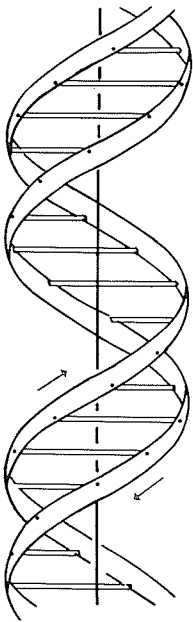


ourselves half to death." Yet, no matter what his subject, it is clear where Thomas places his faith—in science and in mankind (warts and all).

**THE EIGHTH DAY OF CREATION: Makers of the Revolution in Biology**  
by Horace Freeland Judson  
Simon & Schuster, 1979  
686 pp. \$15.95  
L of C 78-12139  
ISBN 0-671-22540-5



The year 1953 brought a new approach to biology that rivaled the transformation of physics after Max Planck introduced the quantum theory (1900) and Albert Einstein published his theory of relativity (1905). The revolution was set off by the discovery by James Watson and Francis Crick of the molecular structure of DNA (deoxyribonucleic acid), which determines individual hereditary characteristics. It has led to today's research into cell differentiation and "genetic engineering." In this richly detailed chronicle, Horace Freeland Judson, former *Time* science reporter in Europe, traces the DNA story from Johann Friedrich Miescher's discovery of nuclein (a complex of DNA and the protein normally associated with it in higher organisms) in 1869, through the Watson-Crick collaboration, to Crick's later work on the way that the "information" in the DNA molecule is translated into the making of proteins and Max Perutz's recent work on the structure of the protein hemoglobin. In the quest for DNA's secret, Watson, a young American, joined Crick in England—after being turned down for graduate study by Harvard and the California Institute of Technology. When they made their "find" in 1953, Crick was only 36, Watson 25. Along with Maurice Wilkins, who specialized in X-ray studies of DNA, they were awarded the Nobel Prize in 1962. The DNA discovery provided a coherent outline of life's processes in the simplest of single-cell creatures. Yet, Judson notes, the molecular biologists' early confidence that the outline could be stretched to include higher organisms was premature: the mysteries of cell multiplication and diversification have proved more difficult to solve than was anticipated.