the computed results of Kimball and observed by these authors, respectively:

Wave-length λ	Computed n_1	Observed n	$n - n_1$
13.96	1.436526	1.4373	+ 0.000774
22.3	1.339977	1.340	+ 0.000323 [sic]
			corr. + 0.000023

In *Annalen der Physik,* 6, 1901, pp. 624, 625, F. F. Martens states in footnotes that for the wave-length 13.96 the German authors had made a correction,[2] giving $n = 1.4627$. He also points out that Kimball's constants should give for this wave-length the value 1.4635, and says: "Dieser Fehler ist . . . höchst befremdend." He then goes on to quote our values of n, cutting off from them the fifth and sixth places of decimals which had been published in Volume I.

In 1901, immediately after seeing Martens' article, I checked Kimball's work. I found that all his logarithms were correct, but that in setting down the number corresponding to the final logarithm he had erroneously transposed the figures 3 and 6, so that his value as published in the *Annals* should have read $n = 1.463526$. The corrected $n - n_1 = -0.000826$.

Later, Dr. F. Paschen made a beautiful determination of the dispersion of rock salt,[3] carrying on to much longer wave-lengths than we had done. He disagrees sharply with Martens, who thought the fifth and sixth places of decimals in n in our work should be thrown away, saying that he finds it up to 2.3 microns "von bewundernswerter Präzision." Up to and including the wave-length 4.12 his values and our values of n differ only a few units in the sixth decimal place, as shown by Table 394, p. 360, Smithsonian Physical Tables, 8th Revised Edition. I wrote to Dr. Paschen expressing my gratification and telling him the nature of Kimball's error as related above. I received a very kind reply.

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RECENT HIGH MORTALITY AMONG GEOLOGISTS

IN the issue of SCIENCE for December 29 Dr. Sidney D. Townley offers a criticism of my note in the issue of May 26 under the caption "Unusual Mortality among Geologists." I there drew attention to the very high mortality, sixteen fellows of the Geological Society, for the period between November 15, 1943, and April 18, 1944, slightly more than five months.

To quote Dr. Townley, "Only two of these deaths occurred in 1943, so if we stick to annual totals it is quite probable that 1943 will show nothing unusual. . . ." The figures were available to Dr. Townley, and he could have known that the death losses for the year 1943 (15) were the highest in the society's half-century of existence up to that time, with exception of the years 1934 and 1935, when they were 19.

We entered the war a few weeks only before 1942 and the society's losses by death for the three-year war period 1942 to 1944 have been 51, the greatest for any three-year period in the 56 years of its history. This figure was approached only once; in the period 1933 to 1935, when the losses were 47 (a fraction of one per cent. higher if membership increase is taken into account). The next highest loss for a three-year period was 31.

I hold no brief for my suggestion that the latest high mortality may in part be due to the war. It was offered as a suggestion only, and I have no suggestion even to offer for the high death losses of the period 1933 to 1935. Dr. Townley tries to explain the sixteen deceased fellows of November 15, 1943, to April 18, 1944, by the large number of geologists who were drawn into the profession by LeConte, Branner and Chamberlin at the time when the sixteen must have been undergoing their training. Unfortunately for this hypothesis no one of the sixteen came under the training of any one of the three, as reference to "Who's Who" would have shown.

WILLIAM H. HOBBS

SCIENTIFIC BOOKS

PHYSICS FOR THE GENERAL READER

Physics Tells Why. By OVERTON LUHR. Illustrated by Ruth C. Schmidt. ix + 318 pp. Lancaster, Pa.: The Jaques Cattell Press. 1943. $3.50.

THE modest subtitle of this book is "An Explanation of Some Common Physical Phenomena." Actually the book does more than this implies since, in addition to explaining many phenomena, it also gives a systematic development of the elementary principles of physics, grouped in nearly the usual manner under mechanics, electricity, light, heat and sound, with a concluding chapter on radiation and atomic physics. Thus the basic framework is not far from that of the traditional text-book of general physics.

There is, however, a marked difference from the usual text, aside from the omission of numerical problems and all but a few of the most elementary equations. This difference, which incidentally justifies the subtitle, is that the reader is led to basic principles, not by laboratory experiments designed to illustrate them, but by ordinary experiences of household, street and field. A certain degree of precision

[2] *Ann. der Phys. u. Chemie,* Bd. 61, 1897, p. 224.
[3] *Ann. der Phys.* Bd. 26, 1908. See pp. 120, 121, 132.