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ALL THE STATES OF SOUTH AND MIDDLE AMERICA have of late years shown great solicitude about the condition of the national education, but none more so than the Argentine Republic. Dr. J. B. Zubiar has just published a little pamphlet entitled "Quelques mots sur l'Instruction dans la République Argentine" (Paris). He is inspector of the national schools and training-colleges, and was his country's delegate at the last Paris exhibition and at the pedagogical congress held on that occasion. The object of his pamphlet is to show to the civilized world what progress the Argentine Republic has made since it succeeded in shaking off the clerical government of Spain, which had for three centuries held it down. The following facts need no comment. In 1810 the only places where teaching went on were a theological college and a few schools kept by priests, who taught the young idea how to shoot chiefly by means of the cane. In 1888, after fifty years of independence, there are for the forty million inhabitants two universities with three faculties each, 15 colleges, 34 training-colleges with 758 professors and 11,365 pupils, 2,263 elementary schools with 4,744 teachers and 175,239 pupils (which gives an average of 34 to each class only), and, besides, 831 private elementary schools with 1,094 teachers and 33,723 pupils,—altogether 3,227 schools with 254,608 pupils. In commenting on this report, the *Journal of Education*, London, states that the great impulse to education was given by the law of 1789, and ever since the work has rapidly extended. In one year, 1887–88, there was an increase of 109 schools, with 1,000 teachers and 27,158 pupils.

MENTAL SCIENCE.

A Study of Movements in Young Children.

MODERN science attaches great importance to the study of beginnings, and such study is quite as promising and interesting in the field of mental as of physical facts. The origin and growth of human faculty as exemplified in the development of the child claims an especial importance on account of its very general and educational interest. Quite a number of child biographies have been written from this point of view, and the period has now come when special studies of particular lines of development and acquisition of faculty are made. A recent study by M. Binet (*Revue Philosophique*, March, 1890) deals with the following four points: the co-ordination of movements in walking, the bilateral character of movements, automatism in movements, and re-action times.

The study of how children learn to walk has been confined mainly to determining the age at which independent locomotion begins: this in the average of a number of infants was found to be at about eighteen months. It varies considerably with the health and growth of the child, and also with the degree of attention the child gives to the learning of it. M. Binet tells of two sisters, the elder of whom learned to walk at twelve months by carefully and persistently leaning on one chair, feeling the way to the next, and so on; while the younger, who was stronger and had every opportunity of learning quickly, made very intense but irregular efforts to walk, and did not succeed until her fifteenth month. This difference of character has been maintained, the elder being calm, serious, and not easily distracted, while the younger is exuberant, easily distracted, and volatile. The origin of the tentative movements resulting in walking, Preyer regards as instinctively inherited, and in this opinion M. Binet concurs. The latter observed in an infant only three weeks old alternate movements of the legs when the child was held with the legs free to move, and the soles of the feet were in contact with any substance. Repeated experiments showed that if the child were held with its feet above the ground, no such alternating movements of the legs occurred, but as soon as the feet touched the floor these movements were reflexly excited. This seems to indicate that the movements of walking are instinctive; it also indicates that the fact of walking being a power which the child acquires somewhat late does not interfere with its instinctive character.

If one observes the spontaneous, explosive movements of the arms and legs of infants a few weeks old, one will notice a great preponderance of bilateral movements; the two arms or the two legs moving together, or, if not quite together, alternating so rapidly as to amount to the same thing. The contrast in this respect between the infant and a child of two or three years is very marked. Of 57 movements made by an infant one week old, only 13 were unilateral, 25 were bilateral, and 23 of the rapidly alternating kind. This tendency towards bilateral movements can be observed in older children. Rubber tubes were placed in the hands of a three-and-a-half-year-old child with the request that at a given signal she should press only one of the tubes. The record showed very frequently that both were pressed, and other irregularities occurred. In connection with these movements, M. Binet's attention was called to the expression of fear in the child when not securely held. This was very evident by its crying, which ceased as soon as the child was securely held. This occurred before the child had had a fall, and so would suggest a sort of instinctive fear of falling,—a fear which does not exist with regard to fire, for instance.

Recent researches have attached great importance to the phenomena of automatism, or the subconscious reception of sensation, and execution of appropriate movements. In a single child such automatism was evident during the first six months of life. If the child's hand were open, a light pressure on the thumb sufficed to make it close, and when closed a stroking of the back of the hand opened it. This succeeded as well whether the child was awake or asleep, whether the child directed its attention to the hand or not. The same automatic faculty comes to the front in many ways. If a child's interest is held towards a certain point,