

A Science Service Publication Volume 125, No. 23, June 9, 1984

E. G. Sherburne Jr. Joel Greenberg Dietrick E. Thomsen Joanne Silberner Laurie Jackson Phillips

Publisher Editor Senior Editor/ Physical Sciences Managing Editor Production/Design Director

Bruce Bower
Deborah Franklin
Linda Garmon
Cheryl Simon
Julie Ann Miller
Janet Raloff,
Ivars Peterson
Jonathan Eberhart
Deborah Franklin
Biomedicine
Chemistry
Chemistry
Life Sciences
Julie Ann Miller
Life Sciences
Policy/Technology
Space Sciences

Wendy McCarren Gardiner Morse, Andrea Rowand Jane M. Livermore Assistant to the Editor Science Writer Interns Books

Donald R. Harless Business Manager

Scherago Associates Advertising
Fred Dieffenbach, Sales Director
1515 Broadway, New York, N.Y. 10036

Copyright © 1984 by Science Service, Inc., Editorial and Business Offices, 1719 N St., N.W., Washington, D.C. 20036. Republication of any portion of SCIENCE NEWS without written permission of the publisher is prohibited.

Subscription Department 231 West Center Street, Marion, Ohio 43302

Subscription rate: 1 yr., \$27.50; 2 yrs., \$47.50; 3 yrs., \$67.00. (Foreign postage \$5.00 additional per year.) Change of address: Four to six weeks' notice is required. Please state exactly how magazine is to be addressed. Include zip code. For new subscriptions only call (1) 800-247-2160. Frinted in U.S.A. Second class postage paid at Washington, D. C. Title registered as trademark U.S. and Canadian Patent Offices. Published every Saturday by SCIENCE SERVICE, Inc. 1719 N St., N.W., Washington, D. C. 20036. (202-785-2255)

### **This Week**

356 Gene Samples From an Extinct Animal Cloned 356 Industry gene-splice field tests approved 357 Chicken pox vaccine works Hepatitis vaccine from yeast 357 357 Predictions foiled: Measles cases jump in first part of 1984 Birthtime for bongo: Antelope of a different color 358 358 Do crustal slabs rotate as world turns? 358 Navy prefers to bury subs

359 Strange bedfellows for toxin cleanup 359 Light delay by gravity

359 Tracking the brain messengers behind TD

### **Research Notes**

360 AAAS 361 Biology

### **Articles**

362 Dissecting the Dance in DNA

Cover: The vibrations of DNA may provide a key to how the macromolecule does its genetic business. The cover shows an artist's conception of the unwinding of the DNA helix, brought about by one particular vibrational mode. Once unzipped, the genetic code within the helix can be read and copied. (Illustration: Al Kettler)

365 Predicting Dangerousness: Future Imperfect

## **Departments**

355 Letters

Science Service Institution for the public understanding of science founded 1921; a nonprofit corporation. Board of Trustees—*President*, Glenn T. Seaborg; *Vice President*, Gerald F. Tape; *Treasurer*, Willis Harlow Shapley; Seretary, Julius Duscha; Joseph W. Berg Jr.; Edward Bliss Jr.; Bowen C. Dees; David A. Goslin; Milton Harris; Hilleary F. Hoskinson; Elizabeth F. Neufeld; O.W. Riegel; H. Guyford Stever; John Troan; Deborah P. Wolfe.

Director: E. G. Sherburne Jr.; Assistant Director: Dorothy Schriver; Business Manager: Donald R. Harless.

# **Letters**

## Rule Britannia?

Although the loss of Gascony (Aquitaine) in the fifteenth century undoubtedly eroded English interest in the continent, it was not in fact the last area under English rule ("Fog in the Channel: British — CERN split?", SN: 4/21/84, p. 246). Calais was held for another 100 years (1585). Furthermore, when the Elector of Hannover was invited in 1747 to become George I of the United Kingdom, he brought with him the duchy of Hannover which remained under the British crown until 1837 when Victoria became queen. The duchy could not descend in the female line and it was therefore then transformed to an uncle, thereby ending all direct British rule on the Continent, excluding the Channel Islands, Gibraltar and briefly Heligoland.

R. C. Munro (address unknown)

We were aware of both instances. Calais was held as a trading port, a kind of continental Hong Kong, not as a base of Empire. Hannover, always a part of the Holy Roman Empire, was independently governed, and the British public tended to resent their sovereigns' interest in the place.—D.E. Thomsen

### Old sounds

Regarding Joseph Nagyvary's reported rediscovery of the wood treatment which made Stradivarius's violins what they are ("A chemical concert sound," SN: 4/21/84, p. 249):

Since Stradivarius's day (c. 1700) the construction of stringed instruments has changed considerably to meet the acoustic requirements of the nineteenth-century repertoire and of large concert halls. Unless Nagyvary's instruments afford the lower string tension (using catgut strings) and other characteristics of unaltered old instruments, and are played by musicians (such as the Dutch violinist Jaap Schroeder) who use Baroque bows and performing techniques, I do not see how any claim to have discovered Stradivarius's secret might be tested.

Of course, the claim for "success in duplicating the sound quality of famed 300-year-old

stringed instruments" in their present state and as used (or misused) today by conventional musicians might be tenable.

David Schulenberg (harpsichordist and musicologist) Delmar, N.Y.

## Apple sauce

I'm afraid "applephiles" ("Even Apples Get the Bruise," SN: 5/12/84, p. 300) is a miscelogue, being of mixed ancestry. Apple in Greek is *melon*, the root *melo-*, so an apple lover is a melophile.

etopinie. If I ♥ N.Y., I am a *megamelophile*, right? Arthur J. Morgan New York, N.Y.

Correction: The Centers for Disease Control (CDC) cites one part per billion (ppb) of TCDD in soil as "a level of concern"—not 100 ppb as stated in "Agent Orange: What Isn't Settled" (SN: 5/19/84, p. 316). Authors of the Jan. 27, 1984, report by CDC on risks from dioxin in soil go on to add that "at substantially higher levels (e.g. greater than 100 ppb TCDD in soil), calculated risks may increase."

JUNE 9, 1984 355