Greenwich as the prime meridian. To quote the *Encyclopedia Britannica Micropaedia* (1974, p. 1014): "Sir Sandford Fleming, a Canadian Railway planner and engineer, outlined a plan for worldwide standard time in the late 1870s. Following this initiative, in 1884, delegates from 27 nations met in Washington, D.C., and agreed on a system basically the same as that now in use."

H. Bruce Collier
Medical Laboratory Science
University of Alberta
Edmonton, Alberta

To the Editors:

There is one specific assertion in Dr. Carrigan's enjoyable article that deserves comment. On p. 312 the author says: "The introduction of decimal time would result in real costs for clock conversion, but unlike the metrification of weights and measures, only the tools of measuring time would have to be changed."

Within the International System (S.I.) there are seven base units: length, mass, time, temperature, electrical current, luminous intensity, and amount of a substance (mole). Of course, there are many other "derived" units of measure, such as the unit for the rate of doing work (the watt) and the unit of speed (meter per second). Some of the more common derived units are dependent on the base units.

Since any change in the base units impacts most of the derived units, it is not true that if we changed the definition of the unit of time, "only the tools of measuring time would have to be changed." Indeed, the proposal to change the second to, say, about 10^{-5} days (in order to facilitate a decimal clock) would constitute approximately a 16% change in many of those derived units. The confusion and expense involved with such a change would be quite significant.

James A. Barnes
Time and Frequency Division
U.S. Department of Commerce
National Bureau of Standards
Boulder, CO

To the Editors:

In his letter responding to Richard Carrigan's article (*Am. Sci.* 66:532, Sept. 1978), Truman Kohman hopefully suggests that the world start adopting what he calls the scientific form of expressing dates, e.g. 1976 July 4. In fact, the Chinese and Japanese started this practice a long time ago, and it is still the conventional way to express dates in these languages.

Incidentally, numbers in Chinese and Japanese are always expressed simply from large unit to small without inversions such as are found in nineteen (which would be teen-nine) and achtundsiebzig.

Marshall E. Deutsch
41 Concord Road
Sudbury, MA

To the Editors:

Regarding Truman Kohman's observations on a "scientific form" for representation of calendar dates, it should be noted that the all-number version of this representation has already been adopted as an American National Standard in ANS X3.30—1971, Representation of Calendar Date and Ordinal Date for Information Interchange.

That the impulse to standardization was generated by an obvious requirement of the information processing community should not be a barrier to its widespread use by human communicants. Nevertheless, one should be warned that the typical response to instructions for its use—at least in a commercial environment—is, "that isn't the way I was taught in secretarial school." Experiencing that reaction leaves me with small hope for rapid adoption of more substantive calendrical reform, no matter how rational. One need only recall the "give us back our ten days" reaction to the introduction of the Gregorian calendar in England.

The ordering of calendar date by decreasing units is not limited to American National Standards. There is an International Standard, ISO 2014—1976, establishing the same principle, and most countries have adopted it as their own national standard. Clearly this approach is essential only in the case of all-number representation, since ordering is an unnecessary redundancy when the words for months are used. It is also formally unnecessary when roman numerals are used systematically for months, along with arabic numerals for days and years.

I fully support Dr. Kohman's view of the matter and am merely pointing