Letters

Origin of Serendipity

In my 1949 presidential address to the Chemical and Physical Society of University College London (unpublished) on "Scientific serendipities," I quoted the origin of the word serendipity as follows: "The letters of Horace Walpole, 4th Earl of Oxford. Edited by Mrs. Paget Toynbee. [Vol. III 1750-1756. pp. 203-4 No. 382. To Horace Mann. Arlington Street, 28.1.1754. 'This discovery I made by a talisman, which Mr. Chute calls the Sortes Walpolianae, by which I find everything I want, à point nommée, wherever I dip for it. This discovery, indeed, is almost of that kind which I call Serendipity, a very expressive word, which, as I have nothing better to tell you, I shall endeavour to explain to you: vou will understand it better by the derivation than by the definition. I once read a silly fairy tale, called The Three Princes of Serendip: as their Highnesses travelled, they were always making discoveries, by accidents and sagacity, of things which they were not in quest of: for instance, one of them discovered that a mule blind of the right eye had travelled the same road lately, because the grass was eaten only on the left side, where it was worse than on the right—now do you understand Serendipity? One of the most remarkable instances of this accidental sagacity (for you must observe that no discovery of a thing you are looking for comes under this description), was of my Lord Shaftesbury, who, happening to dine at Lord Chancellor Clarendon's, found out the marriage of the Duke of York and Mrs. Hyde, by the respect with which her mother treated her at table.'

It will be seen, therefore, that the word *Serendipity* was probably coined and certainly defined by Horace Walpole, and that he *had* read the "silly fairy tale" in question. S. Stuart West [*Science* **141**, 862 (6 Sept. 1963)] does him less than justice.

E. N. da C. Andrade tells me that there used to be a secondhand bookshop in the Shepherds Market, London, called the *Serendipity Bookshop*, which was a good place for picking up valuable old books quite cheaply if you liked to browse and knew what you were about.

KATHLEEN LONSDALE
Department of Chemistry,
University College London,
Gower Street, W.C.1

Several years ago, while studying creativity, I became interested in the story of the *Three Princes of Serendip* and wrote to the Library of Congress about it. They advised me of three copies available in the United States. One was at the Harvard Library; two others were in Chicago—one of them at the Newberry Library.

The copy at the Newberry Library was translated from Persian into French and then into English. The date I have is 1722, although I believe the original was written some time in the 1400's.

MILLARD ZEISBERG

611 Academy Street, Newark, Delaware

In his letter, S. Stewart West writes that "When the origin of serendipity is mentioned by modern research writers, they sometimes mention Walpole also, but I have never seen such a reference which was made specific by direct quotation or even the date of the letter in question."

Perhaps West and other readers of Science would like to know that Chapter VI of Walter B. Cannon's The Way of an Investigator (W. W. Norton, New York, 1945) is entitled "Gains from Serendipity." There he writes: "In 1754 Horace Walpole, in a chatty letter to his friend Horace Mann, proposed adding a new word to our vocabulary, 'serendipity.'" He goes on to state that Serendip was the ancient name of Ceylon. Cannon then devotes

about nine pages to examples in scientific investigation where "this sort of happy use of good fortune has been conspicuous." This chapter is actually an elaboration of a lecture given by Cannon in 1939 and published in the *Scientific Monthly* [50, 204 (March 1940].

I agree wholeheartedly with West that *The Three Princes* should be published in English.

PHILIP BARD

Johns Hopkins University School of Medicine, Baltimore 5, Maryland

. . . if there is any more discussion as to when the idea of serendipity took hold in America you might be interested to know that I was told about it in about June 1913 by Walter B. Cannon, when I was working at Harvard. Cannon was pointing out to me that my experience in his laboratory was typical of serendipity. I started out to study the absorption of gases from the bowel and quickly noticed the gradient of irritability in the bowel-which Cannon and I both felt was immensely more important than what I was learning about flatulence.

In the old days one example of serendipity that was often given was Saul's experience in ancient Israel. He went out to find his father's asses and found himself head of a kingdom.

WALTER C. ALVAREZ 700 North Michigan Avenue,

Chicago 11, Illinois

Purity of Halothane ("Fluothane")

Current concern about possible toxic manifestations following "Fluothane" anesthesia has resulted in attention being called to the presence in commercial "Fluothane" of small amounts of a hexafluorodichlorobutene [Cohen, Bellville, Budzikiewicz, Williams, Science 141, 899 (1963)]. Cohen and his collaborators have reported that evaporation of "Fluothane" can result in a build-up of this substance in the residues. Moreover, they stated that the butene derivative could increase in concentration as a result of a chemical interaction of the anesthetic agent with metallic copper in the presence of oxygen.

As reported verbally by F. L. Rose, on 4 September 1963, to the Subcommittee on Anesthesia appointed by the National Research Council to carry