

dorsed and recommended by this highly respectable and intelligent convention of fire engineers, underwriters and fire insurance delegates. I think I have quoted good authorities to prove that a flash test of 110° may be considered safe. Among the many accidents that have startled us in this country, and which have been investigated, I have not been able to find a single instance in which the explosion or accident took place where the oil had stood a test of as high as 100° even. There have been instances where the barrel containing the explosive oil bore the Inspector's mark of 105° and upwards, but the particular sample of oil which exploded, when tested, did not go above 92°. I have yet to learn of an instance of an accident where the oil stood the flash test of 100°; but I am desirous of allowing every reasonable margin for safety. The States of Vermont, Maine, New Hampshire and New York have a burning test of 120°, which is equivalent to a flash test of 100° or less; but my proposition, the House will bear in mind, is a uniform flash test of 115°, which would be equivalent to a burning test of about 140° or 20° above the test adopted by the several States I have mentioned. I find Massachusetts has a burning test of 110°, that is to say 10° lower than the other states which I have named, and 30° lower than the test which my Bill proposes, making allowances for the difference between the flash and burning test. New York city adopted a flash test of 100°, which is 15° lower than my proposition. In the City and State of New York, in Maine, New Hampshire, Vermont and Massachusetts, I think we shall find as much intelligence and good sense, in regard to this subject, as in any part of the United States; and those states have adopted tests far below that which my Bill proposes. Wisconsin, Illinois, Ohio and Michigan have adopted higher tests. I think Michigan has gone to the extremely high burning test of 180°. I have information, from a reliable source, that the price of these oils, required to meet these exaggerated tests, averages 10c. per gallon above the ordinary standard oils. In New York the price is 9c., and in Michigan, 19c; that is the penalty paid for such a wild and extreme test. With these data and the

experience of experts and dealers in oils, confirmed by my own observation and experience, I am thoroughly convinced that the flash test of 110°, which would be equivalent to a burning test of 135° or 140° would provide a perfectly safe oil. But in this Bill I have not contented myself with resting within a narrow margin of safety, but have added what my judgment tells me, and the best information shows, will make a perfectly safe test, five degrees more, placing it at 115°, a point at which the oil must be, in all possible circumstances, excepting gross carelessness, a perfectly safe article. It has been urged, recently only, that there should be a distinction between the test to be applied to American and that to Canadian oils. That there is a difference in the comparative safety of the two oils in favour of the Canadian, nothing seems to me more unreasonable or improbable. If any difference exists, it is precisely the reverse. Experiments were recently made in the Inland Revenue Department, and high scientific authorities tend to show that the American oil is, of the two, the safer, where both stand the same flash test. In confirmation of my statement, I will quote a passage from the "Popular Science Monthly," a high authority:

"Dr. White, President of the New Orleans Board of Health, found that, on adding to oil which 'flashed' at 113° F., one per cent. of naphtha, the mixture flashed at 103°; with two per cent. at 92°; with five per cent. at 83°." (Report on Petroleum to New York Board of Health. Dr. C. F. Chandler, 1871.) Dr. Chandler says: "The addition of one per cent. of naphtha will lower the flashing test 10° in a good oil, when it would not materially affect the burning point. A quantity of naphtha, gasoline or benzine, quite insufficient to affect the burning test or the inflammability of the body of the oil, would make a very appreciable difference in the flash test."

If then there be more naphtha in American oil than in Canadian the flash test instantly detects it, and the difference between the point at which it will so flash, and the point at which the oil will ignite, must therefore be greater in American than in Canadian of the same flash test. A long series of experiments has been made to determine the difference between the relative flashing and burning points of American and Canadian oils. It has been shown to be two degrees in favour of American oil. So, the proposition that there shall be any discrimination against