

places the yield this year, based on the report of 800 independent correspondents, at 11,275,000 bales. Whatever may be the exact production for the present year, however, there can be no doubt that it will exceed that of the last two or three years, and this fact will do much to smooth the road of our Canadian mills.

At the same time, too much must not be expected of the above optimistic reasoning. It should be remembered that last year's shortage of crop brought about an almost unprecedentedly small surplus, and that a part of this year's harvest will have to be utilized in filling up the void in the world's markets which followed that shortage. As an illustration it may be stated that Lancashire mills are now working overtime to supply not so much the future demand as the deficiencies of staple cotton goods in all parts of the world.

Another factor which will count strongly against any great reduction in price is the constantly increasing consumption. This has been going on for some years past, and is due not only to the rapidly increasing population of this continent, and to the still more rapidly growing wealth of its people, but to the expanding markets in other countries, such as Japan, China, and others less important. While it is improbable therefore that prices will reach the inflated levels of a year ago, it is by no means unlikely that 10c. or so for raw material will be the range for some time to come. It is possible, of course, that a day may come when American cotton will occupy a less unique position than it does to-day, and that other countries—notably the tropical possessions of Great Britain and Germany—will add important quota to the world's supply of raw cotton, but this is a contingency which probably is so remote that now it may be kept out of the range of "practical politics."

In the meanwhile, staple cotton goods in Canadian mills and warehouses may be described as retaining their recently accustomed firmness almost to the full. Some people point to the decline in raw cotton as an argument that lower prices for finished goods are sure to come, but, as we have said above, this is largely problematical in view of the light stocks in hand consequent upon the extreme prices earlier in the year, and the hand-to-mouth buying which resulted then. The demand both from city and country retailers seems to keep up very well and, for this period of the year, has been distinctly good. Reports from the country generally favor a continuance of the same conditions.



ESSAYIST versus ACTUARY.

Mr. E. Fielding, author of a leaflet which is being circulated amongst members of the Commercial Travellers' Association, has written to the Toronto World complaining that his proposed plan of using the funds of that society so as to produce results which actuaries say cannot be achieved, has been misunderstood and unfairly presented in last week's issue of the Monetary Times. Doubtless Mr. Fielding thinks he is right, and that he knows more than either the Ottawa or the Toronto actuaries who were employed to report upon the safe way of administering the accumulated funds of the C.T.A.

Since he ventures to contradict these gentlemen as to what can and cannot be done with a certain sum of money in hand in the way of paying mortuary benefits on a given number of lives, we can hardly expect him to agree with the cautionary views of the Monetary Times in the premises. Perhaps, however,

he may be content to take a hint from such a publication as the last Report of the Inspector of Insurance for Ontario, which has come to hand since Mr. Fielding's pamphlet appeared. On pages C 193 and C 194 of this report he will find some weighty sentences which, if he is not an obstinate man, or one honey-combed with self-esteem, should show him that he has gone too far in his proposals in this matter. Says the Report:

"As financial calculations with serious results are still being erroneously based upon the so-called "Expectancy" or "Expectation of Life," it will be helpful to collect here some of the warnings that from time to time have been published by leading authorities."

The authorities here cited are T. B. Sprague, than whom none has stood higher in the actuarial world, F. G. P. Neison and Edward W. Brabrook, F.S.A., friendly societies' actuaries in England; and W. Sutton, M.A., F.I.A., at various dates from 1857 to the present day:

When reforming the financial basis of the great Friendly Societies of England, Mr. Neison pointed out the *danger of founding any insurance or benefit upon the expectation of life*. See Contributions to Vital Statistics, edition of 1857, page 99, from which the following is extracted:—

Neison.—"Although the expectation of life expresses the true average duration in years of a certain number of individuals at a given age, yet it does not represent the chances of surviving an equivalent number of years; and consequently for medical and other purposes in which it is required to determine the relative value, improvement or other change which may have taken place within a given period of life another expression must be found."

Mr. Brabrook says, in 10 Journal Institute of Actuaries, page 350: "Reflection will show that the 'expectation of life' means nothing whatever. It is merely an arithmetical result. It does not import that any one person, or any number of persons, will live that term of years; but only that, if you add the years lifetime of a number of persons together, and divide by the number of lives observed, you obtain a given result. If some die n years earlier, others will die n years later. Those who live beyond have not really 'exceeded their expectation;' if it were so, all would live till the last age of the tables, for the expected age at death increases with every year of life completed. The 'expectation' is not an element in the premium to be charged, nor is it a measure available for any purpose whatever."

And Mr. Sutton, in a lecture on mortality tables, said: "Although as a matter of theory the meaning of the expectation of life at any age is a perfectly simple matter, yet from various causes this phrase has been the source of endless confusion." Speaking of a certain calculated probability, he says: "This latter quantity is the *vie probable* of the French writers; and when translated into English as the *probable lifetime* has been mistaken for the expectation of life."

It may be that Mr. Fielding has, as his letter to the World says, "taken actuaries' figures," but he has not used them like an actuary; and no one but such cocksure calculators as himself can be certain that he has "shown the present and future income of our society," as he declares he has done. A little more research may do Mr. Fielding good. By reading and enquiring he can find that arithmeticians have lived and studied years before his era who, when they perhaps reached or foresaw just such false conclusions as he has now reached, pushed on further, and by the aid of patient observation and mathematics found out what he apparently has yet to discover, that "a little learning is a dangerous thing," and that shallow draughts sometimes intoxicate the brain.