

the heart, carcinoma, and the various chronic affections that fill our mortality tables.

I call particular attention, in my paper, to the girls, because they are by far the more important class, and the out-door games and occupations of the boys tend to obviate what the sedentary tasks of their sisters but tend to increase.

Once free from the thralldom of school, the boys break loose to unbend their backs and free their lungs; the girls, to saunter home, their arms burdened with books, to aid their mothers in domestic duties.

The infantile diseases of the spinal column, those that involve the structure, have received careful study, and now, thanks to Sayre, the body is at once placed in splints until the rickety diathesis is overcome by growth and a full supply of bony deposit. Even such cases of structural disease as develop later in life are now easily detected at their earliest manifestation, and either held in abeyance by immediate treatment or effectually checked in their course.

But it is my purpose to call attention to another class where spinal weakness, due to the strain of position,—a condition so insidious in its onset and masked in its course,—escapes attention till the frame, fully set by complete bony deposits, cramps the viscera, and, by impeding healthy action, forms a nidus for disease. The development of the skeleton is undoubtedly influenced by the activity of its muscles: symmetrically-developed muscles will produce straight bones. We read much of dystocia, we hear of pelvic distortions, of narrow diameters. Has any one endeavored to mitigate these evils by helping Nature to make normal what the requirements of dress and pursuit have tended from early life to deform? The remedy for those conditions that have suggested the forceps, the cranioclast, or "version by the feet" lies in the early development of the skeleton by proper physical training,—in other words, by educating the female child to be a mother, and if its diathesis be rickety train its pelvis as well as its brain. Far be it from me to decry anything that will tend towards the most thorough education of the intellect: my object is simply to contend that study can be accomplished without cramped positions, and that weak spines are not essential to educated women. My attention has frequently been called in connection with dispensary and other practice to a series of cases that forms the basis of this paper. For better elucidation, and to avoid repetition, I shall group them under two heads,—the first comprising those young enough to go through the daily routine of school life and thereby suffer at once from its ill effects; the second, those who, after having spent years in developing their intellect at the expense of their muscular and nerve force, suddenly call upon them to bridge them over the most difficult period of their lives. The first group you recognize by their pale faces, bowed backs, and rounded shoulders, frontal and occipital headache, weak eyesight, cardiac palpitations, disordered digestion, and cer-

tain nervous combinations, chorea predominating. Stand at any school-room door on an afternoon in the early spring, and you will not fail to see the cases that fill our dispensaries. You read their remedy in their very faces,—a proper division of study and recreation, recreation that means not mere rest from book-work, but muscular exercise, good food and fresh air.

To-night to the second group I wish to call special attention: a chapter devoted to its consideration might most appropriately bear for its heading the one prominent symptom, "backache." Free from the daily restraint of school life, their hours are devoted to the absorbing necessities of society; and their habits either become extremely active or extremely sedentary, the mania for violent exercise developing from the lassitude that follows nervous excitement; and from one extreme to the other will these girls drag out years of miserable existence whose monotony will be relieved only by the periodical tortures of dysmenorrhœa. That the functions are deranged is simply in accordance with the general physical strain. In all such cases the great muscles of the back are those most called upon, and soon from excessive tension or want of nutrition, fail in their most important duty. The equilibrium which is maintained by the concerted action of those of either side is lost by the giving way of the muscles that malposition has tended to weaken, and the stronger group brought into play draw the spinal column where they will. Neuralgic pains, backache, and internal congestions are the result, to say nothing of the occasional permanent lesion in long-standing cases by the absorption of cartilage. Weariness from anæmia, chlorosis, and hysteria in all its forms is the inevitable sequence. Let me picture for you an example. A young girl comes to your office with the following history. Possessed of a naturally strong constitution and vigorous intellect, she has been ambitious, has graduated after years of close application and with the highest honors in her class. Her winters have been spent in the sedentary pursuits of the school-room; even her hours of leisure have been devoted to her books. Of course, the usual result—"break-down"—has followed, and the routine treatment of tonics has been adopted, and, so far as general appearance is concerned, the patient has been benefited by them. But the principal complaint is weariness, a continual feeling of fatigue, following the smallest amount of exercise, brought on equally well by standing and by sitting, by day and by night. This feeling of weariness is more decided in the back, and is so uncomfortable, not to say painful, as to require some constant form of pressure in the lumbar and sacral regions, which, when lying in bed, is brought about by placing a pillow in the hollow. There is also an aching in one of the shoulder-blades, and a feeling of weakness in the muscles at the back of the neck. Upon examination, your patient appears well nourished, but the muscles upon pressure are found to be soft and flabby. It will