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Cover: Synchronized oscillators play crucial roles in settings ranging from the coordinated ticking of pendulum clocks to the rhythmic beating of cells in the heart. Researchers are beginning to untangle how such synchrony arises in certain situations involving arrays of electronic devices. Based on a computer simulation, the illustration depicts how the voltage fluctuations of a chain of coupled Josephson junction oscillators (left to right) change as time passes (bottom to top). (Illustration adapted from: J. Lindner, B. Meadows, and W. Ditto/Applied Chaos Lab, Georgia Institute of Technology)

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Science Service, which publishes SCIENCE NEWS, is a nonprofit corporation founded in 1921. It gratefully accepts tax-deductible contributions and bequests to assist its efforts to increase the public understanding of science, with special emphasis on young people. More recently, it has included in its mission increasing scientific literacy among members of underrepresented groups. Through its Youth Programs it administers the International Science and Engineering Fair, the Science Talent Search for the Westinghouse Science Scholarships, and publishes and distributes the *Directory of Student Science Training Programs for Precollege Students*.

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Letters

Countering counterfeits

"New Greenbacks" (SN: 1/27/96, p. 58) propounds an expensive and complicated solution to the problem of counterfeit currency. The simplest answer has been with us since the beginning of civilization: gold coin.

Gold is impossible to counterfeit, impossible to devalue, and impossible to convert into a marker for economic surveillance. Anyone who really needs to carry hundreds of dollars in cash will scarcely be burdened by \$100 dollar gold pieces.

Michael J. Dunn
Auburn, Wash.

My great-great-grandfather, Joannes Hermanus Van de Weyer (1819–1875), invented the watermark used in printed banknotes and paper money. He lived in Groningen, the Netherlands, and inherited a stone-printing business from his father, which printed official papers, notes, and so on for banks, trading companies, and the Dutch government.

He introduced watermarks sometime in the late 1840s or early 1850s.

Your article states that the United States first used watermarked bills in 1869, which would agree with this.

I inherited an 1839 painting of Van de Weyer, passed on to me through four generations (and almost lost during World War II), which I had restored recently. I have thought of someday donating the portrait to a museum devoted to the history of money or inventions. Any historian out there who is interested and wants more information, I will be happy to oblige.

Jeff W. Eerkins
Columbia, Mo.

A counterfeiter copying a bill with an encrypted pattern derived from the bill's serial number will, naturally, copy both the pattern and the serial number. Thus, the pattern will not show up as false when scanned, and any potential tracking system will know that there are counterfeits but will not know

which scanner has found the real bill.

Most people don't look at the serial numbers on the money they take and wouldn't notice if two (or three or more) bills had the same serial numbers. Passing duplicate bills with a shared number at multiple stores would be nearly impossible for a cashier to notice.

Ian Randal Strock
New York, N.Y.

The security thread first used in 1990 is polyester, not metallic. With the new currency issue, the new thread will be a polymer.

Several other countries do use metallic security threads; however, the United States is not one of them.

Thomas Serfass
Curator
Mercantile Money Museum
St. Louis, Mo.

The security thread is a metallized polyester strip.
— D. Christensen

