms experimented with are *Chlamydomonas, Raphidium, Desmidium, Stigeoclonium, Draparnaldia, Navicula, Scenedesmus, Euglena, Spirogyra, Conferva, Closterium, Synura, Anabaena* and *Uroglena.* Some of these were killed in solutions as dilute as one part of copper sulphate to three million parts of water, while others endured solutions as strong as 1 to 2,000. It is evident that in order to apply this remedy the organisms must be fully known, and the authors emphasize the statement that it is impossible to tell what strength of solution to use without a thorough study of the organisms in any particular case. Incidentally they find that such treatment of the water supply is likely to destroy many pathogenic bacteria and also the larvae of mosquitoes.

STRUCTURE OF THE PLANT NUCLEOLUS.

HAROLD WAGER discusses the structure of the nucleolus of the cells of the bean (*Phaseolus*) in the January number of the *Annals of Botany,* and concludes 'that not only is the nucleolus concerned in the formation of the chromosomes, but that there is a definite morphological connection between them.' He says further that "it is found that the nucle-