of the hose under heavy duty has shown the value of these examinations.

In the case of lubricating oils, also, the contracts are let to the lowest bidder whose oil conforms to the specifications of the bureau. At one time, 26 samples of oil were rejected, and it was necessary to advertise for new bids. The second set of samples were practically all up to the requirements.

The 1,164 samples examined during the past year can not all be mentioned, but here are a few that were rejected as inferior: paint, with over 20 per cent. gasoline; sand, dirty, not well graded, and unsuitable; anti-freezing compound, guaranteed free from calcium chloride, yet found on analysis to be composed entirely of calcium chloride and water; marble cleaner. high in price, and consisting entirely of washing soda; woolen blankets, supposed to contain not more than 15 per cent. of cotton, yet shown on analysis to have 30 per cent.; and sulphuric acid, containing such a high percentage of iron that it would have ruined the expensive storage batteries of the fire alarm telegraph system.

The services of the bureau are, for the most part, accepted in a cooperative spirit by dealers and manufacturers. Its reports are frequently the first analyses the dealers have seen of their products, and they have shown much interest in the results and have tried to meet the specifications. The work of the bureau has increased 80 per cent. since last year. The city departments are rapidly taking advantage of the laboratory, and the coming year will undoubtedly show a big increase in the variety, as well as in the volume, of the work submitted.

## THE RETIREMENT OF CHARLES HORTON PECK

THE regents of the University of the State of New York on the retirement of Charles H. Peck from the position of New York State botanist have adopted the following minute:

The service rendered to the state by Charles Horton Peck, D.Sc., who has just retired from his position as state botanist, has been extraordinary in its fidelity, assiduity and productiveness. Dr. Peck entered the staff of the State Museum as botanist in 1867, and from that date to the present, his service has been continuous—a period of 48 years. In 1883 the position of state botanist was created and he has been its only incumbent.

The nearly half century of his scientific activity became an epoch in the science of botany in America, by virtue of the extensive contributions which he made, not alone to the knowledge of the flora of New York but specially through his almost pioneer investigations among the fungi. His researches in this field vastly increased the sum of knowledge and established an orderly and rational classification so that his published papers, issued in the reports of the state museum, are indispensable to any student of these forms of life. The number of species discovered and described by him are counted by thousands and the additions made through his efforts to the state herbarium are so extensive that this collection of plants is to-day among the largest on the continent and of great scientific worth. By common consent of his colleagues Dr. Peck has long been recognized as the ultimate authority in mycology-the field of his special labors.

In view of these services whose value to the state can not be briefly estimated or readily expressed, the regents take this occasion to record, with their regret that the exactions of time have impelled him to retire from the service of the university and the state, their congratulations to Dr. Peck upon a life well rounded and a work well done, with their assurance of continued interest and deep regard for his welfare during the years that may remain.

## SCIENTIFIC NOTES AND NEWS

THE annual meeting of the Wesleyan University Club of New York City, on January 28, was in honor of the fiftieth anniversary of the graduation of Dr. William North Rice, professor of geology.

DR. ROBERT H. RICHARDS, professor emeritus in the Massachusetts Institute of Technology, has been awarded the gold medal of the Mining and Metallurgical Society of America in recognition of his services in the advancement of the art of ore dressing.

PROFESSOR ISAIAH BOWMAN, now in charge of geography at Yale University, will at the end of the current academic year on about