
LECTURE AT THE NEW ENGLAND WOMEN'S CLUB,

The regular lecture was given at the club parlors yesterday afternoon by Miss M. A. Hardaker, her subject being "A Scientific Study of the Woman Question." At the beginning, allusion was made to the unwillingness of social reformers to submit their problems to scientific treatment, to the disposition on the part of philosophers and critics to apply such treatment, and to the small results usually obtained by it. These failures were explained by the complexity of the data on which reasoning must be based. Hitherto arguments for sexual inequality of intellect had been reared upon comparison of brain weights and measurements. This had made the arguments too close and specific, and had led to much useless belligerency. To be valuable in the present state of scientific knowledge, the argument must rest upon the *most general* truths, and the facts of brain weight and size could only be used in their bearing on the general conclusion. The purpose of the paper was to start from universally admitted scientific facts and to create from them an argument which must be indestructible so long as the premises were allowed.

The most general principle to which the inequality of power in men and women could be referred was the inseparability of matter and force; a large amount of matter represents more power than a small amount, and this law includes vital organisms as well as inorganic masses. Under proper test conditions, the amount of power evolved by any vital organism is in direct ratio to the size and weight of that organism. If, then, quantity of power is in proportion to the size of the body, the question of *quantity* of power is settled in favor of men. The weight of all the men of civilized countries would exceed that of all the women by probably fifteen per cent. Another accepted truth of modern science is that all human energy is derived from the food and is an exact equivalent of the amount of food consumed and assimilated. The amount of food assimilated by men exceeds that appropriated by women by at least twenty per cent. This fact has popular recognition in the higher rate of board demanded for men. This reaffirms the conclusion that men must represent more power of *some kind* than women. It may be more muscle,

must represent more power of some kind than women. It may be more muscle, but it must be more of something. If the collective weights and food-assimilating powers of men should ever fall below those of women, we should see a reversal of present results. The human body obeys the same laws of the conservation and transformation of energy which pertain to the entire universe of matter. The kind of power evolved by human beings will be determined by individual organization. Food converted into muscle will re-appear as work; food converted into brain action will re-appear as thought and speech.

In arriving at *qualitative* differences in the power of the sexes we are forced by the barrenness of anatomical knowledge to reason from the quality of the product back to the quality of the organ which produced it. Fine manufactures argue excellent machinery; skilful workmanship proves a trained eye and hand; an exhibition of work is equivalent to exhibition of its agencies. A barrel of brains is of no account unless it produce a song or a steam engine. From "Hamlet," "Faust," and "Middlemarch," we reason back with absolute certainty to the qualitative excellence of the brains of Shakespeare, Goethe and George Eliot. It is tolerably established that women possess a larger amount of actual nervous matter in proportion to the size of the body than men. But this matter distributed over the body in the form of ganglia and filaments would increase sensitiveness and liability to nervous disease without increasing the intellectual mechanism, i. e., it would indicate a preponderance of emotion—a physiological theory which all facts confirm. Evidence was adduced to show that the intellectual action of women can never overtake that of men as a sex in the factor of time. This can be reasoned out from general physiological truths. The example was taken of a pound of bread to be converted into thought by two persons—the man weighing 150 and the woman 130 pounds. In an harmonious balancing of physical functions the rate of mastication and of deglutition will be less in the woman. She will not be able to swallow the pound of bread in the same time. The absorbing surface will be less, the digestive juices necessary to an equal amount of food cannot be secreted so quickly in the smaller organism. The bread can be transformed into thought more speedily in the large organism. Hence, the average conditions remaining as at present, men will always be able to think more than women in any given time. This priority of development has historic confirmation, and we are bound to take account of the physiological law in casting up our

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