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This Week

Research Notes

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Letters

Counterclockwise conjecture

"Turning Back Time" (SN: 2/10/90, p.91) raises a question in my mind. What if the Renaissance Germans had "turned the clocks back" for the winter as we do today? If they had, then in order to "fall back," they would need only have filled the bowl of the Schissler sundial with water. In the spring, they could have "sprung forward" by draining the bowl. As a bonus, the evaporated water would have humidified the air during the dry winter months.

J. K. Richard Weber
Wheeling, Ill.

I fail to understand why the calibration of Christopher Schissler's antique sundial is considered a puzzle. All he would have had to do was make one prototype test bowl and leave it aligned in his backyard for a year. He could then determine the time by some independent means and manually mark the position of the shadow on the bowl. Once the bowl was marked, it would be simple to make copies.

Demetrios Matsakis
Takoma Park, Md.

Schissler's sundial Moorish figure holds a halberd or a poleax, but not a pike as stated in your article.

John Wanda, Jr.
Brookfield, Ill.

Thanks for the clarification. For those unfamiliar with these terms, Webster's New Collegiate Dictionary *defines the pike as "a weapon formed of a long wooden shaft with a pointed steel head," the halberd as "a weapon . . . consisting typically of a battle-ax and pike mounted on a handle about 6 feet long," and the poleax as "a battle-ax with a short handle and often a hook or spike opposite the blade."* — I. Peterson

Who gets the bends?

In "Reopening Old Wounds" (SN: 1/20/90, p.40), physician Bruce Rothschild tentatively ascribes the vascular necrosis found in monosaur vertebrae to decompression syndrome. My last recollection of this subject was that the "bends" requires the artificial rebreathing of air during the dive. It does not occur in whales, for instance, despite some very deep dives of long duration ending with rapid ascent.

Ralph Pacini, M.D.
Grand Junction, Colo.

Free divers can develop decompression syndrome, Rothschild says. He notes that Polynesian pearl divers sometimes suffer this condition if they repeatedly descend to depths greater than 30 meters with only 3- to 4-minute rests between dives; a 10-minute wait between dives seems to prevent them from developing the bends. Rothschild says he would like to test the assumption that whales do not develop decompression syndrome. However, he adds, X-raying a single set of whale vertebrae would cost about $300, so it would be quite expensive to test a sufficient number of whale skeletons. — R. Monastersky