

the civilized female is developed through the constricting influence of dress around the abdomen. This is markedly shown in the greater prominence of the costal movements in those girls who were either one-half or three-fourths white, and who were hence dominated to a greater or less extent by the influence of civilized blood. . . . It is also evident that the costal type of respiration in the civilized female is not due to the influence of gestation."

Long-continued compression, by the corset, of the wall of the abdomen in the epigastric and hypochondriac regions, gradually brings about a thinning of its adipose layer. Below the ring of constriction the fat accumulates. The woman who abhors 'a stomach' yet adopts the most effective means of cultivating one. Flabby, old, or obese persons are especially prone to pile up panniculus adiposus below the navel. Many stout young men in good condition have been examined, and not one has been found in whom this tendency is evident. On the contrary, the fatty layer above the umbilicus is usually thicker than that below it. These men wear suspenders. In eleven healthy women below thirty who have been in the habit of wearing corsets (of varying degrees of tightness) the fat below the navel has always been found to be more than twice as thick as that above, while one to three is no uncommon ratio. That this is not normal is proved by the fact that in two teachers of gymnastics measured for me by Dr. Mosher the fatty layer was thicker above. With a corset that is 'quite tight,' but not so tight as the patient "could bear it, as in a new dress or at a ball," the displacement of the uterus is a third of an inch. The distance seems insignificant, and may only be considered of importance in view of the following facts: 1st, That this is almost the deepest position to which the structures can be forced by straining down; 2d, That the long-continued action of the depressing force is exerted during the period of growth; 3d, In view of the results likely to ensue in case of weakened and enfeebled supports, in case of increased size and weight of the uterus (normally present during menstruation), and in case of incipient displacement; it naturally follows, 4th, That this forcing downward is sufficient to render the uterine supports tense (be they ligament, 'column,' or pelvic surroundings *in toto*), and that in their taut condition any extra or added stress, like deep breathing, or exertion, or bending, might well be enough to each time slightly overstrain these stretched supports. Slowly and steadily as this force acts, yielding must in time occur. In fact, Engel states that in every one of thirty autopsies in which evidences of tight lacing were found, prolapsus of the uterus was present in some degree, except where adhesions had prevented it. Will not this account in part for the uterine troubles of women supposed to be due to many of their sedentary occupations, such as sewing-machine work? The man bending forward relaxes his abdominal wall, and enormously lowers his intra-abdominal pressure by so doing (Schatz), but the corseted female, who writes or sews, produces the opposite effect. The earlier corsets are worn, the more the liver would be affected, since it is proportionately much larger in the child than in the adult. Previous to puberty its weight may be as much as one-thirtieth, or even one-twentieth, of that of the entire body: in the adult it averages one-fortieth. "The practice of tight lacing," says Murchison, "may cause displacements and malformations of the liver, which may simulate enlargement, and which are of considerable importance in diagnosis. Tight lacing may act on the liver in three ways, — according to the situation, the tightness, and the duration of the constricting cause. (a) The liver may be displaced upward or downward, according as the pressure is applied below or above. The precise situation where the pressure is applied will vary with the prevailing fashion of dress; but most commonly in this country the displacement is downward, and this may be to such an extent that the lower margin reaches the ilium, and the liver appears to fill up the whole of the right side and front of the abdomen. [Frerichs and other writers speak of this amount of change in location]. (b) In consequence of lateral compression the liver may be elongated in its vertical diameter so that a larger portion of it is brought into apposition with the abdominal and thoracic walls. This is a very common result of tight lacing. (c) When the pressure is exerted by a tight cord, it may produce deep fissures in the substance of the liver, as the result of which, portions of the organ may be more or less detached, and may even be felt as movable tumors through

the abdominal parietes. Apparent enlargements of the liver from tight lacing are far more common than is generally believed."

If, from the testimony of these five observers, — Braun, Corbin, Engel, Frerichs, and Murchison, — the extreme mobility of the liver has been proved, although we grant that these extremes result from tight lacing, are we not justified in believing that even a loosely adjusted corset must definitely displace so mobile an organ? The difference between the loosest corset and the tightest is less than might be imagined. Dr. Dickinson has not been able to double the pressure on requesting a patient to lace her loose corset to the utmost she could bear.

Engel found the stomach displaced in the following remarkable manner. It was shoved to the left. Its long axis, from a horizontal or oblique direction, was changed to a vertical, so that the lesser curvature ran down directly to the left of the spinal column. The pyloric end was depressed as far as the fourth lumbar vertebra. Constriction not unlike the liver-furrow was occasionally met with, but without pathological changes in the walls. The pancreas may be dragged down to a perpendicular position on the face of the vertebral column, reaching down to the promontory. These were extreme cases, of course.

