at least one session in the preparatory group of evening classes at the technical school. The number of students must be limited to thirty at any one time. For each year's course there will be a competitive examination, successful students passing on from one year's course to the next. The course of study for each year will consist of practical mathematics, practical mechanics, geometrical and machine drawing, heat, electricity and chemistry. Those attending the classes will have their wages paid as if at work in the factory, and the Great Western Railway Company will pay their school fees. The students attending the day classes will be expected to give some time each evening to private study. Students who distinguish themselves will be allowed to spend part of their last year in the drawing office and chemical laboratory. The whole of the arrangements will at all times be under the direction of the chief mechanical engineer.

DR. HENRY M. LEIPZIGER, supervisor of free lectures of the New York City Board of Education, says in his annual report: "The attendance at the scientific lectures is such as to show that the purpose of the lecture course should be to lay especial stress on popularization of science. The great need of our country is an increase in popular technical instruction, and the demand in our land for thoroughly trained workmen is always great. The intelligent workman should be thoroughly equipped in scientific principles, and the lecture course is one medium for giving that general information in scientific subjects which many mechanics lack. For this reason it is hoped that at no distant day two or three well-equipped science halls, where experiments can well be made, will form a feature of the educational plant of the city, and to these halls shall come the very ablest scientists to expound to the thinking people of our city the great principles of science, and elaborate on the great discoveries that are constantly being made. Such lectures will be of inestimable value in improving the intellectual condition of the workingman."

## UNIVERSITY AND EDUCATIONAL NEWS.

GROUND will be broken shortly at Leland Stanford Junior University for a new library building to be erected at a cost of over \$500,-000. The building will be given to the university by Mrs. Stanford. It is said that she or Mr. Thomas Welton Stanford may also endow the library without drawing on the permanent funds of the university.

By the will of the late Frederick W. Guiteau, Cornell University receives \$100,000 and the residue of the estate, which it is said may amount to a considerable sum.

MR. J. OGDEN ARMOUR, of Chicago, has endowed with \$100,000 a chair of orthopedic surgery in St. Joseph's Hospital, Omaha, Nebraska.

An appointment as assistant demonstrator of physiology in the Medical Department of the University of Pennsylvania is open for applications. The appointee will devote his mornings to laboratory teaching, his afternoons to research, and will receive a salary of \$500.

DR. R. E. HEDRICK, instructor in mathematics in the Sheffield Scientific School of Yale University, has been called to a chair in the University of Missouri.

DR. KENNETH L. MARK, son of Professor E. L. Mark of Harvard University, has been appointed instructor in chemistry in Simmons College, Boston.

DR. D. HEPBURN, of the University of Edinburgh, has been appointed to the chair of anatomy in University College, Cardiff, vacant by the removal of Professor A. F. Dixon to Trinity College, Dublin.

At the Heriot-Watt College, Edinburgh, Mr. Roderick M. Shearer, M.A., B.Sc. (Edinburgh), has been appointed chief lecturer in mathematics; Mr. William C. Houston, B.Sc. (Glasgow), to be assistant professor of mechanical engineering; Mr. W. Mansergh Varley, B.A. (Cantab.), Ph.D. (Strasburg), to be assistant professor of physics and electrical engineering; and Dr. Bertram D. Steele, D.Sc. (London), McGill University, to be assistant professor of ehemistry.