

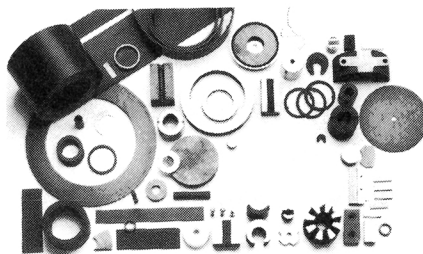
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taken as a remarkable coincidence that the period of a 1-meter simple pendulum is almost exactly 2 seconds. (For $g = 9.81 \text{ m/sec}^2$, the period is 2.006 sec.) If the period were 2 seconds, then from $2 \text{ sec} = 2\pi\sqrt{1 \text{ m}/g}$ we would get $g = \pi^2 \text{ m/sec}^2$.

I believe that this coincidence arises because there existed an older standard of length, defined by the group of skilled instrument makers who manufactured pendulum clocks. It was the length of a pendulum for a clock with a 1-second tick. (That is a 2-second period.) The escapement had been invented long before 1791, so that this standard length was well established. It could be reproduced with high accuracy by any skilled instrument maker anywhere on Earth.

It appears as if the new French Republic chose a rational standard of length and then confounded rationality by linking it to one-quarter the circumference of the Earth. The recipe for the meter became truly grand, and difficult to implement. To reproduce the French standard, one had either to remeasure the circumference of the Earth or to make a pilgrimage to the location of the standard meter. The conspiracy? There can be little doubt that the French Board of Tourism was behind the 1791 standard length.

I have enjoyed using this speculation to engage the attention of my students. I am writing to ask if there is any real evidence for the use of clock pendulums as length standards.

Reference

1. F. W. Sears, M. W. Zemansky, H. D. Young, *University Physics*, 7th ed., Addison-Wesley, Reading, Mass. (1987), p. 5.

JOHN W. DOOLEY

Millersville University

3/91

Millersville, Pennsylvania



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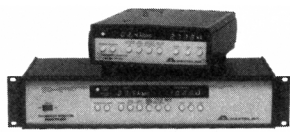
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Honor Compton with a Postage Stamp

As a philatelist and scientist I note with dismay the dearth of American scientists pictured on US postage stamps. The 100th anniversary of the birth of Arthur Holly Compton is an opportunity to address that problem. Compton was born on 10 September 1892 and received the Nobel Physics Prize in 1927 for his discovery of the Compton effect. Accordingly, I have urged the US Postal Service to consider issuing a commemorative postage stamp to honor this outstanding physicist.

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Anyone who wishes to support this effort or to recommend another scientist for similar recognition should write to the Citizen's Stamp Advisory Board, United States Postal Service, 475 L'Enfant Plaza SW, Washington DC 20260. In addition to honoring the scientist, this is an excellent way of bringing science and technology to the attention of the public.

JERRY L. FIELDS
University of Toledo
Toledo, Ohio

2/91

She Likes the Land of Ten Thousand Lakes

After reading William Sweet's news story about the Soviet physicists joining the new theoretical physics institute in Minneapolis (February 1991, page 83), I felt I must write in support of the city and its location. I went to Minneapolis to interview in January a couple of years ago, and was impressed by its attractiveness, safety, cleanliness and vibrant "university city" atmosphere. It's true that Minnesota often experiences very cold spells in January and February, which personally I would enjoy, although I know many find such weather oppressive. But these brief intervals of discomfort are amply repaid during the rest of the year; in particular the summers are characterized by temperatures and humidities that are neither too high nor too low. Also, Minnesota has large areas of undeveloped hinterland, mainly in the form of lakes and forests, in which a rich population of wildlife flourishes relatively undisturbed. It's easy to find peace and solitude just a short distance from the city.

Although California is undeniably rich in natural beauty, it is also hot, bright, dry, overpopulated and overdeveloped. I'm with the Soviet physicists!

ALISON CAMPBELL
The Johns Hopkins University
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2/91

The 'Matthew' Effect: The Gospel Truth

While turning out some old copies of *PHYSICS TODAY* recently, I came across a letter from Caroline L. Herzenberg (December 1989, page 98) that mentioned the so-called Matthew effect in science, which "consists in the accruing of greater increments of recognition for particular scientific contribu-

tions to scientists of considerable repute and the withholding of such recognition from scientists who have not yet made their mark."¹ The effect takes its name from Matthew 13:12—"For whosoever hath, to him shall be given, and he shall have abundance; but whosoever hath not, from him shall be taken away even that which he hath" (Revised Version; see also Matthew 25:29). It seems that yet again a selective reading of the literature, rather than a scholarly search, has led to injustice to other authors, in this case three others.

Mark (4:25) wrote of the same effect, in almost the same words, around 65 AD—some 20 years before Matthew. So did Luke (8:18 and 19:26), later than Matthew. John's version (15:2) is different and gives a clearer understanding of the effect, which is not quite the simple one that could be ascribed to it from the wording of the other three.

At least in this case the sole attribution to Matthew was presumably not made to flatter someone who could be useful in the future—or if it was, the attributor may be in trouble.

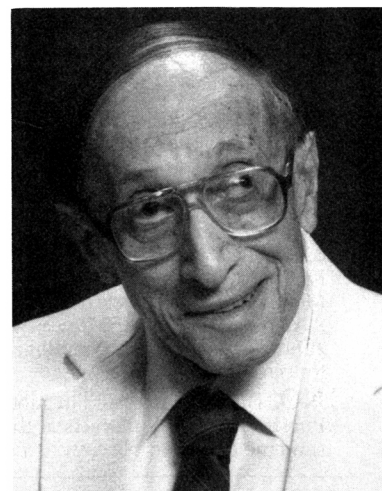
Reference

1. V. Kistiakowsky, *PHYSICS TODAY*, February 1980, p. 32.

DOUGLAS F. BREWER
University of Sussex
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9/90

Correction



June, page 134—The photograph accompanying the obituary of Eugene Guth is actually a picture of Francis Yost, whose obituary appears on page 133 of the June issue. The photo of Guth that should have been used appears above. ■