A few of the most palpable changes brought about by corset-pressure have thus been briefly described. There are many others as much more important as they are more subtle and difficult of proof, such as the disturbances of abdominal circulation, the effect on digestion, the limitation of exercise, and the slowly increasing action on the general health.

The conclusions reached by the author of this interesting paper, are: 1. The maximum pressure at any one point was 1.625 pound to the square inch. This was during inspiration. The maximum in quiet breathing was over the sixth and seventh cartilages, and was 0.625 of a pound. 2. The estimated total pressure of the corset varies between thirty and eighty pounds, — in a loose corset about thirty-five pounds, in a tight corset sixty-five pounds. 3. Within half a minute after hooking the corset, such an adjustment occurs that a distinct fall in pressure results. 4. The circumference of the waist is no criterion of tightness. The difference between the waist-measure with and without corsets gives no direct clew either to the number of pounds pressure or to the diminution in vital capacity. Relaxation and habit seem to affect these factors largely. 5. The capacity for expansion of the chest was found to be restricted one-fifth when the corset was on. 6. The thoracic character of the breathing in women is largely due to corset-wearing. 7. The thoracic cavity is less affected by the corset than the abdominal. 8. The abdominal wall is thinned and weakened by the pressure of stays. 9. The liver suffers more direct pressure, and is more frequently displaced, than any other organ. 10. The pelvic floor is bulged downward by tight lacing one-third of an inch (0.9 cm).

BOOK-REVIEWS.

The Study of History in American Colleges and Universities. By HERBERT B. ADAMS, Ph.D. Washington, Government. 8°.

The Study of History in England and Scotland. By PAUL FREDERICQ. Baltimore, Johns Hopkins University. 8°.

BY a pleasant coincidence these two volumes reach us together, and they have a great and reciprocal interest. When Dr. Adams comes to look over the present series of his Studies, we believe that he will find it the most interesting, and perhaps the most valuable, of all. It will be remembered, that, after half of the series had been devoted to studies of local government, a pleasant essay on a recondite subject in the political history of the United States was introduced, and that this was followed by Dr. Adams's own contribution on the literature of charities. The present paper, which is translated from the French by Miss Henrietta Leonard, is the report on the study of history in England and Scotland, which was prepared by Professor Fredericq at the invitation of the Belgian minister of public instruction. The report is very complete, and the author seems to have spared no pains to gather all the information available. Courses of study and examination-papers have been drawn upon *ad libitum*.

The author finds that the "study of history in Scotland" is something which does not exist. He says frankly that "history is in reality excluded from the curriculum of Scottish universities." At Aberdeen and St. Andrew's it is not taught at all, except when some historical information is necessarily imparted in the course of instruction in literature. He is hopeful, however, that a new act of Parliament will remedy this glaring defect, and afford history at least a decent recognition in the land of Robertson, Walter Scott, and Carlyle.

With Cambridge and Oxford, Professor Fredericq was very much impressed, and he grows quite enthusiastic over the system of fellowships which permits men like Max Müller and Mr. S. R. Gardiner to secure an academic income while devoting their lives, not to teaching, but to advancing the cause of science. The historical instruction at the two universities is outlined for us by the author, and we learn exactly what courses each professor and fellow gives, and how he gives them. The description of Professor Seeley as "a master whose first care is to make his pupils think for themselves," is a very pleasant one, and his adaptation of the German *Seminar* method is highly praised. Mr. Oscar Browning, well known in this country for his pedagogical writing, also comes in for a special word of praise.

At Oxford it was found that the programme of the historical instruction was more grandiloquent than the instruction itself justified. The lecturers are referred to as generally restricting themselves to an elementary style of teaching, and as not using any of the scientific equipment on which the continental student depends so much. Professor Fredericq notes that "the remarkable development in historical instruction that has taken place at Oxford since 1870, and at Cambridge since 1875, leads one to think that the practical course will soon be felt a necessary complement to the already brilliant theoretical course." The corps of instructors at both universities is ample; and, when modern methods and *quellenstudie* shall have replaced much of the present antiquated instruction, then, we are led to believe by the perusal of this essay, little else can be asked for.

