terest in natural science, especially physics and chemistry. From 1843 to 1850 he was assistant to Dr. John W. Draper, the distinguished English chemist who made his home in New York, and he had charge of the chemical laboratory of the medical department of the university. He spent some time in Paris pursuing the study of electrometallurgy. In 1849 he was elected professor of chemistry in the New York College of Pharmacy, and in 1850 he was one of the founders of the New York Medical College, where he equipped a chemical laboratory for medical students. Later he was instrumental in founding both the Long Island Hospital and Medical College and the Bellevue Medical College and occupied the chair of chemistry and toxicology in both institutions. He was for many years professor of natural history in the College of the City of New York, and about 1882 was made professor of chemistry and physics, a position which he retained until he gave up teaching in 1903. At the College of the City of New York he established a large chemical laboratory in which hosts of students received practical instruction. Upon his retirement from the duties of instructor he had completed sixty years of continuous work as a teacher of chemistry and physics and it is doubtful if any other instructor in this country has ever lectured to so many pupils.

Professor Doremus paid special attention to toxicology and distinguished himself by the thoroughness of his work in medico-legal investigations and the improvements which he made in some of the most important tests for poisons.

He made some important improvements in the preparation of cartridges of compressed gunpowder for army use, which attracted especial attention in France where he was invited to make experiments before the Emperor Napoleon III. and his generals. Dr. Doremus was especially interested in the application of chemistry and physics to the practical affairs of life and was often consulted by manufacturers and by sanitary authorities.

Dr. Doremus was especially successful as a public lecturer, he was a man of commanding presence, most agreeable voice, and eloquent and clear in his presentation of the facts and principles of science. He spared no trouble or expense in the preparation of his experiments, and many old New Yorkers will remember with pleasure the brilliant and dazzling experiments which he made in the Academy of Music in demonstrating the phenomena of light and heat as developed by various forms of combustion and by electricity. Dr. Doremus was very musical in his tastes, a skillful performer on the cornet, and was several times president of the Philharmonic Society. He was warm, cordial and friendly in his relations with others and endeared himself to the hearts of all who knew him.

Charles F. Chandler.

A STANDARD AGRICULTURAL COURSE.

At the recent meeting of the Association of American Agricultural Colleges and Experiment Stations held in Washington, D. C., the subject of courses in agriculture and horticulture and allied subjects was discussed by Professor F. W. Rane, of the New Hampshire College, before the section on college work and administration.

The speaker recommended that the fundamental sciences of the course should be placed in the first two years and that the requirements be uniform for all the various institutions teaching agriculture. He showed that at present from an extensive study of comparative courses in the various institutions, there exists no uniformity, subjects being given in some institutions in the freshman year, while in others the same subject is offered in the senior year. After emphasizing the importance of having the basal or fundamental work the same, he would then require sufficient of the applied or economic subjects to give the agricultural student a general broad grasp of agriculture, as shown in the accompanying table, the student then being allowed a free and unrestrained will to elect in the junior and senior years the subject that most appeals to his tastes and likings.

The cultural subjects recommended by the speaker are practically those recommended by

a previous committee of the same association on methods of teaching agriculture. Professor Bailey, of Cornell University, in discussing the course, gave his general approval of at least the first two years and said it in many ways corresponded to the course now being offered at Cornell University. The course recommended was as follows:

Freshmen.		Sophomore.		Junior.		Senior.	
Botany	100	Botany	100	Agr. Agron.	50	Rural Engineering	60
Chemistry	100	Chemistry	100	Agr. Zoot.	100	Rural Economics	60
Physics	100	Geology	100	Agr. Agro.	40	Land Gardening	30
Zoology	100	Physiology	100	Agr.	190	Plant Breeding	30
Geom. & Trig.	100	Agron. Climate, Soils, etc.	50	Veterinary Medicine	100	Hist. & Pol. Sci.	190
English	100	Plant Propagation	50	Surveying	40	Ethics	40
Modern Languages	150	English	100	Shop Work	30	Elective	370
		Modern Languages	100	Forestry	30		
		Drawing	50	Hort. Pom	50		
				Hort. Oler.	50		
				Hort. Flor.	30		
				Hort. L. Hort.	20		
				Hort.	150		
				Psychology	60		
				Modern Languages	50		
				Elective	100		
	750		750		750		780

				Total.
Culture	250	250	110	230 840
Pure Science	500	400	000	000 900
Applied Science	000	100	540	180 820
Elective			100	370 470
	750	750	750	780

THE METRIC SYSTEM BEFORE CONGRESS.

As most readers of SCIENCE know, a bill is now before congress which, if enacted, will require the use of the weights and measures of the metric system by the government after July 1, 1908. The committee on publicity of the American Metrological Society, of which Professor Simon Newcomb is chairman and Professor James H. Gore, secretary, have sent out the following letter:

It is well known to those interested in the matter that certain persons have for the past three years been actively engaged in opposing the use of the metric system of weights and measures in the United States by all means in their power. In order to accomplish their purpose they have sent out a great deal of literature in which a distorted picture of the real state of the case is presented to their readers. By ignoring some facts, minimizing others, and by the exaggeration of the importance of the residual employment of the old weights and measures where such use still exists, they have striven to create the impression that the metric system has made but little progress among nations, and that the expense and difficulty of its introduction into this country are insurmountable obstacles to its employment.

To support these contentions they are soliciting every one they can influence to write letters to their representatives in Congress, urging them to oppose the passage of any bill by Congress in favor of the metric system. They persistently endeavor to create the impression that the bills proposed are intended to forcibly compel the immediate use of said system, by imposing penalties on those engaged in ordinary trades and occupations, and they also exaggerate in every possible way the alleged prospective difficulties of a change from the customary system.

Members of Congress who are acquainted with the subject, and who honestly are endeavoring to find some way by which our country can adopt and enjoy the benefits of the international system of weights and measures, in which all the real progress of the world is now made, find themselves handicapped in their efforts to make their fellow members of Congress see the subject in its proper light by the apparent lack of interest, on the part of the friends of the metric system in our country. The opponents of the system, though few in number, are creating as much noise as possible, while the friends of the system confident of success are doing little to convince Congress of its advantages. We, therefore, earn-