class women move away from an exclusively domestic role. In the process such women might be expected to be eagerly attentive to professional pronouncements liberating them from the taint of maternal deprivation. But this does not indicate that they have given up the cultural faith in the long-term import of early experience. To determine this we need inquiry into the present cohort of working mothers.

L. J. BORSTELMANN
Department of Psychology,
Duke University,
Durham, North Carolina 27706

Medical Self-Help

Medicine without Doctors. Home Health Care in American History. Papers from a symposium, Madison, Wis. GUENTER B. RISSE, RONALD L. NUMBERS, and JUDITH WARNER LEAVITT, Eds. Science History Publications (Neale Watson), New York, 1977. x, 124 pp., illus. Cloth, $7.95; paper, $4.95.

The present day is not the first time in American history that conventional medical practice has come under the gun of social criticism. It happened before, during the middle of the 19th century, and this book, the outgrowth of a seminar on the subject, is an attempt to describe and explain that earlier movement. With an eye half cocked on the present the authors have tried to understand what it was about the American character or the particular historical conditions of the time that produced such massive disaffection.

The book consists of five articles and an introduction by one of the editors. (What, incidentally, are we to make of a book that has almost as many editors as authors?) Since the five authors do not differ from each other in methodology or theoretical stance they seem, as it were, to be speaking with one voice about different aspects of the same subject. John B. Blake discusses domestic medical manuals, most of them written by "regular" physicians who believed that the informed patient was the best patient. Ronald L. Numbers describes the "irregular" self-help movements—herbalism, homeopathy, and hydrotherapy in particular—that were explicitly opposed to the norms of medical practice, and James H. Cassedy attempts to explain what made those movements so popular. Regina Markell Morantz assesses the relationship between medical self-help and the changing role of women, and James Harvey Young describes the producers of patent medicines, purveyors of yet another form of self-help. Guenter B. Risse's introduction attempts to tie the five pieces together, not a terribly difficult task considering how similar they are in tone and how well articulated in content.

All the articles are based on standard published sources, principally the books and articles written by proponents of self-help. None of the authors has attempted the considerably more difficult task of assessing the movement from the users' rather than the purveyors' point of view; none of them has gone to the letters and diaries that exist for the period (in other words to the unstandard and largely unpublished sources) to find out what people thought about home remedies, patent medicines, and "irregular" practitioners or, more crucially, how often people made use of them. This leads the authors to make sweeping judgmental pronouncements about what the self-help movements offered (for example, "a means of coping with an imprecise, undependable, and often hostile environment"; Morantz, p. 81) without giving us any idea whether the offer was ever taken up. Cassedy points to this and other failures when he writes (p. 47), "We are unfortunately almost totally ignorant of the various dimensions of domestic medicine. . . . We have hardly the slightest idea of its numerical extent and we know little of its distribution," but unfortunately for us those sentences appear at the very end, not the beginning, of Cassedy's article.

Most of the descriptions offered by Numbers, Blake, and Young can be found in other places, often in greater detail, and most of the explanations offered by Cassedy and Morantz (rise of democracy in the Jacksonian period, failure of "heroic" medicine to cure effectively, lack of physicians on the frontier, general popularity of no-nothingism in this period, disappearance of traditional feminine roles after industrialization, and so on) are also much bruited about. Historians who specialize in the development of American medicine will perhaps find it convenient to have the descriptions and the explanations lodged in one, fairly inexpensive place, but they will otherwise find very little that is novel in this volume, except perhaps Morantz's discovery that many 19th-century feminists were health reformers. Other readers may well find it a useful brief introduction to the subject.

RUTH SCHWARTZ COWAN
Department of History,
State University of New York,
Stony Brook 11974

Communication Between Cells

Intercellular Junctions and Synapses. J. FELDMAN, N. B. GILULA, and J. D. PITTS, Eds. Chapman and Hall, London, and Halsted (Wiley), New York, 1978. x, 246 pp., illus. $35. Receptors and Recognition, Series B, vol. 2.

By the late 1950's there was substantial evidence for chemical transmission at synapses. It therefore came as a surprise when in 1957 Furshpan and Potter reported that at the giant motor synapse of the abdominal nerve cord of the crayfish transmission was "electrical," that is, the local currents generated by an action potential in the large presynaptic fiber directly depolarized the smaller postsynaptic motor fiber. This was the first clear demonstration that apparently separate excitable cells were "electrically coupled," and it suggested that a mechanism existed to allow ions to move directly between the cytoplasms of adjacent cells. (The synaptic junction studied by Furshpan and Potter had the unusual and interesting property of being asymmetric or rectifying, with ionic currents in the prefiber easily spreading to the postfiber but not vice versa. Most "electrical" junctions that have since been found are symmetric.) Today electrical coupling, mediated by what are called low-resistance junctions, is known to occur not only between excitable cells in both invertebrates and vertebrates but, surprisingly, between nonexcitable cells as well. Furthermore, in some cases coupled cells have been found to transfer not only ions but also large molecules (up to molecular weight 1000) such as intracellularly injected dyes or biologically relevant molecules such as nucleotides. The transfer of normally present intracellular molecules between cytoplasms of adjacent cells has been termed metabolic cooperation.

It is with electrical coupling, low-resistance junctions, gap junctions, metabolic cooperation, and chemical synapses that this book of nine chapters by ten authors deals. Although the editors state that they planned the book to draw attention to the similarities and differences in structure and function between gap junctions and chemical synapses, it is not obvious that this was achieved. The book can be divided into two roughly equal parts: the first five chapters deal with the structure and function of gap junctions, the remaining four with chemical synapses. It is surprising that there is practically no mention in either group of the material in the other, let alone any discussion pointing