Dr. Adams's paper on the study of history in American colleges and universities is quite as painstaking and far more comprehensive a study than that of Professor Fredericq. The substance of some of the chapters has previously appeared as articles in *Education*, but they are now reproduced with many additions. Dr. Adams traces the study of history at Harvard from its foundation up to the preparation of Mr. Winsor's 'Narrative and Critical History of America,' and at Yale from the seventeenth century to the foundation of the courses now given by Professors Wheeler and Dexter. To Columbia College the writer awards the honor of being the first institution in America to recognize history as worthy of a professorial chair. His sketch of the historical teaching at Columbia, which embraces the work of Vardill, Anthon, McVickar, Lieber, and Burgess, is in many respects the most interesting in the volume, and to it a very appreciative account of the School of Political Science is added. The University of Michigan and Cornell receive separate and generous treatment. The chapter on the Johns Hopkins University is a slightly revised reprint of Dr. Adams's earlier paper on the subject. We were very much interested in reading of the excellent instruction being given in the colleges for women, particularly at Wellesley. The paper concludes with an extract from Mr. Carroll D. Wright's impressive address before the Economic and Historical Associations at Cambridge in May last, and some statistical tables.

Read in connection with each other and together with Professor Fredericq's articles on the teaching of history in Germany and France, published some little time ago in the *Revue Internationale de l'Enseignement*, these pamphlets afford us the data for determining with some approach to exactness the comparative value of the historical instruction now being given at the world's great colleges and universities. We find advance everywhere, — promising, hopeful advance. The spirit of Savigny, Ranke, and Draysen is abroad; and the work of Freeman and Seeley in England, and of Burgess, Emerton, Adams, and Channing in this country, is in the right direction, and productive of excellent results. But the next generation will be even better able than our own to appreciate what the modern method of studying and teaching history really means.

The Family: An Historical and Social Study. By CHARLES FRANKLIN THWING and CARRIE F. BUTLER THWING. Boston, Lee & Shepard. 8°.

BOOKS on sociology increase in number and interest. The one under notice is indeed a very good summary upon the subject in its historical, social, and moral aspects; but it gives no hint of a definite purpose other than can be ascertained by reading it. It is without a preface, — an omission which we think a defect in so important a discussion.

The first chapter treats of the prehistoric family, and examines this institution in the Semitic and Aryan races, as a type of different social structures. "The Semitic family is patriarchal, the Aryan is individual: one makes the father the unit, the other makes the family itself the unit; one is polygamous, in the other monogamy prevails; one gives all duties to women, the other gives some duties to men, and some rights to women. The patriarchal Semitic system is the germ of monarchy; the Aryan family is the beginning of the political commonwealth." The patriarchal system is shown to prevail among the Greeks, Romans, and Hebrews, with the strict responsibility of woman for fidelity, and considerable laxity in tolerating male infidelity. Then Christianity modified this system. Two characteristics mark its influence and improvement upon previous conceptions of the family: monogamy and mutual chastity. The same rule of purity was applied to the husband as to the wife, which had been limited previously to the latter. The middle ages are considered to mark a conflict between the Roman patriarchal system, and the republican conception of the family in northern races, based upon the capacity to bear arms. It is a chaotic period, the first of which shows little respect for woman. The decline of virtue in the Roman Empire had to burn out its course; but the rise of chivalry was the restoration of the Christian conception, which in one form or another continues to make improvement.

The general contrast between modern and ancient conceptions of social life is that between the individual and the family. The individual is the legal and social centre of modern life; the family, of the ancient. In modern jurisprudence the individual is made to suffer for his own crime alone; in ancient, the family and kinsfolk were also made to suffer for the crime of a guilty member. This is important for illustrating the tendency in individualism to distribute the rights and responsibilities among a larger number than the centre of a group or community. This elevates woman above the position of a servant or of property.

The drift of rural into urban population is noticed, and is thought to endanger the family in such a way as to require correction by a re-action in the opposite direction. We think, however, that economic forces have determined this more than moral, although the latter are strong factors in the movement. Fourierism, the Oneida Community, and Mormonism do not pass unnoticed.

The last two chapters are an elaborate discussion of divorce in a very scientific manner, but with some unconsciousness of the difficulties in the way of correcting the evils of it, due to social customs which must first be amended before the problem of divorce can be solved. The causes of divorce are assigned to two classes, — general and special. The general are, (1) growth of individualism, (2) secularization of marriage, (3) change in social and political condition of woman. The special are, (1) husband's belief in ownership of wife's person, (2) property, (3) wife's failure to assume her share of the burdens of the family. The remedy lies, as the author thinks, (1) in a proper conception of a woman's responsibilities, (2) in a higher standard of belief and practice as to domestic institutions, (3) in the restoration of marriage to a religious basis, and (4) in uniformity of law as to marriage and divorce.

We will not criticise this. The subject merely suggests the remark that there is a growing tendency to make married life a commercial matter, one of the most dangerous influences that ever affected human life. On the other hand, both as a corrective of this, and as a check upon population of which Malthus may not have dreamed, there is a tendency to enfranchise woman, socially and legally, so as to make her independent of the marital relation for her support. It is not a little remarkable, that, just as population is beginning to approach the limits of its expansion by occupying all the material resources for its subsistence, the combined in-