

Herr K. Krall, who exhibited them at various places in Germany.

In accordance with its usual custom the faculty of medicine of Harvard University will offer a course of free public lectures to be given at the Medical School, on Sunday afternoons, beginning January 3 and ending May 9. The schedule follows:

January 3—Dr. Reid Hunt. Drugs.

January 10—Dr. John Lovett Morse. The care and training of older children.

January 17—Dr. J. L. Goodale. Susceptibility and resistance in diseases of the nose and throat.

January 24—Dr. Alexander Quackenboss. Catarract; its nature and treatment.

January 31.—Dr. William P. Graves. Heredity.

February 7—Dr. S. A. Hopkins. Mouth hygiene as a factor in sickness and health.

February 14—Dr. Harris P. Mosher. Catarrh.

February 21—Dr. George S. Derby. The preservation of the eyesight.

February 28—Dr. Franklin W. White. Food in health and disease. "Food fads." "Health foods." "Vegetarianism."

March 7—Dr. E. G. Martin. Fatigue and rest.

March 14—Dr. F. S. Newell. Modern obstetrics. (To women only.)

March 21—Dr. G. S. C. Badger. Common colds.

March 28—Dr. Percy Brown. The use of X-rays as an aid to our knowledge of disease in the stomach and bowels.

April 4—Dr. R. B. Osgood. The cause and prevention of chronic rheumatism.

April 11—Dr. C. A. Porter. What surgery can do for chronic indigestion.

April 18—Dr. Paul Thorndike. The bladder ailments of man in later life. (To men only.)

April 25—Dr. E. H. Place. What may we do in diminishing the dangers of contagious disease?

May 2—Dr. E. E. Southard. Sex differences in the human brain.

May 9—Dr. W. B. Lancaster. Lighting. Good and bad lighting; its effects on the eyesight.

THE *Journal* of the American Medical Association states that the Rockefeller Sanitary Commission which has had in charge the eradication of hookworm in the southern states under the fund of \$1,000,000 granted by John D. Rockefeller in 1909, will disband at the close of the present year. The forces of the commission at that time will be withdrawn

from all the states in which they have been working except eight, and the work in these will be taken over by the Rockefeller Foundation, a separate organization. The foundation will close up the work in five of the eight states March 1, 1915, and the remaining three on June 30. Under the foundation there has been created an International Commission on Health which will undertake work for the promotion of health in all parts of the world in cooperation with health departments of all countries, and especially will cooperate in the constructive development of state health forces, not alone with reference to hookworm, but in connection with other health conditions.

ANOTHER year's laying record of hens bred from selected strains has been compiled by the poultry department of the Oregon station. A flock of fifty hens averaged 213 eggs each during the calendar year, November 1, 1913, to November 1, 1914. If the actual laying year of each hen is counted the average number of eggs laid becomes 220. The world's champion layer, which last year laid 303 eggs in 365 days, has broken the two-year record by the production of 505 eggs in two years, while another hen has averaged more than 200 eggs a year for four years, having laid 819 eggs within that time.

UNIVERSITY AND EDUCATIONAL NEWS

MR. J. ARTHUR BEEBE has bequeathed \$150,000 to the building club of the Harvard Club of Boston; \$10,000 to the fund of the Harvard class of 1869, of which class he was a member, though he left before graduation; \$10,000 for music at Harvard College, and \$5,000 to Dr. F. C. Shattuck for investigations of tropical diseases. The residue of the estate, after some personal bequests have been paid, is bequeathed to Harvard University, the income to be used for the general purposes of the university.

THE University of Pennsylvania will be the ultimate beneficiary of the \$200,000 estate of William B. Irvine, ex-city treasurer, who died December 6. The money will provide either a building for a school of mining engineering or an auditorium.

THE new building for the Medical College of South Carolina, Charleston, was formally transferred to the board of trustees of the institution, November 18. The address of the occasion was made by Dr. William S. Currell, president of the University of South Carolina.

DR. JOHN HENRY MACCRACKEN, syndie and professor of politics in New York University, has been elected president of Lafayette College. In the same week Dr. Henry Noble MacCracken, professor of English at Smith College, was elected president of Vassar College. They are the sons of Dr. Henry Mitchell MacCracken, chancellor-emeritus of New York University.

PROFESSOR S. F. ACREE, of the Johns Hopkins University, has accepted the position of chief of the Section of Derived Products in the Forest Products Laboratory in Madison and professor of chemistry of forest products in the University of Wisconsin.

MR. DE FOREST HUNGERFORD, instructor in soils in the College of Agriculture, University of Minnesota, has been appointed assistant professor of agronomy in the College of Agriculture, University of Arkansas.

DISCUSSION AND CORRESPONDENCE

RATE OF CONTINENTAL DENUDATION

AT first glance nothing appears more simple than the measurement of the discharge of a large river, and from the volume of matter found to be held in suspension and in solution to calculate the annual depletion of the drainage basin. Ever since the first estimates of Humphreys and Abbot, over half a century ago, the Mississippi River has been a favorite illustration of this kind. Recent results of more elaborate measurements of this character made by the federal government are apparently undertaken with the express purpose of determining the rate of lowering of the continental surface through stream-corrasion.

So soon as a concrete case is settled upon there enters into the problem a number of new and variant factors which, if not perfectly evaluated, utterly invalidate the results sought. In this respect the Mississippi Valley appears

to be the most unfortunate choice that it is possible to select. Although the recently published results seem to give excessively small figures and the established rate very much too slow, it is to certain other features that attention is here briefly called, which appear not to have entered into the calculations named.

According to the figures referred to it would take some millions of years to reduce the already low-lying Mississippi basin to the condition of a true peneplain with a position but slightly above tide-level. All direct geologic observations made during late years in the region go to show rather conclusively that in reality the surface of the vast basin is on the whole actually rising instead of becoming notably lower.

Among other factors it appears that the wind-borne dusts from western deserts are alone probably depositing materials over the entire Mississippi Valley faster than the river and its tributaries are carrying rock-waste to the sea. In recent geologic times, also, the western half of the basin has actually had deposits laid down upon its surface to a thickness of not less than 1,000 feet. The great river has not only not been equal to the task of doing its normal amount of work, but it has been so incapacitated as to permit this prodigious volume of rock-waste to accumulate until its original Tertiary surface is already carried far below sea-level. Nowhere on earth is there finer exemplification of vast continental sedimentation.

In the lately compiled estimates of continental lowering several diastrophic factors are left out. These are extremely important in all calculations of this kind. Since Glacial times—perhaps 10,000 years ago—a very considerable part of the upper Mississippi Valley appears to have been elevated not less than 500 to 600 feet. This change of level may represent the isostatic compensation of the last great ice-cap. At any rate, while there has been over this region an erosive loss of a fraction of a foot each century, there has been in the same time a gain in sediments of many times this amount. Growth has exceeded decline a hundred-fold.