

ten by them. A year or two ago a number of university women formed a settlement at Southwark, in the southeast of London. Here they endeavor to provide teaching and amusement for the poor children of the district. But it is not necessary that a woman graduate should enter upon public duties in order to make the most of the advantages she has enjoyed. There is a wide field for quiet, unobtrusive work at home; a capable woman, trained to habits of self-control and self-reliance, must always be a useful member of society.

A great deal is said about the overstrain of college life, and about the ill-health which the higher education of women engenders. During a residence of four years at Newnham College

I was particularly struck with the average good health enjoyed by the students. Since then a most careful census has been taken of students past and present, which goes far to prove that the higher education is not detrimental to health; and, indeed, the arrangements at the large colleges provide such opportunities for recreation that it is only very exceptional students who are likely to overwork. And surely, all will agree that a regular life, with plenty of occupation and good healthy pursuits, must be an enviable one; and that it must be more beneficial than otherwise for once in a lifetime to have to work steadily on towards one goal, to reach which all the best energies must be concentrated in one honest effort.

Eleanor Field.

NOTE ON THE HEALTH OF WOMEN STUDENTS.

THE Sixteenth Report of the Massachusetts Bureau of Statistics of Labor contained some interesting data, furnished by the Association of Collegiate Alumnae, in regard to the health of American female college graduates. Mr. Carroll D. Wright, the Superintendent of the Bureau, summed up the statistics in these conservative words: "It is sufficient to say that the female graduates of our colleges and universities do not seem to show as the result of their college studies and duties any marked difference in general health from the average health likely to be reported by an equal number of women engaged in other kinds of work." At that time the only data relating to the health of a distinct class of women, that were available for purposes of comparison, were a report on the working women of Boston. Five years have passed since this report appeared, and we are now presented with some English statistics on the same subject, which in some respects are more valuable than the American report which suggested them.

"Health Statistics of Women Students of Cambridge and Oxford, and their Sisters," is the title of a pamphlet issued by the University Press, Cambridge, 1890, and edited by Mrs. Henry Sidgwick, the secretary of a special committee which undertook to secure scientific data as to the "effect of a university course of study on the health of women." For good reasons, not in any way detracting from the results, the inquiries were confined to students of Newnham and Girton Colleges at Cambridge, and of Lady Margaret and Somerville Halls at Oxford. These students fall into four classes: first, and most important those who have resided in college three or more years, and have read for Tripos Examinations at Cambridge, and for Final Examination Schools at Oxford; these "*honor students*" may fairly be compared to those who were put down in the American report as having "*studied severely*"; second, students who resided for three years or more, but did not try for honors; third, students who resided for two years; fourth, students who resided for one year. There are three terms in a year at the English universities, and students who took less than three terms were omitted altogether.

To these picked women, the majority of them devoted both before and after college life to intellectual work of a more or less laborious nature, schedules were sent containing, besides the direct query, "Has your health been *a* excellent, *b* good, *c* fair, *d* poor, *e* bad, between the ages of three and eight years, eight and fourteen years, fourteen and eighteen years, at the time of entering college, during college life, and since leaving college," tabulated queries as to family health, as to individual history before going to college, as to conditions of college life, and as to history after leaving college. The object of these questions was mainly to throw light on all causes other than study that might have affected health.

An identical schedule of questions (omitting those about college life) was also sent to each student to be filled up by, or for, the *sister* (or lacking a sister, a first cousin) *nearest her in age*, who had attained the age of twenty-one and had not been to college. In this way was obtained "a parallel series of statistics, with which to compare those about the students—a feature in our inquiry which we think greatly adds to its value."

Elaborate and detailed tables (41 in number) have been carefully made up from the 562 answers received to the 663 schedules sent out. The answers received in the United States amounted to a little over half of those solicited, so that our English sisters have shown a commendable willingness to have the question looked into as thoroughly as possible. Indeed, of the 136 women honor students from Newnham, 130 answered; furthermore, in order to show that the percentage of answers withheld would not have materially affected the average, the Secretary was able, from her personal knowledge of the six women who made no answer, to give the missing health facts in their special cases.

