

of a beginnings, and that it was so widely used after its faults were known is a proof of the indifference to accuracy, which is only another word for definiteness, which long prevailed in assurance matters, and is seen in the earlier stages of progress of all kinds. As compared with the faulty Northampton Table we now have the greatest attention paid to the collection of facts as to the duration of human life, and different classes of people are dealt with separately, so that the tables based upon the observations may be suitable for various purposes. The mortality of men is classified separately from that of women; the duration of assured lives is collected and tabulated separately from the lives of both annuitants and the general population, while considerable attention is paid to the effect upon the death rate of recent medical examination for life assurance. These are only some instances out of many of the efforts that are made to base life assurance calculations upon observations that are as definite and accurate as possible. In converting these observations into mortality tables and in combining money considerations with them, mathematical methods are employed which were to a large extent developed for their own sake, or in connection with some of the sciences, notably astronomy; while in turn the mathematics required for actuarial investigations aid the progress of science in general, and materially assist the advancement of physical and other inquiry.

#### CANADIAN PACIFIC AND GRAND TRUNK DIVIDENDS.

The holders of Grand Trunk first preference stock had a welcome surprise a year ago when the directors declared a dividend at the rate of 2 per cent. per annum. To most of the holders of this stock the distribution at this season of the year was a novelty, as it had not occurred previously for many years. This year they have what they will regard as a luxury, viz., a distribution on first preference at rate of 3 per cent. per annum. To assist the increase from 2 to 3 per cent, the balance forward will be reduced from £2,000 to £200, so as to release £1,800 for dividend purposes, the extra sum required by the enlarged dividend being about £17,000. The preliminary revenue account of the company, just to hand, shows an increase of £156,000 in gross receipts and £144,000 in working expenses, the percentage having gone from 65½ to 67½ per cent. This increase in expense ratio was owing to all materials being more costly and more liberal appropriations made for improvements. The payments to subsidiary lines were £5,000 less in past half year; the surplus after these deductions being £152,000, as compared with £136,400 a year ago, and £106,600 in June, 1898. The Grand Trunk is having a fair share of the prosperity prevailing and its active securities have accordingly advanced. The Canadian Pacific, after several half years of a 4 per cent. per annum dividend, increased it for the latter half of last year to 3 per

cent., making the distribution 5 per cent. for the whole year. For the past half year the dividend has been fixed at rate of 5 per cent. per annum, as against 4 per cent. a year ago. In no previous year was the C. P. R. dividend for the first half of the year as high as that recently declared, since the termination of the guarantee. The gross receipts increased in the half year by £1,480,000, and expenses £1,224,000, the net profits being enlarged £256,000. As was the case with the Grand Trunk, the ratio of expenses rose last half year, the increase being from 60 per cent. to 62¾ per cent, the causes being, more costly materials and money spent on improvements. Both these great Canadian lines are doing well, passenger and freight business being in advance of last year.

#### BETTER THAN A PENSION.

LIFE INSURANCE THE TEACHER'S BEST RELIANCE.

Dr. Mary E. Law, of Cincinnati, contributed the following very sensible article recently to *Complete Education*, a monthly journal published in that city: "Life Insurance vs. Pensions. The question of pensioning teachers is one of interest to every citizen as well as to the teachers. There is a marked inclination on the part of the office-holding class to fasten upon our republican institutions many of the customs and forms of monarchical governments, whose foundation principles and whose national characteristics are wholly different from our own.

European governments are founded upon the old idea of the divine rights of kings, and the undemocratic notion of caste and social inequality.

Centralization of power and the formation of a governmental class, born and bred to official position, with its power, perquisites, and pensions, is a notion wholly obnoxious to the thorough bred American spirit.

In many, if not all, of the European countries, the teachers form such a class. They are educated, often at the public expense, for their profession, and when once prepared are appointed for life, on a meagre salary, ranging from 300 dollars to 900 dollars per annum, with the assurance of a meagre pension when placed on the retired list, generally at the age of sixty-five years. "Once a teacher, always a teacher," is a common saying in Germany, and the typical German pedagogue is known the world over. Our American teachers are better paid than European teachers, especially those of higher grade, but their terms of office are very insecure.

Our public school system differs widely from the German in three important particulars:—

- (1) It is not a distinct branch of the Government, as is our postal system.
- (2) Our teachers are not especially trained for their work, and do not enter it as a life business.
- (3) They are not appointed for life, and therefore have no incentive to continue in the profession.

These reasons, if there were no others, render a pension law impracticable and unjust. Young men enter school rooms for a few years to convert their power