

(Keelyites) 132, and occasionally drinking to excess 139 to 170.

3 and 4. Occupational diseases can be largely prevented. Nowadays, under the influence and initiative of life insurance men, many large factories and plants have established periodical examinations of employees in order that disease may be discovered in its incipency and proper remedies adopted early.

Accidents from machinery, etc., were formerly unreasonably excessive. Our accident insurance companies took the first steps toward introducing safety devices and methods. I have reports from three of the largest steel companies which in 1906 introduced safety devices. By such devices the saving of life and limb has been reduced between 55 and 70% during this time.

The experience of these insurance companies has demonstrated that for working men, especially those in factories whose close and constant application is necessary, long hours of work are fraught with excessive percentage of accidents; that in these shops only one-fourth as many accidents occur in the morning as in the afternoon; and that the little rest at noon brings marked immunity from accidents for the following hour or so. And finally that Monday is freest from accidents, and that on Saturday the most accidents happen, when men are tired out. This knowledge, abundantly confirmed by experience, has led to important legislation governing working hours and conditions bringing about enormous saving in life and limb.

In conclusion, you gentlemen will realize from the foregoing how vitally interested insurance companies are in conserving health; whatever benefits the community is good for the insurance business—whether it promotes industry and thrift or educates people to better homes and saner living, or bears directly on preventing disease. In all these departments of human welfare insurance companies have always taken a conspicuous part.

One great channel of co-operation where medical men and the companies may be of signal service to the public is in the work of health officers and sanitary officials in spreading the gospel of health.

All we want to know is the best method of procedure most effectively to serve our common purpose.

We are all proud of the vast material wealth of this magnificent empire of the South. Why should not we medical men and insurance men work together to make the South famous for health; for freedom from preventable disease; an empire where an equable climate, perennial sunshine and pure, wholesome food combine for human welfare? Let us unite to make this part of the world far-famed for the health, happiness and longevity of its people.

Discussion of this paper will be found following paper of Dr. W. O. Pault.

WHAT LIFE INSURANCE COMPANIES CAN DO FOR BETTERMENT OF THE PUBLIC HEALTH.*

BY M. M. SMITH, M.D.
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Henry Abels, president of the American Life Convention in 1913, writing upon the subject of "The Ever-Increasing Interdependence Between Life Insurance Companies," said:

"Human life—the most vital asset of the nation—is the essential element of the institution of life insurance. Interdependently must the companies, as benefactors of mankind, seek to educate the masses with regard to prevention of disease and conservation of health—thus lessening sickness, suffering and sorrow and promoting the happiness of the race. Conservation has become the keynote in the economic and industrial world today. Life insurance—than which there is no greater influence for economic and social advancement—has embodied in its very existence the supreme idea of conservation. The life companies, responding to present-day needs, are directing their forces toward increased action in placing the institution of life insurance as a foremost factor in the general conservation movement. Again is seen the interdependence of the companies. Through the combined efforts of many of the companies, results have been produced in conserving the interests of humanity through life insurance."

The above quotation certainly emphasizes what great assistance life insurance companies can lend toward betterment of the public health.

Dr. Eugene L. Fisk, Medical Director of the Postal Life Insurance Company of

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New York, says that "A perfect adjustment of the race to environment has not been reached, but that our civilization has developed powerful resources for the up-building of resistance to disease and for the prolongation of human life, which have been used for systematic and intensive work among policy-holders in a number of important companies. Life saving has actually become a function of life insurance." He cites a striking instance of smashing the death rate by adjustment of the environment to the individual in the work of Dr. Gorgas in the Canal Zone, where within the short period of five years the annual death rate was reduced from 48,000 to only 21,000 — showing conclusively that public health is a purchasable commodity.

The value of reliable statistical data, as furnished by life insurance companies in their utilization for purposes tending to betterment of the public health, can not be fully estimated.

In 1909, forty-three life insurance companies in the United States and Canada agreed to pool the results of their collective experience on many different classes of the insured, which investigations were later put into the hands of the Actuarial Society of America and the Association of Life Insurance Medical Directors, being records that represented more than 2,000,000 lives, covering a period of 25 years. This Herculean task took the Central Bureau of the Medico-Actuarial Mortality Investigators three and a half years of continuous labor to complete.

Public hygiene is built upon, and to a very large extent controlled and directed by, vital statistics; and insurance companies furnish some of the most accurate vital statistics ever compiled. On account of the mutual dependence the different insurance companies, through their agency forces, especially with their corps of medical examiners (and in the fraternal system, through their regular lodge meetings), are in a better position, through the direct influence they can bring to bear, than are any other organizations to assist in increasing longevity, through the medium of their policy-holders. The medico-actuarial reports referred to furnish us with volumes of statistics; or in other words they open up their experience for the past 25 years for the general

benefit of mankind; and this information, if properly used, possesses an untold wealth of knowledge which can be utilized to the end of life extension.

