

AMERICAN ASSOCIATION
FOR THE
ADVANCEMENT OF SCIENCE

Board of Directors

PAUL E. KLOPSTEG, *President*
CHAUNCEY D. LEAKE, *President Elect*
WALLACE R. BRODE, *Retiring President*
H. BENTLEY GLASS
GEORGE R. HARRISON
MARGARET MEAD
THOMAS PARK
DON K. PRICE
MINA REES
WILLIAM W. RUBEY
ALAN T. WATERMAN
PAUL A. SCHERER, *Treasurer*
DAEL WOLFLE, *Executive Officer*

DAEL WOLFLE, *Executive Officer*
GRAHAM DUSHANE, *Editor*
JOSEPH TURNER, *Assistant Editor*
ROBERT V. ORMES, *Assistant Editor*

Editorial Board

DONALD J. HUGHES H. BURR STEINBACH
KONRAD B. KRAUSKOPF WILLIAM L. STRAUS, JR.
EDWIN M. LERNER EDWARD L. TATUM

Editorial Staff

JUNE G. BANDY, SARAH S. DEES, LUCILLE GUINARD, NANCY S. HAMILTON, WILLIAM HASKELL, OLIVER W. HEATWOLE, YUKIE KOZAI, ELLEN E. MURPHY, BETHSABE PEDERSEN, MADELINE SCHNEIDER, NANCY L. TEIMOURIAN, MARIA A. WOLSAK.

EARL J. SCHERAGO, *Advertising Representative*

SCIENCE, which is now combined with THE SCIENTIFIC MONTHLY, is published each Friday by the American Association for the Advancement of Science at Business Press, Lancaster, Pa. The joint journal is published in the SCIENCE format. Entered at the Lancaster, Pa., Post Office as second class matter under the Act of 3 March 1879. SCIENCE is indexed in the *Reader's Guide to Periodical Literature*.

Editorial and personnel-placement correspondence should be addressed to SCIENCE, 1515 Massachusetts Ave., NW, Washington 5, D.C. Manuscripts should be typed with double spacing and submitted in duplicate. The AAAS assumes no responsibility for the safety of manuscripts or for the opinions expressed by contributors. For detailed suggestions on the preparation of manuscripts, book reviews, and illustrations, see *Science* 125, 16 (4 Jan. 1957).

Display-advertising correspondence should be addressed to SCIENCE, Room 740, 11 West 42 St., New York 36, N.Y.

Change of address notification should be sent to 1515 Massachusetts Ave., NW, Washington 5, D.C., 4 weeks in advance. If possible, furnish an address stencil label from a recent issue. Be sure to give both old and new addresses, including zone numbers, if any.

Annual subscriptions: \$8.50; foreign postage, \$1.50; Canadian postage, 75¢. Single copies, 35¢. Cable address: Advancesci, Washington.



Weight of Expert Testimony

In carrying out its mission to prevent "unfair methods of competition in commerce, and unfair or deceptive acts or practices in commerce," the Federal Trade Commission often encounters conflicts between the testimony of experts and that of users about the merits of a product. Such a conflict has occurred in the case of the Evis Water Conditioner, which is an oversized galvanized cast iron, or bronze, pipe coupling with an integrally cast center post. The device is, according to the Evis Manufacturing Company, designed to be installed in the supply pipe to improve the quality of water for domestic or industrial use. The company advertises that the conditioner has the following beneficial effects, among others: It will solve hard water problems; reduce the cost of heating water; remove grease; prevent or remove scale; prevent, reduce, or eliminate scum, rust stains, and corrosion; retard the pitting of metal; leach out alkali and salts; reduce the amount of water required for irrigation; improve the texture or structure of soil; and increase the production of agricultural products.

The Federal Trade Commission regarded these claims as false and misleading and issued a complaint on 5 February 1954. After holding extensive hearings to collect testimony from both users and scientists, the FTC hearing examiner dismissed the complaint on 26 April 1956, despite the fact that laboratory and field tests failed to substantiate any of the claims made for the conditioner. He concluded, largely on the basis of the testimony of users, that "it appears that we may here be confronted with a device operating upon a principle unknown to or unrecognized by present-day science" and added, "the scientists admitted that they did not understand the theory upon which the Evis Water Conditioner purports to operate." It is fair to add that neither the inventor nor the users claimed to understand it either.

On 20 December 1956, the FTC remanded the case to the hearing examiner for another go-round. On 30 June 1958, he again decided that the complaint should be dismissed. The Commission was unwilling to accept this recommendation and on 3 April 1959, in an opinion written by Commissioner Sigurd Anderson, stated that the hearing examiner had been in error in dismissing the complaint and ordered the Evis Manufacturing Company to discontinue making false claims.

Anderson pointed out that the results of tests run in laboratories or practical installations were "almost wholly adverse to the Evis Water Conditioner," while the evidence in favor of the conditioner was "almost entirely connected with the testimony of users." The opinion noted that the evidence from users was not obtained under scientifically controlled conditions. Perhaps the most significant conclusion was this: "The scientific evidence in the record almost entirely supports the allegations of the complaint. The user evidence, in these circumstances, is of relatively little value."

This opinion sets no precedent: the Commission has made similar distinctions before. But the opinion does reaffirm the value of expert testimony and the controlled experiment as legal evidence—a reaffirmation that will hearten those who believe that decisions affecting the public interest should be made on rational grounds.—G.DuS.