channels of the streams. Such water is unfit for household or even for manufacturing uses, and though the coal refuse is not an organic pollution, nor a chemical poison, its presence in large quantities is a troublesome factor to be considered when water filtration is projected. The distances downstream to which this material persists under different flow conditions will also furnish an interesting subject for study.

PROFESSOR T. C. CHAMBERLIN, of the University of Chicago, has had charge, during the present season, of the investigations carried on by the U.S. Geological Survey in the deposits of Pleistocene age in the United States. An important part of these deposits consists of the gravel and till widely spread over the northern tier of states by the invasion of the great glacier during a late geological epoch. These gravels are of considerable economic importance on account of the clays found in connection with them in certain localities. In the middle states they are of importance on account of the water retained by them, which is available for wells; while in the western states they are associated with auriferous metals. Professor Chamberlin has been assisted by Professor Salisbury and Mr. W. W. Atwood in the Rocky Mountain region, by Frank Leverett and W. F. Taylor in Michigan and by W. C. Alden in Wisconsin.

THROUGH the influence of Director Stewart, of the Experiment Station at West Virginia University, and with the cooperation of some prominent citizens of Morgantown, the U.S. Division of Good Roads in the Department of Agriculture has been induced to supervise the building of three miles of good road in Monongalia county. Work upon this piece of model road is now going on. It extends from the west end of the suspension bridge at Morgantown down the river three miles, A portion of it is to be built to Randall. of Telford blocks, and the remainder is to be a MacAdam road. Citizens furnish the material and labor and the U.S. government furnishes the machinery and supervises the work.

THE Department of State has received from the Belgian legation, Washington, under date of November 3, 1902, notice of the International Congress of Hygiene and Demography, to be held at Brussels from September 2 to September 8, 1903. An invitation is extended to the United States to be officially represented, and the wish is expressed, in behalf of the Minister of Foreign Affairs, that committees of propaganda, composed of persons eminent in medical science and hygiene, be organized in the different states, with whom the central committee at Brussels may correspond. The. questions to be discussed will include bacteriology, microbiology, parasitology applied to hygiene; alimentary hygiene, applications of chemical and veterinary science, sterilization. use of antiseptics; sanitary technology; industrial and professional hygiene; hygienic transportation, best means of disinfection; administrative hygiene, aim and organization of medical inspection, quarantine regulations, and supervision of tenement houses; colonial hygiene, malaria, beri-beri, etc.; demography. Blank applications and copies of regulations and programs, sent by the legation, are filed for reference in the Bureau of Foreign Commerce.

UNIVERSITY AND EDUCATIONAL NEWS.

THE twenty-fifth anniversary of the opening of the State University of Colorado, in Boulder, was appropriately celebrated on November 13, 14 and 15. The general address was given by President Jacob Gould Schurman, of Cornell University, who spoke on 'Problems of Modern University Education as Suggested by the Charter of the University of Colorado.' The other addresses were given before the professional schools. Dr. Frederic S. Lee. of Columbia University, spoke on 'The Scientific Aspect of Modern Medicine'; Mr. Frederick N. Judson, of St. Louis, Mo., spoke on 'The Quarter-Century in American Jurisprudence'; and Professor Dugald P. Jackson, of the University of Wisconsin, on 'The Potency of Engineering Schools and their Imperfections. The University was established on paper as early as 1861 in the early territorial days of Colorado, but it was not until 1874 that the Legislature of the Territory made the first appropriation for its support. When Colorado was admitted to the union in 1876 the constitution provided that the university should become an institution of the state. Since that time the university has been well supported both by a regular portion of the tax levy and by special appropriations which have been made from time to time. The present year's enrollment is about 550 in the University while the State Preparatory school, managed also by the Regents, has 375 pupils. Last June 71 degrees were conferred.

THE new building of the Central High School of Philadelphia, erected at a cost of \$1,500,000, was dedicated on November 22. President Roosevelt and several members of his cabinet were present. The exercises, which were continued on the twenty-fourth and twenty-fifth, included addresses by Dr. W. T. Harris, commissioner of education, Dr. Thomas M. Drown, president of Lehigh University, and R. E. Thompson, president of the school.

THE Supreme Court has handed down an opinion sustaining the decision of Justice Truax in directing the New York University to reconvey to the Medical College Laboratory of the city of New York the premises which were deeded over to the university in 1897 in accordance with a plan for combining the laboratory and the university.

WE learn from The British Medical Journal that the Gordon Memorial College, at Khartoum, which Lord Kitchener opened on November 8, is now ready for the chemical and bacteriological research laboratories presented by Mr. Henry S. Wellcome during his recent visit to the Soudan. The fixtures and appliances made in England have already been shipped. The equipment for scientific work is said to be complete in every detail, and to be equal to any similar laboratories in Europe. The Sirdar has appointed Andrew Balfour, M.D., B.Sc., D.P.H., of Edinburgh, director of these research laboratories. The Soudan affords excellent opportunities for the study of tropical diseases, especially malaria, typhoid, and

dysentery, and it is hoped that the results of the investigations of Dr. Balfour and his staff will be of the greatest importance. Dr. Balfour will also assist the authorities in the investigation of the criminal poisoning cases which are very frequent in the Soudan. The nature of some of the poisons used by the natives is at present obscure, and it is possible that the work in these laboratories may considerably increase our knowledge of toxic Apart from the original researches agents. and general sanitary work, Dr. Balfour and his staff will devote their attention to the study of the cereals, textile fibers, and various matters affecting the development of the agricultural and mineral resources of the Soudan.

DR. HERMAN KNAPP has resigned the chair of ophthalmology at the College of Physicians and Surgeons, Columbia University, and has been appointed emeritus professor.

PROFESSOR R. OGDEN DOREMUS has retired from the chair of chemistry in the New York City College, with which he has been connected for fifty-one years.

W. H. BOUGHTON, assistant professor of civil engineering in Denison University, has accepted the position of professor of civil engineering in the University of West Virginia.

DR. C. H. GORDON, superintendent of the city schools of Lincoln, Nebraska, has been appointed instructor in geology and geography in the University of Nebraska. Dr. Gordon retains his position at the head of the city schools and will, for the present, give a course in petrology and during the spring semester a course in geography, the latter designed especially for teachers or those having teaching in view. In addition to this work he will also, during the spring semester, repeat his course of lectures on school supervision and management given last year.

It is announced that Dr. Martin H. Fischern, associate in physiology at the University of Chicago, and Dr. Charles D. Rogers, assistant in physiology, will go with Professor Jacques Loeb to the University of California.

Erratum: In the review of Professor Baldwin's 'Development and Evolution,' page 820 above, for othoplasy read orthoplasy.