

compared with the 18th century, though there have been some especially severe epidemics. There was one epidemic in 1805, not long after vaccination was discovered; another in 1825. Dr. Barron, the friend and biographer of Jenner, says the disease was nearly as prevalent in London in this year (1825) as during any of the three great epidemics of the preceeding century. In 1838, '39, '40, in spite of vaccination, which had become very general, small-pox killed in England and Wales, 35,833 persons. In 1870, '71, '72, '73, the worst epidemic, it appears, of the century prevailed, reaching its climax in 1871. In it the mortality appears to have been, proportionately, almost as great as in any of those of the 18th century. Regarding this one, D. Manson Fraser, M.A., M.D., F.S.S., a strong advocate of vaccination, gives us a valuable but sort of apologetic paper in the *Sanitary Record* of April last. A large part of his argument goes to show that whilst, as he himself has it, "in the epidemics of small-pox which occurred before the introduction of vaccination, the mortality caused by the disease was almost exclusively amongst the very young," (from 80 to 90 per cent. of the deaths being of children under 5 years of age), from his figures, it "appears that in the epidemic of 1870 to 1873, the number of deaths from small-pox amongst children under 5, as compared with the total number of all ages, was very much less than it was in the 18th century." Again he writes: "It is held, and the opinion is based on wide clinical observation, that while vaccination cannot, under any circumstances, be called an absolute protection against attack of or death by small-pox, it is, when efficiently performed, an almost absolute protection against attack of and especially death by that disease during the earlier years of life; and when followed by efficient re-vaccination, the protection is renewed for a further period of years." Observe, what a backing down is this from the strong language used in the time of Jenner, as regards the preventive influence and the permanency of vaccination. Near the commencement of his paper Dr. Manson writes that the occurrence of the epidemic "was fully expected," from a certain tolerably definite law of periodicity; but "wholly unexpected, however," he adds, "was the extreme intensity which the disease assumed all over the country." The prevalency of the disease had so diminished that in many quarters, he says, "extravagant hopes had been formed as to the efficacy of vaccination as a protection against small-pox. The great extent, therefore, and the extreme virulence of the epidemic came as a com-