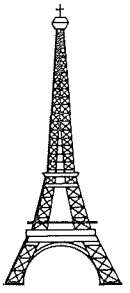
Science & Technology

INSIDE THE CRIMINAL MIND
by Stanton E. Samenow
Times Books, 1984
285 pp. $15.50

"To understand crime," writes Samenow, a Washington, D.C., clinical psychologist, "we must focus on personality, not laws and social mores." Samenow rejects the widespread notion that poverty, parental pressure, or other external causes have a significant role in the making of a criminal. Instead, he believes, the criminal *chooses* from earliest childhood to behave in antisocial and destructive ways. Rehabilitation fails, Samenow contends, because there is nothing positive in the criminal to restore. The only way to change him is to alter the way he thinks. Reviewing case histories of patients and prisoners, Samenow finds that the criminal sees himself as a victim and that his idea of going wrong is getting caught. To the felon, the law-abiding life not only seems dull but fails to reward personal effort quickly enough. Samenow's solution: intensive group therapy in which former convicts are required to produce daily "moral inventories" of ways they have chosen to redeem themselves. Unlike other therapists, Samenow strives to instill fear and guilt in his patients; otherwise, he believes, they will never develop any regard for other people. Samenow says his approach works: 13 out of 30 of his patients, once released, not only stayed out of jail but achieved productive, law-abiding lives. While this is not a radical improvement over the U.S. recidivism rate (roughly two-thirds of imprisoned felons are repeat offenders), it may be an encouraging start.

THE TOWER AND THE BRIDGE: The New Art of Structural Engineering
by David P. Billington
Basic, 1983
306 pp. $24.95

The Swiss architect Le Corbusier (1887–1965) once described structural engineers, with undisguised condescension, as mere technicians. He said that they lacked the aesthetic sense of the architect who, "by his arrangement of forms, realizes an order which is a pure creation of his spirit." This book by a Princeton professor of engineering is a learned and persuasive counterargument. Structures, Billington reminds us, *are* part of technology—the static half, complementing



machines, the dynamic half. Nevertheless, the best towers, trestles, roof vaults, and bridges put up over the past 200 years have reflected the aesthetic as well as the technical concerns of their builders. Looking at the representative works of such men as John Roebling (the Brooklyn Bridge), Alexandre-Gustave Eiffel (the Eiffel Tower), and Fazlur Khan (the John Hancock Center in Chicago), Billington identifies three consistent artistic principles realized in each: efficiency, economy, and elegance. Combining these elements, satisfying a functional need, and making the best of available materials are the true test of the structural engineer. The Eiffel Tower, Billington explains, with its iron legs sweeping up from a massive base to a pinnacle at the top, was a simple yet ideal structure for coping with high winds; the tower was also an elegant example of the latest technology. The Hancock Center, one of the world's tallest towers, is a simple tubular building whose exterior x-braces form its predominant visual feature; thanks to the bracing, the interior is free of columns, and moveable partitions permit flexible use of interior space. (The building was also cheap and easy to build.) Theologian Karl Barth's description of the challenge facing composers of classical music applies as well to the great structural engineers, writes Billington: For both, art requires the "manipulation of the most exacting rules [along with] invention in the expression not so much of what the composer himself found personally stimulating, but rather of general laws."