Combining figures of the several States with those of Greater New York, we have the following interesting exhibit:

Total fires, 120,908. Suspicious or incendiary, 4,229. Ratio, 3.49. Causes unknown, 22,487.

Ratio, 18.59.

From the foregoing figures, we are justified in assuming as a fair estimate based upon all available data, that the number of suspicious or known incendiary fires of all kinds does not exceed a percen-

tage of 3.50 of the total number of fires.

But it will be rightly argued that hidden in the mass of fires "cause unknown" lies a further heavy percentage of incendiary fires. This is surely so. It may even be allowed for the sake of argument that one-half of all the "cause unknown" fires are incendiary, and should therefore be added to those reported as incendiary. As out of the 120,903 fires with which we are dealing, 18.59 per cent. are reported as "cause unknown," we add, one-half or 9.29 per cent, to the ratio of incendiary fires of 3.50, so making 12.79 or say 13 per cent., estimated as the total proportion of all fires in the country due to incendiarism. This must be deemed a very liberal estimate. Taking the best known estimated figures of the total United States and Canada fires, those compiled by the Journal of Commerce, we find for 1912 they amounted to \$225,321,000. Assuming 13 per cent. of this amount to be due to incendiarism as a whole the figure reached is \$29,291,430.

But this is the figure of incendiarism due to all four motives of revenge, insanity, crime and insurance. Eliminating the three which have no bearing upon insurance, and keeping to our topic, "The Relation of Fire Insurance to Incendiarism," we now reach the question: What proportion of the 13 per cent.

of the total fire loss

OWES ITS ORIGIN TO FIRE INSURANCE?

The available statistics are meagre, but three States give the motives of incendiary losses so far as known, viz.: Massachusetts, West Virginia, Ohio. The figures for 1,320 incendiary fires recorded in these States are: For revenge, 351; crime or drink, 36; insanity, 167; for insurance, 258; unknown, 508; this item of "unknown" being about 38.5 per cent. of all incendiary fires. From these figures it would appear that 19.5 per cent. of the known incendiary fires had insurance imputed as the motive by the State officials; if to this we add one-half of the "motive unknown" incendiary fires we reach 19 per cent, more, or 38.5 per cent, in all as a proper estimate of the incendiary fires which have fire insurance as the exciting cause. As we have before demonstrated the volume of all the fires caused by incendiarism to be approximately \$29,291,430, we now take 38.5 per cent, of that amount, showing an amount of \$7,705,978 as the probable fire loss in the United States and Canada, which can fairly be imputed to fire insurance in its relation to incendiarism, or a ratio of 3.42 per cent. of the total estimates for all losses for the year 1912.

This figure of 3.42 per cent. compares with widely promulgated estimates of from 25 to 50 per cent. of our total fire loss based upon nothing but guess work. The figure is doubtless not far from the truth, and justifies what is said before, that while we cannot prove exactly any estimate it is easy to disprove those which have hitherto been extant. Facts are very disturbing, they upset theories, guesses and sensations

which are dearly prized by those who beget them. Doubtless the reason why the popular conception is so much higher than the reality is due to the fact that fires suspected to be due to incendiarism attract notice and are talked about, while the fires having only careless, but not criminal, origin pass without comment. Furthermore, it is a fact that

THE CRIME OF ARSON IS LARGELY LOCALIZED

to a few cities and to a few sections in such cities, because of exceptional opportunities due to the presence of a certain type of broker and public adjuster not found generally elsewhere, combined with a seething mass of mixed population gathered from all nationalities. Incendiarism can not get a foothold on a large scale apart from such conditions, but the public impression is as though such local conditions were general. It is as though there exist a few spots where smallpox is epidemic, and we should estimate the whole population of the United States to be afflicted with the scourge in the same proportion, which would be foolish. Incendiarism is apt to be sporadic and occasional rather than universally epidemic although popular opinion has been impressed to the contrary. Certain limited areas in New York and Chicago unquestionably are more subject to the crime than any other sections in the United States. This contention is borne out by the statistics of convictions obtained by the fire marshals department of Greater New York from January, 1910, to August, 1913, which show 47 per cent. of the total convictions obtained as being suspicious or for insurance gain and 53 per cent. as for all the other causes numerated. This compares with the average of incendiarism for insurance for the rest of the country as given above of 38.5 per cent. of all incendiary fires.

As to the great volume of loss, we must not forget that large city conflagrations like those of Chicago, Boston, Baltimore and San Francisco are not the products of incendiarism. Likewise, in the case of large individual losses where high values are concerned, such as large factories, storage warehouses, stocks of merchandise, expensive dwellings, churches, schools, public buildings, the element of incendiarism has rarely anything to do with them. Thus if every incendiary in the country were locked up in prison it would not seriously reduce the great bulk of the

property loss by fire.

Our analysis must be carried still further to the subject of

OVERINSURANCE.

The dread of this evil is evident with legislator, magistrate and newspaper, so that the popular mind is profoundly impressed with the idea that overinsurance is an evil of colossal proportion underlying a large proportion of the great fire waste. Careful investigation does not support this view. To begin with, the great bulk of policyholders in the community are honest people who do not pay premiums upon more than a fair valuation of their property. Thus the vast proportion of property in the country is not overinsured.

(To be continued.)

Arrangements are in progress for the absorption by the Phœnix of Hartford, of the Connecticut Fire, also of Hartford.