# FIRE HAZARDS IN MUNITION PLANTS

### Report Made by Underwriters-Heavy Risks Are Carried

An interesting report has been issued by the fire underwriters in New England in regard to the risks which are being carried by the companies in munition plants. The re-

port details the additional risks in such plants. I ne re-port details the additional risks in such plants in the United States and these apply also to plants in Canada. While there are heavy risks carried, this business has been fairly profitable to the insurance companies both in Canada and in the United States. The amount of this class of insurance carried in Canada naturally cannot be disclosed. as publication would disclose also the volume of munitions in course of manufacture here, and that would not be in the public interest. The growth of the munitions business has resulted in greater precautions for safety being taken in many factories that were not operated with success prior to the war. They have since become successful, thus minimizing the moral hazard. Overtime also has a tendency to minimize the risk, inasmuch as when work-people are on the premises all the time any incipient fire is more likely to be arrested before actual damage is done.

#### New England Report.

The following is a summary of the New England underwriters' report :-

(1) Prolonged hours of labor, night work, etc., have increased the period of action of the active special or manufacturing hazards.

(2) A tendency towards uncleanliness has been created or enhanced by long hours of labor, the difficulty of obtaining satisfactory help, the increased congestion of equipment and material, and, above all, by the failure of superintendents through pressure of other business to give proper and routine attention to matters of housekeeping.

### New Manufacturing Processes

(3) The introduction into established risks of new manufacturing or special hazards and processes. In some cases there has been failure to protect these in a satisfactory and permanent manner on the assumption that they were of a temporary character. In other cases there has been failure to realize the true nature of the hazard involved and an ignorance of established methods of protection.

The introduction of the hazards of construction in (4) the building of extensions to existing structures. This feature assumes a prominent place in a consideration of a sprinklered risk, where the protection of the whole plant may be virtually set at naught by reason of failure to equip new portions promptly. The time required to equip new portions has been greatly increased by reason of the pressure put upon sprinkler

companies and the general delay in obtaining materials. (5) Strikes and other evidences of unsettled labor conditions have had a bearing upon the fire risk.

#### As to the Moral Hazard.

(6) Failure to produce, under war orders, goods ac-ceptable to inspectors of the foreign governments has resulted in accumulations of rejected products which represent heavy losses to the manufacturers. This condition suggests the question of moral hazard.

(7) Incendiarism springing from a desire to cripple plants producing goods is a subject given much attention in newspapers. While there have been incendiary fires in "war order" plants in New England, it would seem that they have resulted from the individual efforts of misguided men. There is certainly little evidence to show that any well studied. intelligent or organized effort has been made to cripple factories by violence, in this section of the country at least, but there are indications that financial means have been tried to limit or embarrass the efforts of certain munitions plants.

#### An Important Moral Hazard.

(8) Another question of moral hazard has been raised by the visualization of conditions which may exist, when the war demand ceases, in those plants equipped particularly for "war business." This point raises a most interesting economic problem. There are a number of concerns which have built and partially equipped large plants for the production of munitions, but which have not yet produced appreciable quantities of acceptable goods. If the war should cease with-in a year these concerns might find themselves in a critical

condition. Established plants manufacturing munitions as a side line may feel a period of depression during the readjustment which must follow the war, but in most cases this should not affect them seriously. The value, in times of peace, of equipment installed for

the manufacture of munitions varies with each individual case. In a general way it may be said that machinery, that is, lathes, presses, etc., are of permanent value, while large quantities of dies, tools, patterns and gauges will be of slight value when the war demand ceases. The cost of the latter may be considered as an expense of manufacture rather, than as a capital charge against a business. In certain instances, however, the value lost in investing in such dies, patterns and gauges will be very large, and these cases will be found in those newly-established munition plants which were late in getting into the field, and the net volume of whose total product is small.

#### Effect of Rejections.

(9) The manufacture of shell parts has been attended by heavy losses on account of large quantities of product be-ing rejected by purchasers' inspectors. Manufacturers failed to realize early the degree of precision required. The steady rise in the cost of labor and material and the loss in rejected product has robbed the war business of much of its seeming profit. The sentiment amongst most of the smaller manu-facturers is that the "game has not been worth the candle," though as the demand continues early losses are being forgotten.

## AUGUST BANK CLEARINGS

The monthly returns of Canada's bank clearing houses showed an increase of over 53 per cent. last month. The figures compared with the similar period last year are as

10110 ws	August, '16.	August, '15.	Changes.
	\$206,013,018	\$224,452,501	+ \$ 71,560,517
	187,511,224	140,624,050	+ 46,887,174
Toronto		66,444,845	+ 127,688,982
Winnipeg	194,133,827	24,246,715	+ 4,303,999
Vancouver	28,550,714		+ 5,232,494
Ottawa	19,890,475	14,657,981	+ 8,279,104
Calgary	18,713,089	10,433,985	
Quebec	16,769,606	13,949,741	
Hamilton	15,864,278	13,095,120	+ 2,769,158
Edmonton	10,616,144	7,950,764	+ 2,665,380
Halifax	9,975,969	- 8,725,491	+ 1,250,478
London	8,003,529	7,358,661	+ 644,868
Regina	10,509,885	5,785,215	+ 4,724,670
St. John	8,463,056	6,638,508	+ 1,824,548
Victoria	7,620,000	5,979,244	+ 1,649,756
Saskatoon	5,728,997	3,104,738	+ 2,624,259
Moose Jaw	4,223,031	2,560,706	+ 1,662,325
Brandon	2,611,038	1,764,203	+ 846,835
Brantford	2,403,806	1,917,414	+ -486,392
Fort William	2,547,350	1,512,064	+ 1,035,286
Lethbridge	2,907,669	1,454,382	+ 1,453,287
Medicine Hat	1,676,966	726,010	+ 950,056
New Westminster.	1,392,489	1,029,261	+ 363,228
	1,392,409		+ 714,224
Peterboro'	2,343,781	1,029,337	
Total	\$858,478,941	\$566,042,056	+ \$292,436,885
	2,332.347	+3	
		Service and the	
Kitchener	1,991,000	1 1 at 1 1 1	

Mr. E. J. Langlois has been appointed general agent of the Hamilton Fire Insurance Company, Montreal, with offices at 10 St. John Street.

Mr. B. Hal Brown, president and manager of the Pro-vincial Trust Company, Montreal, is in a Quebec hospital seriously injured as a result of a motor accident this week. Mr. Kelly, vice-president of the Grand Trunk Railway, has sent his private car to Quebec to bring Mr. Brown back to Montreal.

Mr. J. Burtt Morgan, manager at Victoria of the Great-West Life Insurance Company, of Winnipeg, and president of the Life Underwriters' Association of Canada, with mem-bers of the Victoria Life Underwriters' Association, have already set their hearts upon Victoria as the meeting-place for the annual convention of the Dominion Association in 1010.