Company A (balance) '' B (as \$3.000 is to \$2,500) '' C (balance)			Suga	rs	Wines.	
			\$1,500		\$2,273 1,000	
Total Insurance To pay losses This will present the following as the			\$4,227 3,000		\$3,273 2,500	
	CONTRIBU					
Sugar Company A 1,065 '' B 1,935 '' C	1,736	Tea 3,5	00	Fish 4.000	. 1,329	
Total Payment \$3,000	2,500	3,50	00	4,000	2,000	

Or, had the loss on fish been \$5,000 instead of \$4,000, it would absorb all of policy C to meet the loss, and company B would then have to bear all of the loss, \$2,500 in lieu of \$1,736 on wines, and its salvage would have been reduced accordingly, while company A's balance, \$1,500, being virtually specific as it stands, would make the apportionment of the insurance upon sugars \$1,500 x 2,500 = 4,000, to pay loss of \$3,000, so that A and B would pay on sugars each three quarters of their respective insurances in contribution, which would then stand as follows:

Company	Sugars	Wines	Teas	Fish	Salvage
А " В "	\$1,125	••••	3,500	••••	375
C "	1,875	2,500	••••	••••	625
	••••	••••	••••	5,000	••••
Total Payment	\$3,000	2,500	3,500	5,000	I,000

Hence it is apparent that the division of compound policies of the second phase, is but a mode of arriving at an equitable method for a basis of contribution with co-insurers, specific or compound, and cannot be used to the injury of the insured or of co-insurers.

## (To be Continued.)

## COST: THE UNKNOWN QUANTITY IN FIRE INSURANCE.

## PART II.

Though insurance is a recognized branch of commerce, and subject to the law Mercantile, yet it has its differential points distinctly marked. While goods, wares and merchandise have their known cost, which varies from day to day with the rise and fall of price, as controlled by the inexorable law of supply and demand, insurance rates or prices are permanent, and are not affected by the change in price of the subject under insurance. If a risk be worth to-day one Per cent as the value insurance-wise of its hazard, it will still be worth one per cent to-morrow, or next week, or next month, though the subject under its protection may in the mean time change commercial values several times, if the hazard of the risk does not change; thus while enhanced values covered by the same amount of insurance do not increase the insurance hazard of the risk, they do increase the liability of the insurer to loss; hence higher valuations of the same subject call for a larger aggregate of premium for \* proper compensation for the risk, for if an owner insures

but one-third or one-half of the value of his goods at the same rate of premium that he would pay for an insurance upon three-fourths or more of the value, he does not give the insurer a premium adequate to the cost of the increased risk, for in nearly or quite all cases of fires, where there is a low average of, or partial insurance, the loss on this minimum sum is generally total as to the insurance ; while on the other hand, where there is full insurance, the loss is but partial to the insurer, and he reaps the benefit of his portion of the salvage. Hence it follows that the ratio of cost to the insurer is less upon full insurance than in cases of partial insurances of values. And this is why underwriters cannot afford to cover property under floating insurances at the same rates of premium that they can cover the same subjects under specific policies. The collective or floating policy, covering several items under one sum, is liable for its full amount upon any one of such items, equivalent to a loss under partial insurance, and such loss may sweep off the entire amount of the insurance on a portion only of the subjects, and leave no recourse for salvage upon the remainder to the insurer. The cost to the insurer in this case would be the value of the rate of the highest hazard in the risk.

It is an axiom in the business that the *cost* is in direct proportion to the hazard of the risk assumed, and varies with the risks, without any reference to the values of the property; thus we have a planing mill, a brick store building or a farm dwelling house, all of which may have the same identical money-value, and yet their owners will be called upon to pay very different rates of premium for insurances thereon.

Many persons, some of them so-called underwriters, imagine that rates of premium are arbitrary inventions having no bearing upon or relation to the class of hazard or values covered by the insurance, and that they should follow the fluctuations of the market, we find such an opinion entertained by members of the Institute of Actuaries, in London, where the classification of insurance risks was under consideration, with a view to learn the cost. One of the oldest members gave vent to the following :

"He could not rank himself as a scientist, but was compelled to be a simple trader. Fire insurance was one of the adjuncts of commerce; it followed the market which was the true rate. For instance, the Franco-German war stopped the commerce of France and Germany to some extent, and threw a vast amount of merchandise into Antwerp. The people of Antwerp could not get insured, and therefore came to England, and he himself insured goods at Antwerp at four and five times the usual rate. It was not unusual in Hamburg and Bremen for the rate to fluctuate according to the quantity of petroleum in the market. It appeared to him therefore that fire insurance was really a trade, and he could not look upon it as a science."

The President of the Institute at that time, 1880, though less of a "trader," was scarcely less happy in his dicta, as follows :

"It was not practicable to arrive at fire insurance premiums on the same principles as life insurance premiums were arrived at, and for several reasons, of which he would mention two: first, in life insurance what they had to do was to compare the numbers living with the numbers dying, and they had to pay the whole amount of the claims or nothing;