Science & Technology

GREAT SCIENTIFIC EXPERIMENTS
by Rom Harré
Oxford, 1983
224 pp. $17.95

Selecting 20 experiments from the fifth century B.C. to the present, Harré, an Oxford philosopher, shows that the essence of science lies, first, in a systematic way of asking questions and, second, in painstaking testing and observation. These experiments range from ancient biology (Aristotle's notes on the development of chick embryos) to modern physics (Otto Stern's demonstration of the wavelike properties of matter). Some demonstrate that reason and observation yield theories whose proof must often await a powerful tool. During the 1950s, for example, researchers François Jacob and Élie Wollman had no direct evidence for their theory about the transfer of genetic material, but during the 1960s, the electron microscope proved them right. To his text, Harré adds a rich sampling of scientists' logs, drawings, even poetry.

A STROLL WITH WILLIAM JAMES
by Jacques Barzun
Harper, 1983
344 pp. $19.95

Henry James, the novelist, described his older brother William (1842–1910) as "my protector, my backer, my authority, my pride." Barzun is almost as reverent: This informative "stroll" unabashedly celebrates the Harvard psychologist who quietly proved to be "one of the makers of the new culture of our century." James's name has come to be associated with Pragmatism, a doctrine often misconstrued as a form of anti-intellectualism. Pragmatism held, as James himself explained, that "ideas become true just insofar as they help us get into satisfactory relation with other parts of our experience." Barzun, a former professor at Columbia, rightly identifies the 1890 masterpiece, *Principles of Psychology*, as the foundation of all James's explorations of human behavior, art, philosophy, and religion. James proceeded from a neurological base; his discussion of reflexes, Barzun argues, remains unrivaled. He made clear, among other things, that a "conditioned reflex," of the sort that Pavlov's dog made famous, is not a true reflex because it disappears when the stimulus is repeated