

than it is at present, in fact the region may have presented more or less the aspect of a desert.

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PLURAL FRACTIONS

FROM time to time correspondents unburden their minds in these columns of sundry loads of worry about the low state of our written and spoken language. Constant Reader has learned to look for old friends among the words mentioned as horrible and convincing examples, and he would be surprised to find that the English courses in high school and college are not blamed for the deplorable condition. My own personal theory is distinctly different, but will not be aired now. The reason for writing is to call attention to a common mistake for which the decimal system must be blamed.

In reading common fractions such as $\frac{4}{100}$ or $\frac{893}{10000}$ gram, one naturally says "four one-hundredths (of a) gram," and similarly for the ten-thousandths. Yet in recent journals these fractions were given as "0.04 grams" and "0.0893 grams." It is not necessary to give references because the mistake is of wide occurrence, and is an argument for the practice of some journals never to use the names of units in the plural. It is easy to see why so many writers use and editors permit the wrong use of the plural. Think of the way decimals are commonly read. "Oh, point, oh, four gram—no, the last figure is four, so it must be grams."

The "oh," it may be remarked in passing, seems to indicate a great public necessity as the cause of the approaching obsolescence of "zero" in reading decimals. As for "naught" it seems to have died when we were young. Do school children still start the two table with "twice naught's naught"?

If the decimals we have given are bad, what can be said of 0.1 or 0.01 grams? Such expressions can be seen if the reader will look for them.

In tabulated data the column headings are often in the plural, though space is at a premium and all the figures in the column are less than unity. In a recent article "Potential, Volts" occurs seventeen times, though the maximum voltage is -0.825 . In spite of the minus sign it would not be fair to say that the value is less than nothing, and is that much farther from being plural.

In the same number of the last journal negative powers of 10 play their frequent plural role. For instance, just because it is written 7×10^{-12} , the value 0.000 000 000 007 is ergs! One would like to say that

this is a misprint, but the evidence does not in general encourage the charitable thought. On another page can be found "varied from 5–0. 3×10^{-4} g. calories." Seconds, grams and other units in varying negative powers of 10 are common occurrences.

Finally, in the ergs journal a writer says that so and so "occurs at every 2×10^3 collision." He would not think of writing or saying "at every two collision," but perhaps "at every second collision." Why was he led astray by an exponent?

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WHY PATHOGENE RATHER THAN PATHOGEN?

IN printing this word, quite a good many authors in the states, including the U. S. Department of Agriculture and some universities, use the final "e"; many others do not and many abroad do not. As I recollect, the innovation started with the editorial board of *Phytopathology*. Doubtless the U. S. Department of Agriculture followed the usage of that journal, as did a few universities. I have had my doubts as to the need or even desirability of such usage and have always written the word "pathogen."

I was supported in my view by the opinions I received from several distinguished men of letters, among them Stuart P. Sherman, who said: "Why certainly not, no more use for the 'e' than in oxygen and hydrogen." I wonder if those insistent upon the final "e" use it in naming these two gases. I think the matter is also very well stated by my colleague Professor E. E. Schneider, of the faculty here, who says:

To me pathogene seems simply absurd. Of course, English is so outrageously inconsistent in spelling that almost no rules can be laid down, but in a case like this, where we have such long-established analogous words as oxygen and hydrogen, I can't see any sense in using a different form. Anyhow, all these forms are from a root *gen* (as in Greek, γεννω; Latin, gens, genus, generare) and *not* from some established nominal or adjectival form having a proper termination of its own, so why not let it go at that? It is true that *gene* has common use, but that is also an arbitrary modern formation, and so does not, to my understanding, constitute a valid precedent for other formations.

My usual rule in the choice between two spellings is this: To choose the simpler one always when there is any authority for it at all, provided the simpler spelling is easily understood, does not conflict with any fairly well-established rule or practice and, finally, does not lead to any possible ambiguity.

Now a little matter of history. At about the time "pathogene" was being insisted upon there appeared