LETTERS

The editors take no responsibility for the content of the letters published in this section. Anonymous letters will not be considered. Letters intended for publication should be typewritten double-spaced and submitted in duplicate. A letter writer should indicate clearly whether or not his letter is submitted for publication. For additional information, see Science **124**, *249 (1956) and* **125**, *16 (4 Jan. 1957).*

Science and Literature

The article "Literature, Science, and the Manpower Crisis," by Joseph Gallant [*Science* **125**, 787 (1957)] has been brought to the attention of our organization.

It is unfortunate that a magazine which goes under the title *Science* should be so unscientific in checking an article which it publishes. It is no less unfortunate that a supposedly responsible teacher of English, the chairman of a high-school department, should know so little about his own national organization.

Gallant refers to the *Combined Book Exhibit* as "an official publication of the National Council of Teachers of English." The statement is untrue. This pamphlet was merely a give-away item at a commercial booth at an NCTE convention; the advertisers had the privilege of displaying and advertising any books they chose, just as do exhibitors at a science convention. The official publications of NCTE are our four magazines and the publications listed in our catalog; even a glance at this catalog would have shown that the *Combined Book Exhibit* was not included.

Gallant is apparently unaware of the three reading lists that *are* official NCTE publications: *Adventuring With Books,* for elementary pupils; *Your Reading,* for junior-high pupils; and *Books For You,* for the senior-high level. A casual examination of these booklets would have changed Gallant's article considerably. In the first booklet, under the headings "Biology—The World of Living Things" and "Physical Science," no fewer than 130 titles are listed, in contrast to only 27 in a section on poetry, nine in a section on music, and nine in a section on art. In addition, other books on scientific subjects are listed elsewhere, under such headings as "Conservation and Natural Resources," "Persons, Places, and Things," "The World Today," and "Biography."

In the junior-high list are 152 titles, under the headings "Science Fiction," "Science and Scientists," "Inventions and Inventors," and "Fun and Meaning in Math." Other books on science appear in other parts of this list. In contrast, there are 56 books on music and musicians, 23 in a group called "Back Stage With Authors."

The senior-high list is classified differently; hence, a less precise count is possible. However, in one section alone—"I Read To See with the Eyes of Science"—there are 45 titles. In another—"I Read To Feel the World's Life"—there are books by our or about two of Gallant's favorites, Roy Chapman Andrews and Carl Akeley, as well as over 200 others, many directly related to science.

Gallant mentions a number of authors who should, in his opinion, be included in reading lists. Before jumping to the conclusion that they are not included, Gallant should have observed that the following among his recommended authors are represented in current NCTE reading lists and that others have been included in former lists: Andrews, Beebe, Byrd, Teale, Heyerdahl, Ditmars, Cousteau, Tazieff, Hogben, Linton, Jaffe, Shippen, Carson, and Ceram.

I do not choose to debate Gallant's main point that it is the English teacher's job to recruit scientists and to encourage still more emphasis on science than already exists—although a great deal can be said on both sides of this question.

J. N. Hook
National Council of Teachers of English, Champaign, Illinois

It would be pointless to debate with Hook on the semantics of the word *official* as used in his third paragraph. The Council had a committee of its members listed as being in charge of the book exhibit at the convention. The Council cannot shrug off responsibility for a "give-away" which consisted of 80 printed pages of annotated book listings and which, moreover, was mailed on request months after the national convention and in a specially prepared envelope. Such a booklet, given away gratis, substantially competed with the Council's other reading lists, whose excellence is unquestionable.

The point made in my article, however, did not deal with committee supervision in the National Council of Teachers of English or with the effective educational work performed by Hook's and my organization. It pointed out the implications of the fact that *any* recommended bibliography in reading for the high school should give so little emphasis to science and should fail to list a single scientific title under the category "Understanding the Universe," which was given over entirely to books of devotion and ritual. This interpretation of "understanding the universe" raises a graver semantic question for the Council and

for 20th-century education than the usages of the word *official*.

What is deplorable is a pre-Copernican mentality in the age of nuclear physics. This mentality will not promote survival —unless it be of a pre-Copernican world. Surely this is not Hook's wish.

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The "Abominable Snowman"

It is probable that the footprints that have been reported from the snows of the Himalayas as being those of the "Abominable Snowman" may have been made by several orders of mammals [W. L. Straus, Jr., *Science* **123**, 1024 (1956)]. In April 1953, tracks that looked like the photographs published in several popular magazines as being those of the "Abominable Snowman" were seen by the writer along the snow-covered trail to Baltistan, near Sonamarg, Kashmir. Some of the tracks were old, and some were fresh. The fresh tracks were large —4 to 6 inches wide and 10 to 14 inches long—and appeared to be made by a biped. In some of the fresher tracks the imprint of the toes became more and more pronounced as one followed the track, and then the toes disappeared and the tracks became larger. The bottom of the new and larger tracks showed a pattern like a rough weave but within a few yards became smooth and free from any distinguishing marks.

The tracks were made by men wearing snow sandals to protect their feet, not from the snow but from ice crystals that form from thawing and freezing. These sandals were woven of a plant that seemed to be much like the cattail, *Typha*. The plant grows in marshy areas and is cut in the fall and dried, but before it is too dry it is woven into a crude sandal. These snow sandals are worn by many inhabitants, either because they are too poor to buy leather or because they belong to a Buddhist sect that will not use leather. The sandals first wear under the toes, so the imprint of the toes is clear in the snow. When the wear goes too far, the foot-covering is discarded and the track changes suddenly. Discarded sandals were examined but were not saved, for the "Abominable Snowman" was considered to be the product of the imagination of men who saw "animal" tracks that had been enlarged by melting of the snow. Although the use of such snow sandals may be a local custom, it is quite possible that some of the tracks reported by explorers were made by men wearing the type of sandal described here.

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EQUIPMENT NEWS

The information reported here is obtained from manufacturers and from other sources considered to be reliable. Science *does not assume responsibility for the accuracy of the information. All inquiries concerning items listed should be addressed to* Science, *Room 740, 11 W. 42 St., New York 36, N.Y. Include the name(s) of the manufacturer(s) and the department number(s).*

■ COMPARATOR MICROPHOTOMETER, for measurements on photographic plates, uses a tiny mirror to deflect light from the line being measured, while light from the remainder of the field is used to project an image. The measuring optics are able to resolve the double component of the iron "triplet" at 3100 A when the linear separation on the plate is 28 μ. Scattered light is less than 0.5 percent. The electrical output of the multiplier phototube is measured by a servo slide-wire assembly. An electronic control circuit automatically selects the point of minimum transmission of the spectrum line and stops the scanning operation to permit reading. (Jarrell-Ash Co., Dept. S668)

■ SWEEP OSCILLATOR has two ranges, 10 to 500 and 400 to 950 Mcy/sec. Two series of calibration marks are provided at harmonic frequencies of 5- and 50-Mcy/sec crystal-controlled oscillators. Sweep-width is variable from 5 to 40 Mcy/sec with sweep rate approximately 60 cy/sec. The output waveform contains less than 5 percent harmonic distortion at full output. (Kay Electric Co., Dept. S670)

■ POWER SUPPLY furnishes high-voltage excitation for multiplier phototubes. Output voltage ranges from 500 to 5000 v d-c. The unit is designed for scintillation-counting applications. Regulation is 0.005 percent, and noise and ripple are 50 mv peak-to-peak. A standard cell furnishes voltage reference. Current capacity is 10 ma. (Hammer Electronics Co., Inc., Dept. S671)

■ FUME HOOD is fabricated with spherical corners throughout to eliminate points where hazardous deposits may accumulate. The hoods are made of stainless steel integrally welded and ground smooth. Service connections are mounted on raised circular platforms that are pressed into the sheet metal. Cup sinks and sink bowls are integrally welded. (Warren Corporation, Dept. S673)

■ ZONE MELTING device for purifying silicon eliminates container contamination by eliminating the container. The silicon rod to be purified is supported rigidly at its ends, while the molten zone, which is swept along the rod by induc-