

1872-1896 there was a further depression in the commercial centers all over the world, and the rate again declined, until with the revival of men's hopes in prosperous ventures in 1896, the rate again rose. Another fallacy common to many is that abundant money produces a low rate of interest, but the speaker showed that following the great gold discoveries of 1848-9, which in three years multiplied the world's supply of gold by twelve, the minimum rate of discount of the Bank of England rose from 2 per cent. to 5 per cent., and for forty years did not again reach the lower figure. The accumulation of capital had no tendency to reduce the rate, but so long as the commercial spirit was rife and men felt that they could reap profit from their ventures they would continue to convert moveable capital into fixed capital, and the demand for still more and more capital would have its effect in an increasing interest rate. The commercial spirit was still in full vigour under present conditions with every chance of the rate going higher yet.

Professor Bottini of Milan agreed with Mr. Lewis, adding that the rate follows the law of supply and demand. He thought insurance companies should so invest their funds as to benefit more largely commercial activity. Mr. Carment, of Australia, and Mr. Barrand, of London, also joined in the discussion, the latter advancing the proposition that actuaries should acquire such familiarity with investments as would enable them to procure the highest rate, not confining themselves to securities which would just earn the requisite rate, a task which, he said, any stock broker could perform. Mr. Burn closed the discussion on his paper in a few words of thanks to those who had taken so active a part in it.

We propose to treat the above question in our next issue.

AN ACTUARIAL CURIOSITY.

MORTALITY IN THE 17TH AND 18TH CENTURIES.

One of the most interesting volumes recently published, as it is also one of the most valuable for its historical records, and graphic pictures of life and manners is, "London in the 18th Century," by Sir Walter Besant. Students of English history will not find much in the work with which they are not familiar, but the records known to them are found in a number of works, some of them quite rare, some indeed not found in any but the largest and oldest libraries. Sir Walter Besant having gleaned freely from these sources combined what he had gathered in a literary sheaf of remarkable richness.

We propose to give one chapter which presents an actuarial curiosity, but, incidentally, we may refer to the documentary evidence he publishes in regard to English life in the 18th Century as likely to open the eyes of some who recently have depicted that

period as a time of absolute intellectual and moral darkness. He gives a list of 43 London churches in which early in the 18th Century there was daily prayer, morning and evening, 12 once every day, 14 Wednesdays and Fridays, and 13 on Saturdays. In the year 1738 there were 69 Church of England Chapels where divine service was held, 28 Presbyterian, 26 Independent, 12 Baptist, and 44 other Chapels, making in all 179 Christian churches in regular use in the City of London 165 years ago, and the records show that they were well attended. That there was an appalling amount of private vice, and of revolting barbarism in prisons is well known to readers of Fielding's works, Howard's life and other authorities. But Sir Walter Besant regards some descriptions of the social conditions of the 18th Century as exaggerated, naturally so, as the chroniclers in most favour were satirists writing for effect, not for truth.

The Weekly Bills of Mortality in London began on 21st December, 1592, some of them being still extant. Out of them Maitland estimated the population of London in 1750, as 725,903. He used these documents to dispel certain vulgar errors such as, 1. a common belief that there were 2 girls born to 1 boy; 2. that only 1 in a 1,000 lived to 70 years of age. He showed that 4 per cent. of the city's population reached 70 years, 2 per cent., 80 years; and 1 in 200 reached the age of 90. London, therefore, cannot have been as unhealthy, nor the people so generally vicious as is often represented.

The author made enquiry into the average duration of life in London of the 17th and 18th Centuries by taking Parish Registers for 2 or 3 years towards the end of the 17th Century. From the Registers the following table was arrived at, the number of entries taken was 885:

Of deaths at 5 years and under there were 516.			
"	"	10 "	over 5 years
"	"	20 "	" 10 "
"	"	30 "	" 20 "
"	"	40 "	" 30 "
"	"	50 "	" 40 "
"	"	60 "	" 50 "
"	"	70 "	" 60 "
"	"	80 "	" 70 "
"	"	90 "	" 80 "

Total..... 885

Of over 90 there was not one. In other words, out of 1,000 persons born, says Sir Walter,

At age of 5 there were left 417, at age of 50, 178

"	10	"	360	"	60
"	20	"	329	"	70
"	30	"	293	"	80
"	40	"	225	"	1991

Sir Walter puts these tables in another form. "The Hm. Table of the Institute of Actuaries takes 100,000 persons living at the age of 10, and shows how they gradually decrease until all have disappeared. Let us present our figures in the same way,