# MODERN FIRE WASTE

By James Hedley.

(Concluded.)

According to Mr. W. Fitzpatrick, consulting architect, Washington, there are in the United States more than 11,-000,000 buildings, whose value is something like \$14,500,000,-000. Out of this number there are but 4,000 whose authors even claim as at all fire-proof.

According to a recent compilation, two billions' worth of property has gone up in smoke in the United States in the last twenty-one years. The number of fires causing this loss was 369,298—or say, 17,585 every year.

Of this destruction, 73,328 fires, costing \$216,179,000, were caused by carelessness. Thus:-

2¼ per cent. Careless use of matches. From stoves and stove-pipes. From oil stoves. Candles and gas jets. 11 Ashes, hot coals, fire-places. 11 6

Lamp accidents or explosions. 5 1/2 Defective flues and smokestacks. Fireworks.

Cigarettes.

2034 " of the whole number attributable to these specified forms of carelessness, \$216,-000,000 being the amount lost.

Progress is being made in the United States in reducing the fire waste through fire marshal laws. In 1905 the fire marshal system was in operation in thirteen States; four of them New England States, six of them Southern. The testimony from North Carolina is that the law has been very satisfactory in lessening the fire waste and reducing insurance rates. In the State of Maine incendiary fires were reduced from 8.64 per-cent. in 1895, steadily year by year, down to 1.10 per cent, in 1904, while fires from unknown causes were in the same period reduced from 33 per cent, of the whole to 30% per cent.

As long ago as 1805 Mr. Charles W. Whitcombe, fire marshal for Massachusetts, had begun his labors. During 1897 there were 56 arrests and 41 convictions for arson under the Act, and in that year the percentage of incendiary fires in Boston was only 31/4, where in former years it had ranged from 18 to 35 in the State at large. In 1897 or 1898 one-third of the total number of incendiary fires were set for the purpose of defrauding insurance companies, 9 per cent. from motives of revenge, 2 per cent. from insanity, 1 per cent. from pyromania.

Fire Marshal Reduces Fire Loss.

The Ohio fire marshal began his work in 1899. Five years thereafter, namely, at the close of 1903, he says: The average annual fire loss of the State is \$7,000,000, the result largely of ignorance, carelessness, and incendiarism. "unknown" losses 449 should be termed incendiary. The number of such losses occurring in 1901 was 292; next year it was 222; and the next year only 190. The motives of 689 incendiary fires in that State were classified as follows

To defraud insurance companies		
	468	
Mischievous hove	110	
Mischievous boys	36	
Pyromaniacs	29	
Intoxicated persons	28	
To avoid or secure work	18	
The number of fires investigated in 1903 was 1,6 connection with these there were:—	64.	]
Persons arrested charged with arson	91	
were bound over to grand mirror		
were indicted .	46	
	76	
Convicted	12	
Committed to asylums	36	
Pending trial at this time	9	
and at this time	27	

## Lessen Fire Waste Duty of the State.

The Fire Bureau of Massachusetts, the business of which is to keep track of fires within her borders, is maintained by the State Government, and makes no levy upon insurance companies, that Commonwealth recognizing that to lessen fire waste is a duty of the State.

It is true that in some other States of the Union, fire insurance companies are compelled to support, in whole or in part, the expense of a State Fire Bureau. But this is not fair, since fire prevention, any more than fire extinction, is not the proper business of underwriters.

To fill all the requirements of a fire marshal adequately needs many and varied qualifications. One of the American marshals says: "He should have the intuition of a detective, experience as lawyer, a judicial mind, ability to weigh evid ence, and some knowledge of mechanics and electrical science." "In any case he must be a man of honesty, industry and perseverance."

In the State of Ohio is a Department of Fire Enquiry, the chief officer of which is called the fire marshal. The law requires all chiefs of fire departments, or mayors in towns having no fire chief, or township clerks in rural districts, "to investigate the cause and circumstances of every fireespecially if such fire appears the result of care essess or design—and make written report to the marshal." The department is in correspondence with 2,099 officials in the State who report fires. These, as has been said, are township clerks, fire chiefs and mayors.

#### Opinion of a Scottish Fire Expert.

The general manager of the Scottish Union Fire Insurance Company in Edinburgh, Mr. James Allan Cook, in an address before the Insurance Actuarial Society of Glasgow, dress before the Insurance Actuaria. State of the said in 1906, dealing with fire waste, which is far less serious in Great Britain than in Canada: "The time has come when this subject should be taken up seriously by the na-tional and city authorities. In endeavoring to saddle insurance companies with charges of fire protection, municipali-ties are fighting the shadow of the trouble, while the trouble itself grows and the community suffers. It is no more the duty of a fire insurance company to pay for fire extinction than for a life insurance company to pay for drainage systems

and a marine company to pay for lighthouses."

An important part of the duties of this marshal is that he or his deputies may remove any dilapidated building that is a danger to property around it, or may order the removal explosives.

If suspicious circumstances attach to any fire, these officials have the power of a court, to take testimony on oath or punish for contempt, or make an arrest. This shows the weight of the Department of Fire Enquiry in the opinion of the State.

Ontario companies, which have suffered from fires of unknown origin, from pyromaniacs, from incendiaries, must often have wished that they had some such machinery as this to set in motion in order to catch and punish these dastardly midnight robbers and public enemies.

### Incendiary Fires in Ohio Show Decrease.

It is proper to ask: What good has come to Ohio out of all this machinery? Is the result worth the trouble and the expense? The first answer is that the number of incendiary fires in that State has been reduced one-third. The number of convictions for arson has been doubled. number of fires from unknown causes has been reduced from I in 6 to I in 16. And the increase in the office income in two years, owing to the rapid increase in the number of insurable buildings in Ohio, made it possible to double the number of detectives, attorneys, and clerks, and to add regular inspectors of buildings

What is being done in Great Britain or on the continent of Europe in the matter of fire inquests may be of interest to ascertain. In Denmark, in Germany, and in France and Russia fire inquests have been common and are found to have the effect of lessening fires.

#### Inquiry is Proper.

In England they appear disposed to think that enquiry into the origin of fires is a proper and even necessary thing. But they are slow about adopting any scheme to bring it about. It was in 1866 or 1868 that a bill providing for such inquiry was brought into the British House of Commons, but for some reason it was dropped. In 1882 a similar bill was drafted and sent to the Home Department and from there to the Metropolitan Board of Works. But nothing definite came

Next year the Common Council proposed to ask for a Royal Commission on the subject. They wanted such a law, and, upon consulting the fire offices, found they favored such a law, yet after many conferences no definite step was taken. There appears to be a lack of co-operation or prompt action

between the parochial and the governmental authorities.

In various European cities great losses by fire are prevented by the laws insisting on the erection of only stone and brick buildings. Russia has an elaborate system of control and local government is nection and local government is nection and local government in nection and local government is nection and local government in nection and local government is nection and local government in nection and local government is nection. control and local government inspection and insurance. compel all buildings to be insured. In Germany, building insurance is compulsory: while French law compels insurance against fire, not only for the benefit of the owner, but for his neighbor. In the Department of the Meuse, whenever a five occurs, the mayor and one or two members of the town council visit the scene of the fire and adjust the losses.