The following condensed and representative table, showing the percentage who have enjoyed different degrees of health at different periods, will, we believe, sufficiently indicate the character of the investigation, and illustrate the comparative position which college training may be claimed to hold among influences that affect the health of women:

ALL HONOR STUDENTS. TOTAL NUMBER 269.

	Excellent or good, per cent.	Fair, per cent.	Poor, bad or dead, per cent.
From 3 to 8 years of age..	71.26	16.86	11.80
From 8 to 14 " " ..	69.78	20.15	10.07
From 14 to 18 " " ..	66.54	23.79	9.67
At time of entering college..	74.35	17.47	8.18
During college life	67.66	22.68	9.66
Present health	74.72	18.96	6.32

SISTERS OF ALL HONOR AND OTHER THREE YEAR STUDENTS. TOTAL NUMBER 264.

From 3 to 8 years of age..	65.87	12.70	21.43
From 8 to 14 " " ..	65.12	18.60	16.28
From 14 to 18 " " ..	56.44	29.17	14.39
From 18 to 21 " " ..	60.61	24.62	14.77
Present health	60.99	27.65	11.36

It appears from this table that throughout life the students in the aggregate maintain a higher standard of health than their sisters. Of this fact, two possible explanations are suggested, that a higher average of physical vigor is implied in the desire to go to college, and that the healthier members of a family are, on the average, expected to obtain remunerative work, and accordingly to prepare themselves for it. But how are we to account for the temporary depression of average health at college? For although the health of students is better than that of their non-college sisters, it shows a deterioration from their own standard, both before and after the period of college life. There seems little doubt that a large part of this loss must be ascribed to the effect of "worry over personal and family affairs." A similar connection between health and worry was indicated in the American Statistics.

No part of the report is more interesting than that portion dealing with the occupations of both the students and their sisters. It does not seem unreasonable to assert that a very positive relation exists between congenial intellectual occupation and good health, and that there is an equally direct although subtle one between desultory and untrained (even when ardent) efforts and much of the indifferent health of women of the upper and middle classes. The tables prove that 77 per cent. of all the students and 83 per cent. of the honor students have engaged in educational work since leaving college, while less than one-half the proportional number of their sisters have done so, and "for a much larger number of sisters than of students no regular occupation at all is reported."

The difference in the rate of marriage of students and of their sisters is unimportant, if we take the end of

the college life of the former as the starting-point for the comparison, as a certain number of the sisters marry while the students are at college. Taking the students and the sisters together, as a fairly representative group of women from the English professional classes, we must face the serious conclusion that a large proportion of these women do not marry at all. We find, however, that there are fewer childless marriages among the students than among the sisters, that there is a slightly larger proportion of still-born children among both than among the average population, but, "on the other hand, that the proportion of deaths among children born alive is smaller than ordinary, especially in the case of the children of students." Of the married students nearly 78 per cent. enjoy excellent or good health, whereas but 62 per cent. of their married sisters are equally fortunate, and the students' children are healthier than those of the sisters. Although such a statement may seem superfluous in this age of physical culture, the report reveals the fact that among the women of both divisions, those who during their school life enjoyed much out-of-door exercise and amusements showed the benefit of such robust physical preparation for the stress and strain of mature life, by a better standard of health.

Of course broad and certain conclusions cannot be drawn from tentative and numerically small statistics. Nevertheless, such are the facts so far collated. That any serious alarm as to the effect of University education on the health of women is groundless, is clearly shown by the fact that the net amount of increase in good present health, as compared with health between fourteen and eighteen years of age, is greater in the health of students than of their sisters.

A final word of comparison between the English and American statistics:

The average health of the American college student seems to be higher than that of her English compeer (probably accounted for by certain college physical conditions), but the American student who has "studied severely" does not appear to recover as high a tone after leaving college as the English woman. The proportion of Americans who report bad health on entering college is 25 per cent., of English women only 8 per cent. Such figures throw a side-light on the ordinary hygienic condition of American well-to-do homes. While a large proportion of American college graduates marry, a larger proportion are childless. A smaller proportion of them are engaged in educational work—in other words, more American college-bred women are absorbed in the home and philanthropic work of the nation, and so act as an invaluable leaven.

Catherine Baldwin.

