be why Heltne didn't see any.) Nature-conscious visitors to Amazonia have always noticed the relative paucity of mammal life. It is inaccurate to blame this on exploitation by humans.

Also, I find it difficult to believe that human exploitation has had any appreciable effect on the great Amazon rain forest. First, native agricultural deforestation always covers such small areas that the natives are able to extract only marginal existence from them. Second, only a fraction of the rain forest has commercial value. With few exceptions, lumbermen cut a tree here and another there, and always near a waterway. Third, even during a brief visit to Amazonia, Heltne must have developed an awareness of the extent of the virgin forest. Hour after hour the airborne traveler observes towering green forest as far as the eye can see in every direction with no visible signs of human exploitation—or even habitation. It's an awesome spectacle.

It will be a long, long time before man destroys the Amazon rain forest, but it *is* conceivable that species of animals might be eliminated from substantial portions of this earth's largest remaining untouched area.

ALAN MARK FLETCHER
J. B. Lippincott Company,
East Washington Square,
Philadelphia, Pennsylvania 19105

Groping through Spoken English

The columns of *Science* often contain expressions of concern about the inadequacy of the writing found in scientific papers. In this country, however, scientific communication is largely made through the spoken word in lectures and talks at meetings and symposia. The language employed for these presentations is almost invariably Ah-ah-ese. I propose a return to the use of English. This radical suggestion is prompted by my recent experience at a symposium in Paris where many papers were delivered in French. Through a fortunate circumstance in my childhood, I understand French as well as I do English. The speakers varied in eloquence, clarity, and audibility, but every talk possessed a quality of smoothness and directness whose origin I was unable at first to identify. Eventually it became trivially simple: every sound uttered by a speaker was part of a French word. What a contrast with scientific meetings in this country! I await the day when an unusually honest speaker of Ah-ah-ese will begin his talk with: "A-a-a-UMM! The ah insignificance of my ah remarks will-uh be-ah minimized, or er-er concealed, by the ahah braying noises I am ahahah emitting." The speakers in Paris convinced me that we too could speak our native tongue without groping around for every other word and moaning dismally as we search. Some of us may be too old to alter our ways. But at least we can persuade our students to cut out the noise, pronounce nothing but English words, and remain silent during the birth pangs of the next inspired phrase.

G. C. MCVITTIE
University of Illinois Observatory,
Urbana 61801

Painfully Slow Medical Progress

Sabin's article, "Collaboration for accelerating progress in medical research" (23 June, p. 1568), appeals strongly to this layman who has been observing painfully slow progress in one area where collaboration and coordination could yield a quick, important payoff—the area of artificial internal organs in general, and artificial kidneys in particular. Though originally a temporary expedient, the kidney machine is now the only practical means of treating chronic uremia. Its cost of $10,000 per year has been prohibitive and, despite available technology, 15 years elapsed before these costs were reduced. Now a unit designed for periodic home hemodialyses has been made available to 25 patients under an experimental program. It is expected to reduce costs by a factor of five—a result of collaboration by physicians, chemists, engineers, and others. This is a major step forward, but its use still requires extensive training of patients and family physicians. The next obvious objective is continuous dialysis with simple equipment portable on the patient, thus obviating problems of intermittent, high-volume flow adopted for emergency use. But without coordinated collaboration, guided by NIH or others, another 15 years can pass before this is achieved even though it may today be within the "state of the art."

LESLIE C. EDIE
700 Nassau Street,
Bellmore, New York 11710