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Education of Women

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far the relative disproportion of the sexes, as in Hayti,¹ where little movement of population takes place, may be due to the degree of crossing of black and white, or to other economic factors. There is some indication that females at birth are very largely in excess among half-breeds. The determination of this point, however, will require more exact statistical information than is at present at hand.

In conclusion, we may call attention to one other contrast between Cuba and Porto Rico and other West Indian Islands as brought out in this excellent piece of work. It seems as if in all the Spanish and French West Indies the proportion of those of mixed parentage was far greater than in the colonies of Great Britain. The Anglo-Saxon here as everywhere holds aloof from intercourse with those of inferior race; and we have as a result in Barbadoes and in Jamaica, for example, the pure white and the full-blooded negro clearly set apart from one another. In the Spanish islands, and in the French colony of Martinique, on the other hand, no such antipathy to intermarriage of the races seems to prevail, and a gradation from one to the other is commonly to be observed. All through the West Indies also it is to be noted that there is a lack of that social antipathy between black and whites which lies at the root of the negro problem in our own Southern States. For example, there is no such abhorrence of the employment of white and negro labor side by side as we find in the United States, whereby the problems of social control are considerably simplified. Whether this docile condition of the negro is due to the fact that he is kept under tutelage to the white by the European clergy, rather than left to the mercy of his own native leaders, is perhaps impossible of determination. There can be little question, however, that the contact of one race with another engendered by this means is socially beneficial to both.

WILLIAM Z. RIPLEY.

EDUCATION OF WOMEN.

Education of Women. By M. Carey Thomas. *Monographs on Education in the United States*; edited by Nicholas Murray Butler. Department of Education for the United States Commission to the Paris Exposition of 1900. Pp. 40.

Among the monographs edited by Prof. Nicholas Murray Butler for the United States Commission to the Paris Exposition of 1900 is

¹An overwhelming proportion of females is noted by many observers; as Spencer St. John, p. 130; Tippenhauer, *Hayti*, p. 437.

one on the *Education of Women* by Miss M. Carey Thomas, President of Bryn Mawr College. This paper presents facts and figures not previously related and makes available valuable statistical data.

The higher education of women is naturally divided into college and professional education. College education is carried on in three different classes of institutions; co-educational colleges, independent women's colleges, and affiliated colleges. The institutions which have been co-educational from the outset are Oberlin, opened in 1833, chartered as a college in 1850; Utah, opened in 1850; Iowa in 1856; Washington in 1862; Kansas in 1866; Minnesota in 1868; and Nebraska in 1871. In 1870, Michigan, then the most important western university, opened its doors to women, and its example was quickly followed by all the other universities then existing in the west. All the state universities of the west organized since 1871 have admitted women from the start. State universities are now open to women in twenty middle and western states; and the one university in each of the four territories, Arizona, Oklahoma, Indian, and New Mexico is open to women. Of the 11 southern state universities only 3, those of Virginia, Georgia, and Louisiana are still closed to women. The one eastern state university, that of Maine, admitted women in 1872.

The greater part of college education — 70 per cent in 1897 — is carried on in private, not in state universities. To show the different attitude toward co-education of the different sections of the United States the following figures are given: In twenty middle and western states, and in four territories, excluding 22 Roman Catholic colleges and seminaries, there are 196 colleges¹ of which 183 are co-educational and one has an affiliated women's college; in fourteen of these states and all four of the territories every college for men is open for women; in fourteen southern and two southern middle states, excluding 21 Roman Catholic colleges and seminaries, there are 161 colleges, of which 125 are co-educational and only 36 are separate colleges for men. Among the 36, however, are 3 very important state and 2 private universities. Roman Catholic colleges apart, all the colleges in four of the southern states are co-educational. In the New England and northern middle states, 17 Roman Catholic institutions excluded, out of 64 colleges, only 29, or less than one-half, are co-educational. The colleges for men only, include, with the exception of Cornell, all the largest undergraduate colleges in

¹ Throughout the monograph the word *college* is used to denote *undergraduate* education.

this section. The separate colleges for men and women are in the east, and it is in the east only that any preference for separate education is shown by either sex.

The growth of co-educational colleges in the United States has been from 30.7 per cent of the whole number in 1870 to 70 per cent, or, excluding Catholic colleges, 80 per cent in 1898. Not only is the number of co-educational colleges increasing, but the number of women relatively to the number of men students is also increasing. During the eight years, from 1890 to 1898, men have increased in co-educational colleges 70 per cent, women 105.4 per cent. During the same period, in separate colleges for men, men have increased only 34.7 per cent, while in separate colleges for women, women have increased 138.4 per cent. This seems to prove that women prefer a separate education, while the reverse seems true of the men.

To show the growth of co-education, the 480 colleges enumerated by the United States Commissioner of Education have been taken as a basis. The larger part of these cannot of course be considered institutions for higher education; accordingly, employing four means of classification likely to commend themselves to the fair-minded student, the author has selected 58¹ which may properly be compared with colleges and universities abroad. Of this number (58) 4 are independent women's colleges, 3 are women's colleges affiliated with colleges for men, and 30, or 58.8 per cent, are co-educational. Of the 21 colleges closed to women in their undergraduate departments 5 have affiliated to them a women's college through which women obtain some share in the undergraduate instruction; 4 of the 5, as well as 3 others of the best known colleges for men, make no distinction between men and women in graduate instruction; one maintains a co-educational medical school. This leaves on the list of 58 most important colleges in the United States, aside from 2 Catholic colleges, only 10 (Dartmouth, Amherst, Williams, Clark,² Princeton, Lehigh, Lafayette, Hamilton, Colgate, and Virginia, all situated on the Atlantic seaboard) to which women are not admitted in some department.

