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fantasies." And all the symptoms they described came to be associated with neurotic disorders, stemming from "weak and delicate nerves, literally stretched or lax." The new electronic technology reinforced increasingly popular notions of "frayed" or "overcharged" nerves. Some neurologists, including American George Beard (who coined the term "neurasthenic" in the 1880s), used electric current to treat their patients—effecting, in many cases, cures that still defy scientific explanation. With anecdotes, portraits of notable physicians, and histories of famous cases, Drinka shows how a world almost picturesque in its assortment of rarefied nervous maladies was virtually brought to an end by Sigmund Freud. His psychoanalytical theory narrowed the meaning of neurosis, making it "ultimately bound to human sexuality."

**ANIMAL THINKING**

by Donald R. Griffin  
Harvard, 1984  
237 pp. \$17.50

"No truth appears to me more evident," wrote the philosopher David Hume in 1739, "than that beasts are endow'd with thought and reason as well as men." Evident, perhaps; but Griffin, a Rockefeller University professor, is rare in thinking that there are good *scientific* reasons for agreeing with Hume. For half a century at least, most scientists have endorsed the behaviorist view that animal actions are genetically determined reactions, not products of conscious decisions. Griffin claims that it is genetically "economical" for animals to be capable of thought. He ranges throughout the animal kingdom, analyzing group behavior among lions or communication among ants and pointing out inadequacies of the behaviorist hypothesis. For instance, when a pride of lions hunts, some of them will act as decoy threats, while others will wait in hiding. The genetic material required to "program" such complex decision-making would be much greater than what these animals actually possess. Griffin draws on the most recent research in the field of cognitive science. A key to understanding animal consciousness, he concludes, is to understand consciousness in humans first.