

The Combined Experience of Life Annuitants embraced male lives under observation numbering 6,728, and females numbering 18,951, and the whole number of years of risk of the first sort was 53,599 and of the second 173,519. In this experience there were only 51 male entrances under age 30, and 146 female, and over 75 there were only 990 male, and 2,088 female entrances.

The data forming the basis of Dr. Farr's tables, embraced 492,525 males, and 503,248 females, and of course full exposure at early ages, and no less than 8,871 male entrances, and 10,608 female, at age 75 and over.

As the latter tables are the neglected factor in the search for suitable tables for the regulation of annuity transactions, I may appropriately quote a couple of Dr. Farr's remarks on these tables, as given in the Cyclopædia:

"We have no means of ascertaining what the rate of mortality would be among men living in the most favourable sanitary conditions; otherwise observations for a term of years on a considerable number of such persons would supply a standard rate with which other rates could be compared. In the absence of such a standard the districts of England in which the mortality rate did not exceed 17 annual deaths in 1,000 living have been selected as the basis of a new Life Table, which will shortly be published, as the nearest approximation we can obtain to a Table representing the human race in a normal state.

"Upon inquiry it was found that in many districts of England the mortality of the population did not exceed the rate of 17 annual deaths to 1,000 living. For the sake of convenience these were called 'healthy districts,' consisting of 64, or nearly a tenth-part of the total registration districts of England and Wales, and inhabited by nearly a million of people. Sixty-three of these districts have been taken as the basis of the new Life Table, constructed according to the methods previously described."

It may be possible to improve the graduation of Dr. Farr's tables between the ages of 50 and 60, and in extreme old age, particularly, and this has been tentatively done; but it would be absurd to suppose that an intelligently graduated table based on these adequate data, would not be far more likely to accord with the true law of mortality, than any table hypothetically graduated, from data which are deficient at both extremes or rather ends of life, as the deficiency of annuitant life experience practically covers all except the middle years of life.

SUMMING UP OF MR. HUNTER'S CONCLUSIONS.

Mr. Hunter sums up his conclusions as follows:

"First—That the mortality experience among annuitants resident in the United States and Canada is very low, and appears to be more favourable than any other published annuity experience.

"Second—That there is in this experience no evidence of selection against the companies by those who took large amounts of annuity.

"Third—That the rate of mortality in the early

annuity years is a factor of as much importance as the low mortality due to medical selection under life insurance policies, the new experience confirming the British Offices' Experience in this respect.

"Fourth—That experiences which are based on the combination of the mortality for all annuity years are not satisfactory for calculating the purchase price of annuities.

"Fifth—That the mortality experience among annuitants resident in the United States and Canada is lower than among those resident in Britain and the Continent of Europe, which is probably mainly due to the intensified self-selection in the New World."

These conclusions are quoted in full, mainly to show that nothing in them conflicts with or disproves what is maintained in this discussion.

It may be noted in regard to the fourth conclusion, whether any possible table of mortality which would be suitable during the whole period of duration of an annuity, would not embrace the fault for the first years of risk which Mr. Hunter names. The superior vitality of insured life experience, during the first years after insurance, is unquestionably due to medical selection as opposed to individual selection; and the superior vitality in the early years of annuitant experience, on the contrary, is unquestionably due to individual selection as opposed to the helplessness of the company to regulate selection at all, and do practically any business whatever in this line; and this fact suggests a very obvious remedy to meet the difficulty pointed out by Mr. Hunter. *This is to charge premiums according to the standard table for an annuity of fixed amount, and to stipulate in the contract that a lesser amount only shall be payable during the first few years after the issue of the policy.* It is needless to give specific suggestions on this point. The protection from loss which would be given the company by this means is obvious.

IMPORTANCE OF SECURING ADEQUATE AMERICAN TABLE.

It is not the purpose of this discussion to exclusively recommend Dr. Farr's figures for practical use. It is quite as much its purpose to point out the importance of securing an adequate table of American *healthy or select life* experience, of the same, or only really adequate and practicable sort.

It may well be inquired, considering the limited data of the British experience at high ages and as to years of exposure, whether the higher rates of that table for females are not due to this fact, and the hypothetical graduation of the table, rather than to the law of mortality itself; and also to the more considerable individual selection exercised by women owing to the circumstances generally attending their applications for annuities, and which may be most properly provided against by the company in the way above indicated, and perhaps also by moderate and suitable loading.

In conclusion, a table of 3 p.c. annuity premiums is quoted on the page following.