

Dr. Frederick Adams Woods summarized the results of unpublished studies which he has made in historiometry, showing the preponderant influence of heredity in influencing the course of history. Professor Corrado Gini contributed a long paper dealing with the evidence obtained from demographic statistics on certain eugenic problems. The paper was a decidedly interesting one but impossible of brief review. Professor F. C. S. Schiller's paper on "Practicable Eugenics in Education" was an exceedingly keen analysis of the significance, from the standpoint of eugenics, of the existing educational system of England.

The social side of the congress was one of its most pleasant features. The hospitality committee, under the chairmanship of Mrs. Alec. Tweedie, arranged a series of banquets, receptions, teas, garden parties and excursions which made it possible for the members of the congress to meet not only one another, but also many of the most distinguished persons in English scientific, social, literary and public life.

RAYMOND PEARL

INDUSTRIAL EDUCATION IN THE PHILIPPINES

UNDER the leadership of American educators, Philippine education is making a remarkable advance. Indeed, according to recent reports received at the United States Bureau of Education, there are features of present-day education in the Philippines that are well worth the careful attention of school leaders in the United States.

It is in the field of industrial training and useful arts that the Filipinos, under American teachers, are making the most notable progress; such progress, in fact, that in certain lines—particularly lace-making and embroidery—the products of the Philippine schools not only compare favorably with the work of the famous French and Swiss experts, but promise to compete with them successfully in the world's markets.

The whole system of education in the Philippines is based on the principle that the children should receive training that will pre-

pare them directly for the life they are to live. The boys receive manual training from the very beginning. In the lowest grades they make articles that they can use and sell, both in their own localities and elsewhere. The most important industry taught the boys is hat-weaving. It is a prescribed exercise in the primary schools. "The Bureau of Education at Manila considers it one of its legitimate functions to give such training in the making of good hats as will afford a large number of children a permanent means of earning a livelihood," wrote Mr. Frank R. White, Director of Philippine education, in 1910, after the courses had been introduced, and the development of the work has more than justified his claim. Chief among the products are the famous "buntal" hats, made from the leaf stem of the opened buri leaf. The schools do not attempt to replace hand machinery with modern apparatus, for it is recognized that there is a real demand for the products of careful handworkmanship. Besides the prescribed courses in the primary schools, there are regular grade schools, where the boys spend the greater part of the school-day in actual manual labor in the shops. A set of dining-room furniture in red narra, made at the Philippine School of Arts and Trades in Manila, sold for \$200 at last year's carnival.

In the girls' schools plain sewing and housekeeping have generally formed the prescribed courses, but recently lace-making and embroidery have been introduced because they are arts which, besides possessing educational value, furnish the girls with a remunerative occupation. There were already in the Philippines young women who had learned embroidery and lace-making in the convents under the Spanish régime. Furthermore, because of their great natural aptitude for such work, and because of their patience and delicacy of execution, the Filipino women are considered among the most skilful workers in the world in these arts, their products being classed by experts as even superior to that of the French and the Swiss. The schools are, therefore, working on sure ground in teaching

lace-making and embroidery, and they have ascertained that the demand for the kind of work their children can turn out is practically unlimited. In an effort to increase the available supply of teachers for the work, courses in lace-making and embroidery have been offered in the Philippine Normal School since 1910, and also in the various vacation assemblies of teachers.

The first thing a Filipino girl does in the sewing class in school is to make for herself a complete outfit of clothing. This work she usually begins in the second grade, but sometimes in the first or third. Armed with an embroidery frame and other apparatus (in most cases made by the boys in the same school), she advances in proficiency through the various grades; hemming and embroidering cotton squares, fine linen, handkerchiefs, waists, and so on. The more expert girls turn out masterpieces in French net and embroidery. In lace they make all varieties of "pillow lace," including "torchon" (Spanish lace), Maltese, Ceylon or Indian, Irish crochet, etc. Battenburg is also made for local use, but it is not encouraged for export, because the Japanese can make it more cheaply.

An idea of the extent of industrial education in the Philippines may be gained from the fact that nearly 400,000 school pupils are engaged in some kind of industrial work. For the past four years industrial instruction has been prescribed in the primary course for both boys and girls, and the work is systematically carried on in an advanced stage in the intermediate schools. Twenty-six well-equipped trade schools have been established in Manila and the various provinces; there is a college of agriculture at Los Banos, and a college of engineering has been added to the University of the Philippines. The Filipinos take to the educational program, industrial and otherwise, quickly and profitably; and the civil government finds its duties much less onerous now that the military invasion of the islands has been superseded by the educational.

GRADUATES FROM AMERICAN COLLEGES AND UNIVERSITIES

THE *Boston Transcript* has printed an article by Mr. Henry T. Claus, who gives the number of degrees conferred by 47 colleges and universities as follows:

College	Total No. De- grees in 1912	Total in 1902	Total in 1911
Allegheny.....	63	35	64
Amherst.....	95	97	96
Bates.....	91	57	92
Bowdoin.....	98	55	85
Brown.....	210	187	193
Bryn Mawr.....	77	68	70
Carnegie Tech.....	242	..	189
Clark.....	58	..	35
Colby.....	69	38	38
Colgate.....	72	37	48
Columbia.....	1,504	788	1,334
Grinnell.....	76	51	83
Hamilton.....	47	..	30
Harvard.....	1,000	1,033	1,003
Indiana University.....	372	124	347
Lehigh.....	85	45	95
M. A. C.....	83	22	43
Middlebury.....	55	19	55
M. I. T.....	286	200	253
Mount Holyoke.....	167	101	134
New York University.....	583	339	545
Northwestern.....	591	506	574
Ohio State.....	501	141	422
Penn State.....	266	28	247
Princeton.....	327	291	268
Radcliffe.....	117	100	84
Rensselaer.....	118	21	71
Rutgers.....	75	72	73
Simmons.....	95	..	73
Smith.....	372	229	360
Swarthmore.....	63	52	68
Syracuse University.....	480	207	417
Trinity.....	36	29	36
Tufts.....	238	137	214
Union.....	60	38	49
University of Cincinnati.....	191	121	158
University of Illinois.....	858	511	798
University of Maine.....	109	67	133
University of Michigan.....	1,143	858	1,093
University of Missouri.....	432	153	383
University of Pennsylvania.....	828	521	850
University of Pittsburgh.....	284	170	260
University of Vermont.....	96	80	109
Wellesley.....	299	155	289
Williams.....	93	67	97
Worcester Polytechnic.....	77	44	77
Yale.....	855	583	904

THE HARPSWELL LABORATORY

THE following persons have carried on investigations during the summer of 1912 at the Harpswell Laboratory: