

LETTERS

Huachuca City, Arizona

EDITOR:

The other evening, upon arrival home, the answer from my wife to my often-asked question of "Any mail?" was "No, just a catalog." I gave it a quick glance, and several hours later I got around to taking it to the "file." Before I dropped it in the wastebasket, I noted in small letters that the *E&S*, which I had taken for representing a drug or mail order store, stood for *Engineering and Science*. I don't believe I have ever seen an uglier masthead. I suggest going back to the former one, if possible. The magazine is excellent, although I did miss Alumni News. Maybe you have transferred that to a newspaper I receive occasionally. (*We have—to the Caltech News, which is sent to all alumni.—Ed.*)

After I finish reading my engineering magazines, I like to leave them (the last issue) on the coffee table since they are both decorative and utilitarian. I have finished the last *E&S* (October), but it is not displayed—the prior issue of *Engineering and Science* is.

ROBERT G. MACDONALD '33

Phoenix, Arizona

EDITOR:

I would like to comment on the new format for *E&S*. Recent issues have been substantially longer. One of the things I liked about the old shorter format was that you did a measure of screening for me. I was able to pretty

much read the entire magazine. Recent issues are sufficiently long that I find myself scanning from paragraph to paragraph and probably getting less out of each issue than I did before.

I would like to put in a plug for keeping the articles technically oriented but not highly technical, with equations, etc. This you have been doing. I would also like to suggest limiting the articles to two or three pages each and limiting each issue to two or three articles.

This is, perhaps, a lazy approach on my part, but I hope that *E&S* articles can be a technical narrative to introduce new technical concepts to us old grads and review other matters of technical interest going on at Tech.

I emphasize "technical" intentionally. In my opinion, most of the articles in *E&S* on non-technical subjects have left something to be desired.

DAVID C. LINCOLN '46

Inglewood, California

EDITOR:

In regard to the so-called "revolution" at Caltech ("*The Revolution*," by Barry Lieberman '68, which appeared in the October 1967 issue of *Engineering and Science*, described the recent movement by Caltech's undergraduates to improve their academic environment by proposing curriculum changes and requesting student representation on specific faculty committees.) . . .

1. The Institute belongs to the people who created it by giving of their energies; they own it.

2. The Institute does not belong to the present group of students or employees, some of whom are faculty.

3. There are no natural "rights" of employees or students, only the rights the owners choose to give them.

4. An applicant for admission as a student or for employment may accept the policies and practices of the owners of the Institute or may exercise his freedom to go elsewhere.

5. If a student or an employee of the Institute chooses not to follow the owner's policies and practices, he has the freedom to get out.

6. Recognizing any one of the four propositions on the "ballot" would establish a dangerous precedent of allowing a group of persons to change the Institute's policies, which have yielded worldwide esteem. The group's only claim to fame may be their loud voices and their sloppy and dirty nature.

7. In regard to the supposed destruction of the students' enthusiasm as the price to pay for an education based on sound principles, it might be asked, "What good was Michelangelo's enthusiasm for creating his *David* unless he possessed a hammer and chisel and knew how to use them?"

8. In regard to the individuals who own the Institute, it might be said that it takes more than a gift of energies followed by relaxation and drifting off to dreamland; maintaining things of value requires constant monitoring and the rebuilding of parts that have decayed.

GEORGE M. SAWYER '51

BOOKS

The Gene: a critical history

by Elof Axel Carlson

W. B. Saunders Co. \$9.00

Reviewed by Robert S. Edgar,
professor of biology

To this reviewer, a history of science brings to mind the image of either a dusty factual treatise or an anecdotal memoir. This book is neither. It is a scholarly yet absorbing and exciting account of the quest for the gene—for half a century the central enigma of biology.

Although this book could be difficult for a reader with little back-

ground in genetics, Carlson's writing style is lively and lucid. His story starts with the rediscovery of Mendel's work in 1900 and carries through the major recent triumphs of molecular biology to the present. Caltech played a prominent role in the fashioning of this history—Morgan, Sturtevant and the chromosome theory of heredity, Beadle and the control of enzymes by genes, Delbrück and the birth of molecular genetics, the discovery of pseudoalleles by Lewis, and the analysis of the fine structure of the gene by Benzer are major milestones in the quest for the gene.

Rather than using accounts of scientists still living who played a part in

the story, Carlson has chosen to reconstruct the history of the gene from the published literature, and he quotes extensively. Within these unpromising boundaries he has created a dramatic and vital account of this major theme of modern biology. He makes a persuasive case for science as a basically human enterprise that progresses, as with social history, through the confrontations of opposing viewpoints. To latecomers like Carlson and this reviewer, the first half-century was a romantic time when heroes walked the earth, especially when contrasted to the present era characterized by the consolidation of molecular biology and its relentless triumphs.