and footnote reference numbers may occur together on adjacent lines, set in the same type, and having approximately the same magnitudes. (I have just such a case before me in a recent issue of an important journal.)

Until a few months ago, however, this danger of confusion was, in my own case, rather an academic possibility than an actual experience. But it was realized in a rather disastrous way in a recent scientific paper of mine. On one page of this paper[1] occur two footnotes (numbered 1 and 2), likewise two fractions bearing exponents. The first of these, which should have been $(\frac{4}{5})^3$, has been printed $(\frac{4}{5})^1$. The second, which should have been $(\frac{5}{6})^4$, actually reads $(\frac{5}{6})^2$. These typographical errors result not only in errors of elementary arithmetic, but they render unintelligible the discussion of a rather important phase of my subject, both on this and later pages of the text. The source of these errors, on the printer's part, seems obvious.

Is it unreasonable for me to suggest that reference numbers (or letters) to footnotes should be set in entirely different type from those employed as exponents?

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COLOR

BY some mistake which neither the editor nor I can explain, the last part of my note on "Color" in SCIENCE for May 8, p. 495, was omitted. The portion omitted follows:

(6) If the physiological elements in the retina which respond to red light are missing, the phenomenon ends here and the sensation of red is not excited.

(7) If the eye is normal, the sensation is transmitted to the brain and mind by a process still entirely physical or chemical but evidently quite different from that by which the light has been transmitted to the eye.

(8) In the brain and mind the sensation of red is produced. Some think the phenomenon is still physical or chemical, but no one has been able to suggest any definite picture of the processes in the mind as physical phenomena.

(9) The name given to the sensation depends on previous comparisons which the individual has made with the aid of others. If he is an American he will call the sensation red. A Frenchman will call it rouge; a German, roth.

It is evident, therefore, that color is a complex phenomenon including many diverse elements no one of which can be omitted if the phenomenon is complete.

Durant in his "History of Philosophy" defines philosophy as "the synthetic interpretation of all experience" and seems to wish to delimit science as including only analysis and description. Most scientific men will agree, I think, that science which includes only analysis and description is of a low order. To be of much value it must rise above that to coordination and synthesis. In these higher reaches science and philosophy should become identical.

What has been given above may be called a scientific philosophy of color.

W. A. NOYES
HEIDELBERG, JUNE 11, 1931

SPECIAL CORRESPONDENCE

GRANTS-IN-AID OF THE NATIONAL RESEARCH COUNCIL

AT its meeting in June the National Research Council's Committee on Grants-in-Aid made grants for the support of research as follows:

To Charles W. Jarvis, associate professor of physics, Ohio Wesleyan University, critical potentials of mercury vapor; C. E. Mendenhall, professor of physics, University of Wisconsin, photoelectric characteristics of metals; S. A. Mitchell, director, Leander McCormick Observatory, University of Virginia, the measurement of the proper motion of the stars for the determination of parallax; Louis A. Turner, associate professor of physics, Princeton University, temperature distribution and metastability of vibration and rotation states of iodine molecules; Peter I. Wold, professor of physics, Union College, electrical properties of expanded mercury, with special reference to the Hall effect and to conductivity.

To Gleason W. Kenrick, assistant professor of electrical engineering, Tufts College, statistical study of field intensities in the low frequency region of the radio spectrum.

To Wilder D. Bancroft, World War Memorial professor of physical chemistry, Cornell University, the application of physical chemistry and colloid chemistry to biological and medical problems; Harry N. Holmes, professor of chemistry, Oberlin College, concentration of vitamin A and other vitamins.

To Arthur Keith, geologist, United States Geologi-

[1] *Journal of Genetics*, November, 1930, p. 307. Barring these unfortunate, but easily comprehensible errors, the press-work was exceptionally fine.