

ly preponderant public opinion, has put the United States in a position which virtually compels a resort to war in the event of Spain rejecting our demands. However unfortunate it may be that affairs have been permitted to take this drift,—and we regard it as profoundly and inexpressibly so,—yet it must be confessed that the country has gradually and half-unwittingly allowed itself to slide into a belligerent attitude from which it can hardly recede without humiliation. One of the best means of mitigating this misfortune is to acknowledge it in all its breadth of significance and consequence. Up to the present time, public opinion and to a large extent official opinion have viewed this question chiefly on its emotional side. Our close proximity to the scene of conflict has deepened the impressions produced by the unparalleled sufferings of the Cubans and the heartless tyranny of Spain. With our humane sensibilities thus aroused to the pitch of positive passion, we have seized our swords almost unconsciously, and without stopping to consider what war involves,—how it must widen the area of bloodshed, how it may carry grief and suffering to homes of hundreds of thousands of our own citizens, how it may add to the horrors endured by the Cubans and place them beyond reach of the charities we are now able to extend to them, and how it may involve destructions and losses alike to Cubans and Americans far exceeding anything we can hope to avert by intervention. When our naval forces confront those of Spain within a few hours' sailing distance of each other, naturally we turn to some consideration of the sacrifices to which we have lightly committed ourselves, and it is to be hoped that this counting of the costs may pacifically modify public and official attitudes.

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The military and naval preparations of both countries have undoubtedly increased the dangers of collision from undersigned causes. It is therefore of the utmost importance that no needless fuel be added to the prevailing belligerent spirit. Senators and Representatives should be given to understand that there is nothing the sober-minded public so much dread and reprobate as their inflaming appeals to popular passion. It is well understood that their jingoistic harangues have too often no higher purpose than the purely selfish one of securing the re-election of the orators; and this egoistic patriotism will therefore prove a very mistaken way of bespeaking public favor. The Congressmen who thus selfishly prostitute their high position for precipitating the greatest of national misfortunes presume upon a larger lack of public perception than actually exists, and so far they affront the public common sense. Nevertheless, it is not to be denied that their harangues do very seriously aggravate the dangers of the perilous situation, and therefore should be met by unmistakable public denunciation. The only hope we have under the complicated circumstances is that the President may justify his continually professed desire to preserve peace and his confident expectation that war will finally be averted. His official power is great, and his wisdom and tact are a match for it; and in that there is some hope that a way may be found out of our commitments without derogation of the national honor."

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"After all, the chief danger to peace lies in the stubbornness and unbridled pride of the Spaniards; and one of the main, but little considered, questions is—what may or may not be done towards modifying that obstacle."

INSURANCE AND ACTUARIAL SOCIETY OF GLASGOW.

We have much pleasure in printing the following report of the meeting of this Society.

The annual meeting of this Society took place on Monday evening, 14th March, the meeting, by permission of the Governors of the Glasgow and West of Scotland Technical College, being held in the Chemistry Lecture room, Andersonian Buildings, George Street, Mr. W. A. Tipping, the president, in the chair. The balance-sheet then submitted showed the Society to be in a most flourishing condition, and Mr. Tipping congratulated the members upon the satisfactory state of affairs, and referred to the excellence of the work that had engaged the attention of the Society during the past session. He thereafter, in felicitous terms, proposed as president for session 1898-1899 Mr. W. Smith Nicol, F.F.A., assistant manager City of Glasgow Life Assurance Company, Glasgow, whose election was unanimously carried. The following office bearers were also elected:—Vice-presidents—Mr. G. W. M'Ewen Breiner, Northern Assurance Company; Mr. N. B. Gunn, Scottish Amicable Life Assurance Society; Mr. W. A. Tipping, Scottish Alliance Insurance Company. Executive Committee—Mr. P. Macneil, Caledonian Insurance Company; Mr. D. L. Laidlaw, North British and Mercantile Insurance Company; Mr. Archibald Blair, London and Lancashire Fire Insurance Company; Mr. J. M. Barr, Lancashire Insurance Company; Mr. Robert Blyth, general manager Union Bank of Scotland, Limited; Mr. Adam K. Rodger, Scottish Temperance Life and Accident Assurance Company, Limited; Mr. A. Guthrie, Guardian Fire and Life Assurance Company, Limited; honorary treasurer, Mr. Stewart Lawrie, Alliance Assurance Company; honorary secretary, Mr. Henry G. Andrews, Scottish Union and National Insurance Company. A sub-committee, consisting of 12 members of the various insurance companies in Glasgow, was likewise elected; and Mr. R. G. Campbell, Royal Insurance Company, was re-elected auditor. The President then introduced Dr. G. G. Henderson, M.A., F.I.C., professor or chemistry, Technical College, who proceeded to deliver an address upon "Risks attending the Use of Petroleum and Acetylene," in the course of which he introduced some interesting experiments.

We are compelled to condense the excellent report of Dr. Henderson's address forwarded by Mr. Secretary Andrews. The lecturer commenced by explaining that the risks incurred in transport, storage, sale and use of oil in lamps and stoves arise mainly from the character of the oil. As a means of obviating these risks Dr. Henderson suggested the use of properly constructed lamps and the prohibition of the sale of low flash oil or, in other words, to compel the manufacturer to separate the naphtha from the burning oil more completely. Although doing this would raise the price of oil the increase cost is not too high a price to pay for comparative safety. Dealing next with the second branch of his subject—"Acetylene"—

Dr. Henderson pointed out that it is the peculiar properties of this substance which give rise to the risks attending its use as an illuminant. It is a colourless gas, with a strong, peculiar smell, which burns under suitable conditions with a brilliantly luminous flame. It is very inflammable, ignites at a much lower temperature than coal gas, and develops great heat in burning. A mixture of acetylene with air explodes with exceptional violence when ignited, and it has been shown that all such mixtures containing from 3 to 82 per cent. of acetylene are explosive, while mixtures of coal gas with air containing less than 7 or more than 50 per cent. of coal gas are not explosive. But under certain conditions, *i. e.*, when liquefied or when subjected to a greater pressure than two atmospheres, acetylene will explode, or rather will decompose into its elements with explosive violence, even when unmixed with air, if heated to a red heat. It is in this respect especially that acetylene differs from coal gas or any other gaseous illuminant. It is necessary therefore, if acetylene is to be used with safety (1) to avoid any admixture of acetylene with air, (2) to guard against the possibility of an explosive decomposition of the gas. Acetylene is prepared by acting with water on calcium carbide, which is now made by heating a mixture of powdered lime and coke or charcoal in the electric furnace. Calcium carbide itself is neither combustible nor explosive, but when acted on by water great heat is developed, so that if a little water were added to much carbide the mass might become red hot, and, if this happened, the acetylene formed would be decomposed explosively. To guard against this, in acetylene generated either the carbide is added to water, a little at a time, or else, when water is allowed to drip slowly on the carbide, a cooling arrangement is provided. The carbide should be of the best quality, or there may be formed such substance as phosphuretted hydrogen, which is