The author treats separately 11 independent women's colleges³ and 5 affiliated colleges.⁴ Details are given relative to the number of

¹ For detailed list see foot-note, p. 12, *Monograph on Education of Women*.

² Since the monograph was written all departments of Clark have been open to women upon equal terms with men.

³ Bryn Mawr, Smith, Vassar, Wellesley, Mt. Holyoke, Women's College of Baltimore, Wells, Elmira, Randolph Macon Woman's College, Rockford, and Mills.

⁴ Radcliffe, Barnard, Woman's College of Brown, College for Women of Western Reserve, and the H. Sophie Newcomb Memorial College for Women of Tulane.

instructors, number of undergraduates, graduate and special students, productive funds, buildings and their cost, size of library, scientific equipment, land, and tuition fee; the exact relation is given of the 5 affiliated colleges to the colleges with which affiliated.

Of the independent women's colleges 4, Bryn Mawr, Smith, Wellesley, and Vassar, and of the affiliated colleges 3, Barnard, Radcliffe, and Western Reserve are on the list of 58, and, with one exception, on the list of 52 leading colleges in the United States given in the 1899-1900 edition of *Minerva*; all 7 are included in the 22 colleges admitted to the Association of Collegiate Alumnae; 4, Radcliffe, Smith, Vassar, and Wellesley are among the 46 colleges of the United States having three hundred students or upward; 4, Bryn Mawr, Wellesley, Radcliffe, and Western Reserve are included in the 23 colleges belonging to the Federation of Graduate Clubs; 2, Vassar and Bryn Mawr, are among the 29 colleges of the United States possessing funds of a million dollars and upwards¹; 3, Smith, Wellesley, and Vassar are among the 23 largest undergraduate colleges, and one, Smith, ranks in size as the tenth undergraduate college in the United States.

Under the heading "Professional Education" are given facts with regard to graduate instruction in the faculty of philosophy, graduate fellowships and scholarships, and professional and technical education.

Of the 23 colleges in the United States, included in the Federation of Graduate Clubs, 16 admit women without restriction to graduate courses, and to competition with men for many of the scholarships and honors. Two admit women only. One admits women to certain courses through an affiliated college. One admits to one university department. This leaves only Clark,² Princeton, and the Catholic University, which entirely exclude women. In these 23 graduate schools, women formed 26.8 per cent of the whole number of graduate students in 1898-99. Among the graduate students of the United States a remarkable increase of women is shown during the last ten years; an increase from 13.27 per cent in 1889-90 to 24.04 per cent in 1897-98, or, numerically, from 271 out of a total of 2041 to 1398 out of a total of 5816.

In 1899 there were open to women 319 scholarships, varying in value from \$100 to \$400 (50 of these exclusively for women), and 2 foreign scholarships (1 exclusively for women); 81 residence fel-

¹ Smith has productive funds amounting to \$900,000.

² Opened to women in all departments November, 1900.

lowships of the value of \$400 or over (18 of these exclusively for women); 24 foreign fellowships of the value of \$500 and upwards (12 of these exclusively for women).

Figures are given which show that the number of women entering upon professional study is increasing rapidly. In 1898 the number of women students in the United States according to professions was as follows: In theology, 198; law, 147; medicine, regular and irregular, 1397; dentistry, 162; pharmacy, 174; schools of technology and agriculture endowed with national land grant, 2281.

Under the heading "General Considerations" the author states that in 1897-98 there were studying in the undergraduate and graduate departments of co-educational colleges and universities in the United States 17,338 women, and in the 11 independent and affiliated colleges, herein mentioned, 4959 women; women thus forming 27.4 per cent of the total number of graduate and undergraduate students. The 30 co-educational, 4 independent and 3 affiliated women's colleges on the selected list of 58, with the addition of the Women's College of Brown, have conferred the bachelor's degree on 14,824 women — exclusive of the class of 1900. In 1897-98, 11.4 per cent of all the women studying in co-educational colleges, and 13.4 per cent of all the women studying in independent women's colleges, obtained the bachelor's degree. In the same year 13.3 per cent of all men undergraduate students obtained the bachelor's degree.

In all secondary schools in the United States (1899) 56.5 per cent of the pupils were girls, and 13 per cent of the girls enrolled, as against 10 per cent of the boys enrolled, graduated from the public high schools.

The number of women students studying in German universities in 1898-99 was, approximately, 471, probably mainly foreigners; in France, in 1896-97, approximately, 410, of whom 83 were foreigners; in England and Wales, in 1897-98, approximately, 2348. The total number of women graduates in England and Wales who have received degrees or their equivalent from English and Welsh universities (autumn of 1899) is 2180.

At the close of the monograph a brief paragraph each is devoted to the health, marriage rate, and occupations of college women, co-education versus separate education, and to a modified versus an unmodified curriculum. The author believes thirty years' experience to indicate that whatever changes in the college curriculum may be made in the future will be made alike for men and women.

Alice Upton Pearmain.