Remarques sur les Société de Secours mutuels*

Mr. Jules Bienaymé

Comptes Rendus Acad. Sci., Paris, 54, pp. 889-891.

"I demand to the Academy the permission to speak to it one time again of the Société de Prévoyance et de Secours mutuels de Metz. In the session of last march 10 (Comptes rendus, t. LIV, p. 536) I have signaled the flourishing situation in appearance of this association, and I have made known the future dangers of it, by supporting myself on the quinquennial Report of which Mr. Didion, the general, well wishes to be entrusted for a long time, and of which he came to offer an example to the Academy. The 14th of this month (Comptes rendus, t. LIV, p. 793) the Commission du Conseil d'administration of the Society, is mistaken on the intention which had dictated the warning that I gave to it, instead of being delivered to a severe examination of its finances, has believed to have to hasten to protest against my observations and against the Report of Mr. Didion, by a Note in which it claims that its financial situation is very satisfactory in all regards; and thus the future is not compromised. If this Note showed very little knowledge of the scientific theories on which alone the security of the prudential establishments repose which depend on the accumulation for life of the savings of their members, I hoped at least that in the midst of the contradictions that it contained, it was able to encounter the indication of some resource that had escaped the benevolent wisdom of the reporter, of whom I had come to confirm the rigorous, but perfectly just councils. It is in this sense that I have pronounced some words after the reading of the Note of which there is concern.

"Unfortunately there is nothing in it, and I have the regret to say that, as I was certain in advance of it, the Report of Mr. Didion, the general, is of a total exactitude, and hence my calculations and my councils to a Société so interested in its philanthropic end subsists also in its entirety.

"Mr. Didion demands me to make known with some details that he has committed no errors which are attributed to him. There is no need of this minute justification. The conscientious rigor which presides in each of his works is well known. However it is good to say that he has omitted no capital of 190000 francs, no more than the interest of this capital, and that this assertion of the Note shows that its authors have poorly read his Report, quite clear (p. 4, in note) for those who know the manner by which the calculations of annuities and of life assurances are executed. There is no point further supposed that each member left a widow: quite far from there, he has even admitted that they would not be remarried: that which I have also in my calculations. But it would be impossible to explain here intelligently all these details, without entering into

^{*}Translated by Richard J. Pulskamp, Department of Mathematics & Computer Science, Xavier University, Cincinnati, OH. June 16, 2010

the exposition of an elementary teaching on the constitution of the establishments of the kind of Provident Societies which grant pensions. It suffices that the Academy know that the facts on which I have called its attention contain nothing erroneous, and that the warnings of Mr. Didion, the general, as mine, merit to be heard seriously by the Society of Metz and by the other Benefit Societies which have had the not very happy idea to manage a fund of pensions themselves.

"These warnings are of a very general interest and concern not only the Society of Metz, and one was able to think in the first arrival. It is not a concern of a private interest, but also of a public interest, because there exists in France many thousands of similar Societies. Moreover there is also concern of a scientific interest, because the constitution of the establishments of help to maladies, of pensions to widows, in a word of all the kinds of assurances on life, form one of the most beautiful applications of the theory of probabilities. When Pascal invented this mathematical science whole, when Laplace gave to the methods of approximation of the functions of great numbers a precision until then unknown, they furnished the means to constitute surely all these institutions advantageous to the public. The certitude that is able to instill an enlightened monitoring is therefore a conquest of modern mathematics. It is especially for this reason that I had indicated briefly this question before the Academy."