ting in the method of photographic engraving in 1858. He said that among the mass of material which Miss Talbot had now unearthed at Lacock Abbey were plates showing the use of fabrics of various textures which her grandfather had used in endeavoring to produce a grain for photo-engraving purposes. He ultimately obtained a very fine grain by folding a piece of black muslin on itself obliquely. Some of the specimen plates of this description were dated 1853, and a particularly interesting one recently unearthed at Lacock Abbey was a small and rather imperfect portrait of Huxley, which had the crossed-muslin grain.

VISIT OF AMERICAN FORESTERS TO GERMANY AND AUSTRIA

A GROUP of leading foresters and lumbermen from the United States will sail on July 26, under the auspices of The Oberlaender Trust of the Carl Schurz Memorial Foundation, Inc., to study the methods employed in Germany and Austria, by which private forests have become a profitable enterprise. The group includes Dr. Cedric H. Guise, professor of forest management at Cornell University, and Wilson Compton, secretary-manager of the National Lumber Manufacturers Association, Washington, D. C. Sustained forest production, as it has been practiced in these countries for many generations, as well as forest management, game preservation, selected cutting, reforestation, and markets for wood products will be studied.

Dr. Franz Heske, the director of the forestry school at Tharandt near Dresden, has been in the United States during the last three months, getting acquainted with conditions that face American foresters, and he will take charge of the group upon arriving in Germany. They will travel by bus from Berlin through eastern and southeastern Germany, into Czechoslovakia, Austria, and perhaps parts of Hungary. They will have an opportunity not only to see the forests, but to study costs, distribution of material and actual operations.

This tour is part of the program of the Carl Schurz Memorial Foundation, Inc., and The Oberlaender Trust, the purpose of which is to benefit the American people by studying those special achievements of the German and Austrian people which are outstanding, and introducing into the United States such as are adaptable to American conditions. Private forests for private profit is one of the fields in which the German people have excelled; and first-hand study of successful private forestry operations by influential American timberland owners will, in the opinion of the foundation, assist in developing the important program of permanent forest management now required by the Lumber Code.

The Trust's Advisory Committee in the field of forestry is composed of Dean Henry S. Graves, Yale University, School of Forestry; Dr. Cedric H. Guise, professor of forest management, Cornell University, and Earle H. Clapp, of the United States Forest Service. Mr. Ward Shepard, special adviser on land policies in the U. S. Office of Indian Affairs, has been of special help in making arrangements.

The trustees of The Oberlaender Trust are: Gustav Oberlaender, *president;* Carl W. Ackerman, dean of the School of Journalism, Columbia University; Dr. Haven Emerson, College of Physicians and Surgeons, Columbia University; Henry Allen Moe, executive director of the Guggenheim Foundation, and Mr. Wilbur K. Thomas, executive director of the Carl Schurz Memorial Foundation, Inc. Mr. Ferdinand Thun, of Reading, Pa., is president of the foundation.

EXHIBIT OF THE PATENT OFFICE AT THE CHICAGO WORLD'S FAIR

AT the World's Fair of 1934 at Chicago, the Patent Office, in its exhibit in the U. S. Government Building, surveys the American record of inventions.

Since the organization of our federal government 1,897,932 patents have been issued by the Patent Office up to January 1, 1934. Nearest to this record is France with 871,532. Great Britain has 797,153, Germany 583,728 and Italy 273,598. Canada rates high in inventiveness in proportion to population, with a total of 325,800 patents issued. Japan since its modernization has issued 83,361 patents and the U.S.S.R. has issued 63,992.

In the United States last year New York led with 8,017 patents. Illinois was next with 4,923. Ohio and Pennsylvania almost tied for third honors with 3,880 and 3,876, respectively. Mississippi is on the list with 49 patents for the year while Louisiana and Georgia have 141 each. A graphic chart shows the steady increase of the output of inventions in America. From 109 patents in 1836 to 56,856 in 1932 the rate of increase is almost unbroken, the chart lines forming nearly a perfect triangle.

Working models of inventions give a record of the past century of industrial advancement. In the exhibit is a compound steam engine model on which a patent was issued December 20, 1845, to John Ericsson, who later created the *Monitor* for the Federal Navy in the war between the states. Dated May 9, 1865, is a model of the four-barreled, water-cooled machine gun with which R. J. Gatling introduced a new method of wholesale destruction. A disappearing carriage for large cannon invented by James B. Eads, the bridge builder, is dated February 26, 1871. December 5 of the same year, is the date of a model by Thomas A. Edison of a machine for perforating tape to send telegraph messages.

The cases exhibiting patents issued include: the sewing machine, E. Howe, Jr., Sept. 10, 1846; the