Naissances des enfants dans le mariage^{*}

Jules Bienaymé

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Mr. Jules Bienaymé communicated to the Society some statistical facts, relative to the ratio which exists between the number of infants born in the first year of marriage and the number of infants from each union or the same number of marriages.

The very numerous levies of men which have been made in France in 1813, and which have climbed to 1,140,000 men, in five successive appeals, in each of which the previously married men were exempt, have made to increase the number of marriages of this same year, in such a proportion, that the mean of the previous eight years being 223,223, the number of marriages of 1813 has been 387,186. The number of births, of which the mean from 1805 to 1813 was 915,769, a number which even in 1812 and 1813 had fallen below 890,000, and which tended to diminish further, is carried up in 1814 to 994,082, that is to 78,063 above the mean of the previous eight years. This increase is due, without any doubt, to the increase of 163,963 marriages which had taken place in 1813, and one sees that the first number is nearly the half of the second.

Some analogous increases, although much less considerable, have taken place in the annual number of marriages, in 1809, in 1823 and in 1830, comparatively to the means of the previous years, and the number of births, in 1810, in 1824 and in 1831, is increased equally, in a proportion which is nearly always of that of the half of the increase in the number of marriages of the preceding year.

Mr. Bienaymé concluded from these different facts, that the marriages of one year contribute to the births of the year following by the half at least of their number, and as the annual number of the marriages is very nearly the fourth of the annual number of births, that the marriages of one year give at least the eighth of the births of the following year, or again, that the first year of a number of marriages taken at random give more than the eighth of the children who exit from these unions, although they must give some children during more than fifteen or twenty years.

Mr. Bienaymé gave to remark that the indirect mean, by which he arrives to this conclusion, appears much preferable to the immediate research on a certain number of marriages and of the children who would be born, such a research must be equally difficult and unfruitful; because it would be necessary to act on some considerable

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numbers, and that often the registers of the civil state are difficult to decipher, and because a great number of households quit more or less promptly the community where their union has been concluded.

The author adds that, in the calculations of which he just announced the results, he has not taken account of the number of illegitimate children, because the number of these children experience in general only very slight changes, in the years where the number of marriages and the one of births are themselves much increased; that they are able therefore to have contributed to the excesses only for an indifferent proportion in the parallel researches; that a single exception to this general fact is presented for the year 1824; but that in this same year the increase of the births has attained *two-thirds* of the increase of marriages in 1823; that which permits further to approach by *the half* the proportion of the births resulting from these marriages.

Mr. Bienaym exposes next many considerations on the actual imperfection of the statistic, and on the inexact ideas that older statistical works have propagated; such is the opinion, generally received, of the frightening mortality of children of low age; without doubt the newborn infants die in higher proportion than the infants of three years and above; but there is with this no taking account of circumstances which must enter into the calculation, and notably of the continual increase of the population, which many older authors have been led to the very erroneous number of 30 or even of 40 deceased out of 100 births in the first year.