NOTES AND NEWS.

DR. DIXON, professor of hygiene at the University of Pennsylvania, has been making some experiments with air and dust obtained in street-cars. He has found in them the germs of many diseases, contagious and otherwise. Better ventilation and more effective cleansing are sorely needed.

—Mr. Allan V. Garrat has tendered his resignation as secretary and treasurer of The National Electric Light Association, to take effect June 15, 1890.

—The directorate of the railway intended to connect Hudson Bay with the Canadian railway system has been recently reorganized, and, it is expected, will be able to carry the undertaking to completion. The length of the railway is to be 350 miles, starting from North Bay, off the Canadian Pacific Railway at Lake Nipissing, thence to Moose Factory, a port on James Bay, the southern prolongation of Hudson Bay. This, it is expected, will become an important feeder to the railways already built, passing as it does through one of the richest pine regions in the Dominion, containing forests of red and white pine, spruce, and tamarac of gigantic proportions. The country traversed is also said to be rich in minerals, such as galena, copper, nickel, and iron.

—M. Georges Rolland, an eminent French engineer, recently read a paper before the Académie des Sciences, in which he insists upon the necessity of constructing a railway across the Sahara. M. Rolland says that it is time for France to make up her mind as to the part which she intends taking in the economic conquest of the interior of Africa. In his paper he defines what are the regions of the western and central Soudan upon which French commerce could reasonably reckon, his conclusion being that nothing durable or really useful could be effected in the Soudan without the assistance of Algeria; while, in order to take any effective action in Algeria, that colony would need to be connected with the Soudan by means of a railway crossing the Sahara.

—A club of students, under the charge of four experienced tutors, will be formed at Seal Harbor, Mount Desert, Me., for study and tuition during the summer of 1890. The object of the club will be to prepare students for the college entrance examinations in the fall, and also to assist any who have fallen behind in their studies in making up their deficiencies. The club will be under the charge of Louis L. Hooper (Harvard '89), assistant in physics in Harvard College, who was at the head of a similar club successfully carried on last summer at North Edgecomb, Me. He will be assisted by L. H. Dow in ancient languages, N. R. George, jun., in mathematics and physics, and J. B. Scott in modern languages, all of whom hold very high rank in the present senior class of Harvard College. They have specialized in their several departments, and are experienced tutors. As each student will receive separate and individual instruction in all his studies, his peculiar needs can be met, and rapid and thorough progress can be made. Although the club is organized principally for study, there will be ample opportunity for exercise and recreation. A tennis court and row-boats have been secured, and, as is well known, the neighborhood offers remarkable advantages in the way of excursions and mountain-climbing. For further particulars, address Louis L. Hooper, Harvard University, Cambridge, Mass.

—At a regular meeting of the Washington Chemical Society, April 11, Dr. Thomas Taylor of the United States Department of Agriculture exhibited a new flash-light intended to take the place of several kinds which have of late proved highly dangerous in practice. The composition of Dr. Taylor's new flash-light consists largely of charcoal made from the silky down of the milk-weed,—a form of carbon which he prefers to all others, because of its freedom from ash. A few grains of this new composition placed on tissue-paper and lighted by a punk-match produced a prompt and blinding flash, while it was observed that the paper on which the powder rested was not even scorched. The flash being instantaneous, the heat is not sufficient to ignite the most inflammable material on which the powder may rest. Dr. Taylor demonstrated this by using, with the same paper for a base, an inferior flash-light, which set fire to the paper at once. This is owing to the comparatively slow combustion of the chemicals used in the inferior grade. Dr. Taylor said that the powder of his new flash-light will not explode either by concussion or friction.

—On Monday evening, April 21, at the meeting of the section of mineralogy of the New York Academy of Sciences with the New York Mineralogical Club, Mr. George F. Kunz spoke on the subjects of "The Minerals exhibited at the Paris Exposition of 1889" and "A Remarkable Group of Meteorites from Kiowa County, Kan.;" and Dr. Joseph H. Hunt exhibited a collection of specimens from Paterson, N.J., consisting of zeolites and quartz pseudomorphs after zeolites. Mr. Kunz also exhibited a new and undescribed meteoric iron from Colfax, Rutherford County, N.C., and spoke on the asteriation in calcite as observed by putting a light through transparent cleavages, on the native antimony from Kern County, Cal., and on the pallasites and meteoric iron from Kiowa County, Kan.

—The following is a complete list of the papers read before the National Academy of Sciences, at its April meeting, 1890: "The Effects of the Inhalation of Nitrogen, Nitrous Oxide, Oxygen, and Carbonic Acid upon the Circulation, with Special Reference to the Nitrous Oxides, Anæsthesia, and Asphyxia," by H. C. Wood; "On the Application of Interference Methods to Astronomical Measurements," by A. A. Michelson; "Physiognomy of the American Tertiary Hemiptera," by S. H. Scudder; "Totality of the Eclipse of 1889, Dec. 22," by D. P. Todd; "The Budding of Salpa considered in Relation to the Question of the Inheritance of Acquired Characters," by W. K. Brooks; "Recent Advances towards a Knowledge of the Fishes of the Great Oceanic Depths," by G. Brown Goode and Tarleton H. Bean; "A System of Classification of Variable Stars," by S. C. Chandler; "On the Spectrum of Metals," by H. A. Rowland; "On the Cheapest Light," by S. P. Langley; "On the Relation of Secular Disintegration to Certain Crystalline and Transitional Schists" and "On the Structure of the Green Mountains," by R. Pumpelly; "The Interrelationships of the Ichthyopsida," "The Notacanthoid Fishes as Representatives of a Peculiar Order," and "The Halosauroid Fishes Typical of a Special Order," by Theo. Gill; "Researches on the Double Halides" and "Researches on the Sulphinides," by Ira Remsen.

—The faculty of the Wharton School of Finance and Economy, at the University of Pennsylvania, have been steadily developing during the past months a library, which, now that it has reached very large dimensions, is making its importance felt. The foundation was laid by the great collection of the late Stephen Colwell, comprising between seven and eight thousand volumes, and including nearly every important book on the subjects of finance and political economy in the English, French, and Italian languages published before 1860. This was supplemented by the bequest of the library of the late Henry C. Carey, which embraces many later works and pamphlets, and is especially rich in statistical literature, European government reports, and the like. Some time since, in addition, a collection of about three thousand English pamphlets on financial and economical subjects, formerly the property of Mr. McCalmot of London, was obtained, covering the period from the close of the seventeenth century to our own time, and bound in chronological order. Professor Bastable of Dublin has pronounced this to be better than the similar collection of the British Museum. It is necessary, of course, in order to keep pace with the times, to buy the best of the new books within the scope of the Wharton School. An annual fund has accordingly been provided for this purpose; and a number of works, several of them fresh from the author's hands, which were selected by Professor James while abroad last summer, have lately arrived at the university. A department of the library of especial interest is that pertaining to municipal government. It is hoped that all documents pertaining to this subject for cities of over fifty thousand inhabitants may be obtained. The co-operation of all municipal officers is urgently requested, and the receipt of any documents, however trifling, will be gratefully acknowledged.