nouns this is extremely arbitrary; and, moreover, in all inflected languages, words very often undergo transformation in gender during course of time. Le Péloponnèse, for instance, has a feminine termination, but is of the masculine gender; and Galilée may be of either gender. Val, feminine in the Latin *vallem,* and still feminine in French proper nouns, has become masculine by common usage, taking the plural *vaux* by analogy with *mal, cheval,* etc. Some words, like *sang,* are masculine in certain combinations, and feminine in others. Finally it can hardly be claimed that the form 'Mont Pelée' does violence to a language which authorizes us to place the feminine article before *bon-bec,* and the masculine before a variety of words like *rouge-gorge, rouge-queue, cent-garde, grand' croix, patte-pelu,* etc.

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THE METRIC FALLACY.

TO THE EDITOR OF SCIENCE: In a recent article in SCIENCE on the discussion of the metric question in the House of Lords, Dr. Seaman repeats with approval the claim as to the great saving of time that would be accomplished in school by the use of the metric system. This claim has been one of the chief supports of the metric cause for generations, and has remained practically unchallenged except by a general denial. The forms in which is was presented in the House of Lords last February and in the report of our House Committee on Coinage, Weights and Measures in 1902, are so typical of this claim that both are given here:

Lord Belhaven, in House of Lords, February 23: "There is a great waste of time in the education of children, through the learning of the arithmetical tables and their application. Out of 221 school-masters consulted, 212 replied. One hundred and ninety-seven stated that there would be a considerable saving of time if the metric system were introduced; of these, 161 estimated the saving at one year; 30 estimated it at two years; and six went so far as to estimate it at three years."

Report of the Committee on Coinage, Weights and Measures to the House of Representatives, April 21, 1902: "Estimates made by the Department of Education and others show that the work of at least two thirds of a year in the life of every child would be saved by the adoption of the metric arithmetic. * * * Teachers and pupils alike unanimously testify as to the ease with which the system is taught and learned and the facility with which it is applied to the problems which in ordinary arithmetic are complex and difficult to solve. When we consider that there are over 15,000,000 school children in the United States being educated at a public cost of not less than $200,000,000 per year, the enormity of the waste will be appreciated. In the lifetime of a single generation nearly $1,000,000,000 and 40,000,000 school years are consumed in teaching a system which is in harmony with that of no other nation of the world."

This argument has been reiterated with so much emphasis and with such a show of authority that it has unquestionably carried conviction to the minds of thousands. The opinions of experts regarding their own trade are ordinarily accepted by others. If educators say the metric system would effect a saving of one to three years in the school life of a child, why should it not be accepted as true?

Within a few weeks Frederick A. Halsey has applied the scientific method to the school children argument, and, in view of its general acceptance, with startling results. It is to him that I am indebted for the data on this point. In the report of the course of study for elementary schools, dated May 27, 1903, the board of education of New York city gave a time schedule for each study for the eight years. This schedule is based on 1,500 minutes per week, and the time allotted for all branches of mathematics amounts to $34\frac{1}{8}$ weeks for the eight years. No reliable data is available as to the proportion of this time occupied in the study of weights and measures; 20 per cent. of the text-book on arithmetic, however, is occupied by the chapters on compound numbers, weights and measures. In order to be liberal to the metric cause we will apply this rate, 20 per cent., to the whole time, including that occupied with algebra and geometry. The total time devoted to the study of compound numbers, weights and measures during the eight years