

wasteful in the world. Fire losses being the barometer of insurance rates, it is interesting to note that the fire cost per thousand dollars of value of property insured is twelve times greater in the United States than in Great Britain, where high buildings, large areas, poor flues and faulty construction are prohibited by law, and it is twenty times greater than in Italy, where the construction is still better and the conflagration hazard practically eliminated.

"Whoever ignores the danger from fire sooner or later suffers the loss of property from that cause—individuals and communities alike."

THE USES AND ABUSES OF ATHLETIC TRAINING AND EXERCISES.

Questions relating to the effects of athletic exercises and training have received much attention in recent years, since a course in physical exercises became recognized as a part of the curriculum of a college, and inter-collegiate contests of this character were established. From a paper presented to the Actuarial Society of America we learn that "not only that no physical strain existed as a result of the athletic training, but that the students taking a prominent part in athletics were actually benefited by the experience."

This refers to the students attending Yale University. Before entering upon any severe athletic competitions the students underwent a course of training under the guidance of a professional trainer whose experienced eyes would quickly detect signs of any constitutional weakness which rendered it undesirable for the would-be athlete to carry on his training beyond a certain point and who would be warned against entering upon a contest that was likely to unduly strain his physical strength.

Thus there is a process of selection going on which eliminates those who give any signs of constitutional incapacity to stand the severest physical strain involved in an athletic contest. The test, therefore, of the effect of athletic training and of contests is not applied generally, but only to a very limited number of young men who have exhibited the qualities that go to the making of a powerful, successful athlete. It is only what might naturally be expected that those who had been trained for severe athletic competitions should have shown a phenomenally low rate of mortality.

There is, however, a serious phase of this question apart from that of mortality. A young athlete may so far overstrain his constitutional strength as inflict very grave injury upon himself without reducing his chance of living to a great age. A student of exceptional physical vigour may so far overtrain, or over exert himself, as to bring himself down from the highest standard of strength to a much lower one. Before going into training or entering upon a violent contest he may have been able to follow cer-

tain practices with absolute impunity, from a health standpoint, but, in consequence of the undue strain he has undergone, he may find it ever afterwards necessary to be careful in his habits, and, instead of being able to set the ordinary laws of health at defiance, he has to pay strict obedience to those laws. This is the experience of a College athlete whose prowess is familiar to all interested in sports.

A number of treatises have been published by medical men in which there are certain conditions in the training of athletes and in their engaging in violent contests, such as boat-racing, which are decidedly injurious and even dangerous to young men of a certain class of constitution. No one ought to enter as a contestant in an athletic competition until he has been examined and passed by a physician.

The transactions of the Actuarial Society of America, Vol. IX., quotes an article by Dr. Coughlin in which he says, "Although the evidence for and against athletics is contradictory, the whole subject may be summed up by stating that athletics are beneficial when properly and judiciously applied and very injurious when proper precautions are ignored or carelessly regarded."

That the majority of athletic sports, as now conducted, cause temporary physical disturbances which are liable to develop unhealthy chronic conditions is admitted by the faculty and is a fact that is familiar to athletes. The vital question is, whether the constitution has the requisite elasticity to return to normal conditions after being strained by a contest. When such contest has been entered upon in a state of perfect health and preparedness the temporary strain passes away without leaving any injurious result, but if it has been engaged in by one whose physique is not adapted to such a strain, mischief is certain to have been caused, the effects of which may not develop for a length of time.

In commenting upon this topic Mr. I. K. Kore, a member of the Actuarial Society remarks:

"While a study of the mortality of college graduates is interesting and instructive, it is doubtful whether such a study would be of direct practical value to life insurance companies. It is true that a large body of college graduates might be considered to be representative as to vitality of the so-called better class of lives in general. Nevertheless, they would, in fact, represent only a small part of the risks carried by a life insurance company. Gathered from localities differing greatly as to climate and other conditions they form during their college course, a brief period of four years, a comparatively homogeneous group. But the influence of these four years upon longevity do not seem important enough to give any special significance to a mortality experience of college graduates as such."

The very serious conditions which are now incident to athletic pursuits not only materially aggra-