only a gleaning; and it seems reasonable to allow that those that are tired and wearied should have some rest. Nay it may happen, though I wish it may be otherwise, that the sloth of the next age may exceed the industry of the present."

RAYMOND BOWERS
*Cornell University*

### *Smithsonian is international*

In your October article, "The Deutsches Museum and How it Succeeds," the statement is made (page 50) that the Smithsonian Institution is "concerned only with accomplishments in the United States." One would not expect such a statement from anyone who had actually seen the exhibits of science and technology in this museum; for the visitor to the exhibits of the physical sciences, for example, would see, as he entered, exhibits relating to Jesse Ramsden (English), Ptolemy (Greek), Willebrod van Roijen Snell (Dutch), Johannes Kepler (German) and a number of other "foreigners" before he encountered anything American. Indeed the editorial in the same issue of PHYSICS TODAY quotes the label from one of our exhibits dealing with Galileo Galilei! It is true that we have few original objects from such eminent Europeans, but this is also true of the Deutsches Museum—and indeed of all others.

Inasmuch as your magazine may have given its readers the impression that the Smithsonian is not interested in science and technology except as they relate to the United States, I am sure that you will want to enter a correction. The Museum of History and Technology of the Smithsonian is a comprehensive historical museum. This means that we cover more than science and technology. In a survey made in 1965 we estimated that 184 000 square feet is devoted to science and technology (against 420 000 in the Deutsches Museum and 171 000 in the Chicago Museum of Science and Industry, neither of which is a comprehensive historical museum). Our exhibits of science and technology deal with the history of those fields per se. In one respect our museum undoubtedly gives the impression of national bias. Historic objects of American origin naturally tend to come here, and objects of foreign origin are difficult for us to obtain. An exhibit here will consequently have a disproportionate number of objects of American origin. Precisely the same observation can be made of the Deutsches Museum and, indeed, of all "science" museums.

ROBERT P. MULTHAUF
*Director, Museum of History and Technology*
*Smithsonian Institution*

### *Few and inadequate telescopes*

In his July column your man Phimsy unwittingly touches a tender nerve when he writes, ". . . but astronomers' telescopes come in sizes unthought of when I was a boy," and later states, "I looked in vain for a picture of an extraordinary 200-inch telescope." Although radio telescopes are often measured in feet, meters and even acres and the Russians are well along toward completion of a 236-inch (6-meter) reflector, in 1921 the Mt Wilson astronomer Francis Pease thought of and designed optical telescopes larger than anything now under construction. I suggest that an extraordinary 200-inch telescope might be defined as a second American 200-inch and that the absence of such a telescope—or a third or fourth such or even a couple substantially larger—is not only extraordinary but also not a matter of indifference to either astronomers or physicists.

The Palomar 200-inch was financed *40 years ago* on the basis of outstanding successes with ever-larger reflectors that revolutionized astronomy. Since then—nothing larger or even as large. No other science can "boast" of such a miserable record. Consider what physics would have been like if accelerators had been limited to their 1928 dimensions.

The American Astronomical Society is doubling in membership about every six years. The appallingly few and inadequate observing facilities have resulted in an ever-growing number of theorists over-discussing an inadequate number of observations. Nevertheless astrophysics has never been so exciting or promised greater research rewards—so much so that a group of astrophysicists trained as physicists has recently applied to the Council of the American Physical Society for the formation of a division of high-energy astrophysics. Quasi-stellar objects of one kind or another and the incredible pulsars are asking questions in fundamental physics that can only be an-