Vital statistics furnish information concerning living, habits, occupation, physique, family history and other most important factors which directly affect longevity. Life insurance companies offer splendid facilities for the dissemination of this knowledge among the people. Nearly all companies have official publications and are able, by means of them, to give publication periodically upon all of the subjects deemed advisable for the education of the policy-holders; and through them they are enabled to reach almost the entire public at large. In this way the prevention of disease may be made known and right living be emphasized in its importance; for the laity will pay much more attention to information imparted to them when they feel that business motives prompt their education than were this same information furnished them by ever so enthusiastic reformers.

Insurance companies, through their powerful influence, are in a position to help mould public opinion and to impress the lawmakers with the necessity for public health legislation; and they can assist very materially in the enforcement of public health laws when enacted.

Many of the largest insurance companies are doing extensive work along preventive lines and they feel that while they are accomplishing a great humanitarian and philanthropic task, yet at the same time they justify the outlay of money to their stockholders in this health campaign by showing a very marked reduction in their mortality tables with an increased longevity.

To show what a momentous task is theirs, for illustration, I will state that the Metropolitan Life Insurance Company for the year ending November 20, 1914, installed nursing service in 1,652 cities. The number of patients under care of these nurses was 175,757; while during that year these nurses had made 1,127,022 professional visits at a total cost of \$525,448.71. This, in addition to the educational training given sick policy-holders by visiting nurses; for by this means the company sought to educate in health matters, as well as through the distribution

of leaflets and pamphlets, which were written in very simple language and published in various foreign tongues, some of the leaflets being profusely illustrated in order to make them the more intelligible.

Much work of a similar character has been accomplished by the Prudential Life Insurance Company. This company has gathered together and tabulated some most valuable statistics bearing upon the causes and origin of disease, mortality rates, etc. And one feature of special importance with them is their public exhibits, which have been arranged with exceedingly great care and at great expense, so that he who runs may read. Their exhibit at the Panama-Pacific Exposition in San Francisco during the entire time of the fair has no doubt been an excellent factor in the education of the public looking to health betterment, and thousands of visitors there will no doubt profit by it.

The Health Bureau operated by the Postal Life Insurance Company has carried health conservation to the consistent limit of its facilities. This company furnishes periodic examinations to its policy-holders, free of charge, and policy-holders are privileged to correspond with the Health Bureau relative to any question with reference to the condition of their health or bearing upon personal hygiene. The Postal likewise issues health bulletins several times during the course of a year.

I have mentioned these three companies in particular because they have largely been pioneers in this public health campaign. And I feel that the time is not far distant when the true value of their efforts will be appreciated to the extent that all insurance companies, both fraternal and old line, will contribute their share toward the maintenance of this philanthropic work.

The Life Extension Institute of New York City has planned to provide periodic physical examinations and laboratory tests for the policy-holders of life insurance companies, employees of corporations and others.

Such examinations show whether or not the individual is in need of medical treatment for any abnormal condition. And if so he is notified and is at liberty to employ whatever physician he may elect. Already many of the larger insurance

companies have taken advantage of the facilities thus offered by the Life Extension Institute. In this way a great step forward has been taken toward betterment of the public health.

I shall not say more at this time upon this all-important subject, but will close by quoting from a paper by Dr. W. F. Blackford, Medical Director of the Commonwealth Life Insurance Company, of Louisville, Ky. In this article, entitled "Policy-holders as a Medium for Increasing Longevity," Dr. Blackford says:

"In the consideration of conservation of the nation's available resources, the most important is to be found in the life and good health of its individual members; and the loss of human energy, through mortality by preventable diseases, constitutes the greatest waste of our resources, today. It is also true that this waste of human energy, through excessive mortality, is the result of ignorance or neglect of prophylactic or curative measures, well known to science. With the health of the nation as its greatest asset, and second only to the nation itself, our insurance companies have an interest in the good health and favorable mortality of the people. And may we not hope to see a co-operative movement of these organizations that will be for the betterment of our nation?"

Discussion of this paper will be found following next paper.

THE RELATION OF INSURANCE MEDICINE AND PERIODICAL HEALTH TESTS TO GEN- ERAL PRACTICE.*

By W. O. PAULI, M.D.

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In discussing the more recent phases of life insurance medicine in its relation to general practice, I desire to present a few facts from the viewpoint of the medical department which may be of interest to physicians in general practice as well as to the regular appointed examiners. The foundation upon which medical selection is based is the work of the medical examiner. The quality and accuracy of their reports determine in a

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