

In October of 1909, Mr. McClintock presented a note "On Annuity Reserves," in which he made the following statement:—

"Companies cannot expect their mortality among American annuitants now entering to be as high on the average as that of the table compiled in 1893 from previous records of the British offices and they must accordingly expect to make good their losses from their interest gains."

He also intimated that while the present standard of reserve used by the Insurance Department of the State of New York was the most stringent extant, it was probably "insufficient as a guide for the proper reserves that should be held on the lives of annuitants in the United States and Canada."

The writer suggested to the Council of the Actuarial Society that, in view of Mr. McClintock's opinions, it was advisable to prepare premiums and reserves based on the experience of annuitants resident in the United States and Canada. The Council approved this suggestion, the investigation to be undertaken when the statistics available were about double those of the former investigation. At the end of 1910 it was estimated that the foregoing condition had been fulfilled, and requests for data were accordingly sent to the companies. All the companies represented in the Actuarial Society granting annuities consented to furnish their data. The issues include annuities granted by the companies up to the year 1909 inclusive, the exposures being carried to the anniversaries in 1910. Only immediate annuities were included, issued on single lives for the whole of life and which had been paid for in cash. Temporary, deferred, joint and survivorship annuities were therefore excluded, as were also annuities issued in exchange for dividend, or where there was no cash consideration.

AGE.

As in the former investigation, the age is taken at the nearest integral age at purchase, which is approximately accurate, as the general custom of the companies is to base the price on the age according to the last completed quarter of a year. The tests made in the British experience showed that, by assuming all annuities purchased at their nearest age at date of purchase, the error involved amounted to 15 days for men and 18 days for women. As this is an immaterial error and as there is no reason to expect any greater divergence in the present experience, the labor of determining the extent of the error was not undertaken.

DURATION OF ANNUITY.

In the case of the existing, the durations were obtained by deducting the year of purchase from the year of termination of the observations (1910). The deaths were treated as exposed to risk to the end of the annuity year in which death occurred. There were very few annuities surrendered for cash, and as the exclusion of these would not affect the experience, they were ignored.

ELIMINATION OF DUPLICATE LIVES.

The cards were first sorted by date of birth, then alphabetically by name. This brought together the most of the duplicates, but not where an error had been made in the date of birth. The cards were accordingly re-sorted by name of annuitant, irrespective of age, and the resulting discrepancies were,

if material, brought to the attention of the various companies. Where a different date of birth had been given in two or more companies, and there were no means of determining the correct date, the earliest year of birth was taken. The process of eliminating the duplicates also brought together cases on the same life which were marked "Dead" on the books of one company and were in force on those of another. In most cases the differences arose with regard to the year 1910, and it was found that the information of the two companies was not as a rule inconsistent, the annuitant having been alive at the anniversary in 1910 of the annuity in one company, but being dead before the anniversary of the annuity in the other company. In sorting the cards, it was noticed that in very few cases had a woman married after the annuity was taken out, due to the advanced age at which the annuities were usually issued, and, accordingly, no systematic attempt was made to bring together such cases, as the labor would have been considerable.

EXTENT OF DATA.

The total number of cards received from the 30 companies was 12,174 of which 6,620 were on women and 5,554 on men, 76 p.c. of the cards having been contributed by 6 companies. After elimination of the duplicates issued at the same age, the following is a summary of the extent of the data.

	No. of Entrants.	Deaths.	Annual Amount of Annuities.	Annuity Released by Death.
Women	5,510	1,585	\$2,188,090	\$665,390
Men	4,042	1,295	2,143,290	\$45,010

It may be worth mentioning that the proportion of the number of annuities on men to the total was 42 p.c., that the average age at purchase was, of men, 61½, and, of women, 63. The average amount of annuity purchased was \$453, while the average on each life was \$610.

(To be continued).

THE STATE EXAMINATION OF THE NEW YORK LIFE.

Points from the Examiners Report.

(Continued from page 399.)

ERRORS.

Age Adjustments.—Age adjustments are made in approximately one case in twenty, the larger portion of these being reductions. Examination disclosed the fact that the date of birth given by the applicant differed in the various applications. The division of policy issues should have reconciled these differences at the time the policies were issued.

REINSURANCE.

Reinsurance collected during the three years was:	
1908	\$ 10,193.29
1909	17,280.93
1910	190,485.35

Reinsurance due on losses paid December 31, 1910, was \$73,600, of which \$25,000 was in companies authorized to transact business in New York state.

This item is not carried in the annual statement as an asset. There are certain other policies of long standing, where the claim was commuted, but the reinsuring companies (not admitted) elected to pay each year on the instalment plan.

LIABILITY ON ACCOUNT OF CLAIMS.

In checking up the known liability, all cases paid during 1911 and up to the date of the check were checked from the paid cards.