

## TABLE OF HEIGHTS AND WEIGHTS.

In order to obtain a new table of average weight at each age according to inches in height, the companies supplied their data on the issues of January of the odd years and July of the even years 1885 to 1900 inclusive, these months in the year being selected so as to counteract the differences between summer and winter weights. The data for men and women were treated separately, and all cases on which an extra premium has been charged or which were treated as under-average were excluded. The necessary records were received from the companies on 221,819 policies on men. The number of policies on women was less than 10,000, as the companies did not insure women freely prior to 1890. Four companies accordingly contributed additional material of more recent date, so that there were in all 136,504 policies on women. In the report it is brought out that no reliable tables have been published giving the relation of weight to height by age in English-speaking countries, with the exception of the National Fraternal Congress Tables, based upon the experience of American Fraternal Orders, and the Medical Directors' Table (1897) based on lives insured in the regular companies in the United States. The latter Table is frequently referred to as the "Shepherd" or the "Wells" Table. The German companies have recently published a table of height and weight based on their experience, and an Austrian company in 1908 published a similar table. In Great Britain there does not seem to be any reliable table in existence based on insured lives, giving the height and weight according to age. Through the courtesy of Mr. J. J. M'Lauchlan, the Committee was given a synopsis of the practice of eighteen prominent companies, from which it appeared that a number of the companies used the statistics of the Medical Directors' Association of America, as the tables for Great Britain did not make allowance for age.....

From the foregoing tables (*not here included*) were prepared tables of average weight for all ages at entry from 15 to 55 inclusive for each inch in height from five feet to six feet five inches.

Tables are given in the report showing the increase in weight for each consecutive five-age group, which is naturally found to be a decreasing amount. The average weight of 7,406 men aged 50 to 54 is 165.5, and of 5,018 men from age 55 to 84, 165.3. It was accordingly decided to assume that the weight for ages at entry 55 and above was the same as for age 55.

A table is given showing the percentage of entrants at each unit figure in weight for a large group chosen at random, in order to determine approximately the proportion of recorded weights which were estimated. It was found that 33 per cent. of the applicants gave the last integral figure of their weight as 0, and 28 per cent. gave 5 as the last integral figure, from which it may be assumed that in about two-fifths of the cases the weights were estimated.

Tables are also given of the average weight by 5-pound groups from which it appears that the range of the weights is greater than was anticipated.

The Committee makes the following interesting statement: "It is probable that the normal weight for any age and height may vary considerably from the average weight for that age and height. We have used the word 'normal' in the sense of typical of the group." Readers are warned not to come to the con-

clusion that those at the average weight have the lowest mortality. The next report of the Committee will deal with the influence of build on longevity.

Comparisons are made of the average weight under the new standard with the experience of the German Companies, and with the Austrian Company, Assicurazioni Generali, from which it appears that excluding the extremes of both height and weight, the average weight of the German insured is about 10 per cent. higher than among the insured in the United States and Canada, and that the smaller the stature of the German the more does he exceed in average weight the American. The statement is made that judging from these and also from unpublished statistics the average weight in one country may not be applicable to another country, especially where there is a difference in race.

## WOMEN.

Tables similar to those for men were also prepared for women.

While the weight for age 55 and above is taken as of age 55, there were indications that above age 60 the average weight was less; the average weight in the group 50 to 59 was about four pounds more than for ages 60 to 74, but there were only 688 cases in the latter group.

## COMPARISON BETWEEN WEIGHTS OF MEN AND OF WOMEN.

A comparative table is given in the report of the average weight of men and women 5 ft., 5 ft. 4 in., 5 ft. 8 in., and 6 ft. in height, for quinquennial age groups, from which it appeared that the difference in weight at the same height is slight below age 20, and above that age young men are distinctly heavier than young women, the difference becoming less marked as they grow older. Tall women are markedly lighter than men of the same height.

The ungraded statistics were also combined for each inch in height irrespective of age, from which it appeared that the increase in pounds for each increase of an inch in height was practically the same among men as among women.

It should be borne in mind that the average weights are taken in the street costume, the overcoat being removed, and in some instances the coat also being removed.

## HEIGHT.

The average height of the men was found to be 5 ft. 8½ in., and of the women 5 ft. 4¼ in. It should be remembered in making comparisons that the insured are measured in their shoes.

## MORTALITY RATES TO BE USED IN DETERMINING THE EXPECTED DEATHS IN THE VARIOUS CLASSES.

In order to obtain select rates of mortality which represent the average mortality experience of the combined companies in the United States and Canada, with sufficient accuracy to be used as a measure of standard mortality in the various classes, the Committee analysed the statistics used in obtaining the average height and weight. There were 229,971 entrants, with deaths of 15,180. It was found that the actual deaths were only 81 p.c. of the expected according to the select table used in the specialized investigation. A test was then made to determine the applicability of the O<sup>m</sup> Table. The expected deaths by that Table were found to be 18,930, with actual of 15,180, a ratio of actual to expected of 80 p.c. It should