

Vital Statistics.

VITAL STATISTICS.—The deductions from the mortality returns of the city of Montreal drawn by Dr. Carpenter, have led to a somewhat important contribution to the discussion of this important subject. The writer is a gentleman who from his knowledge of figures and the attention he has given for some years to the consideration of the laws which regulate the growth of the population, is entitled to be heard with respect and his statements carefully examined. His object, in the first place, is to rebut the very serious charge that Montreal, as compared with Liverpool, for instance, “the plague spot of the Mersey,” shows mortality twice as great as that of the latter city. The foundation for the statements of Mr. Carpenter are the figures given in the *Year Book*, from the census returns of 1861, which are vouched for by the publishers as correct, “no errors in any of the past editions having been discovered.” It is notorious that the census returns were utterly untrustworthy, and this fact is not now for the first time brought out. By a series of calculations, based on the Carlisle tables, and compared with the ascertained rates here, the writer shows that the figures relied upon for the death-rate of Ontario, give a number 1,507 in excess of the total number recorded in that Province. “In fact,” he writes, “the deaths in Ontario must have been equal to the entire number returned by the whole population of the Dominion.” The theory of the writer of the article now before us is, “That the birth rate is the certain controlling element of the death rate; that whenever the ratio of the births to population is the highest, then also the mortality is greatest, and, things being equal, will be in proportion to the birth rate.” From this, by a series of very ingeniously constructed tables, he shows that Montreal, instead of being the “plague spot” described by Dr. Carpenter, in reality enjoys fully more than an average exemption from infant mortality. As the number of deaths of children is *positively* very large in Montreal, whatever it may be *relatively* to other cities, it is evident that the subject possesses much more than a merely theoretical interest. It has, undoubtedly, been the aim of the Sanitary Association represented by Dr. Carpenter, to urge the authorities to adopt the most stringent means for ensuring the cleanliness of the city, and thus securing a higher state of health and efficiency in the adult population, and the preservation of the lives of the children. And no mere questions as to the technical correctness of tables, or the manipu-

lation of statistics to show a greater or less average can relieve the Corporation and individuals from performing their duty in this respect. But it is not only not necessary to exaggerate the evils which exist, but it is very far from being desirable to do so. The exaggeration may arise from a wish to enforce more strongly the necessity of attending to the health of the city, or it may be caused by an erroneous system of calculation. It is difficult to deal briefly with the mass of figures and calculations contained in the statement so as to make them easily intelligible. The proposition with which the writer starts—that the birth rate is the controlling element of the death rate—is illustrated by supposing that on an island in the St. Lawrence, the number of births is double that on an island in the Thames. In a generation twice the number must have died on the one than on the other, not because they were more unhealthy, but because they were more numerous. With our want of a registration system, it is impossible to arrive with the slightest degree of accuracy at the number of births during the year; only the baptisms are recorded, a very large proportion of the children born not being, consequently, registered at all. Taking even the imperfect returns, however, the figures show that while, even with these returns, the number of deaths of children under one year should have been by the London tables 7,358 in five years, they were only 6,756 or 602 less than the London average. Other tables show, according to the writer's figures, that Montreal is more healthy than London and Glasgow, and much more healthy than Manchester. Should these statements be correct, and from the very cursory examination we have yet been able to make of them, it seems difficult to disprove them, it is of the utmost importance they should be known, so as to remove the charge always brought against Montreal in this respect. Until we have carefully gone over the very interesting tables to be found in the writer's statement, which we may mention will be published in pamphlet form in a few days, we content ourselves with briefly indicating the line of argument rather than entering upon a detailed examination.
