

formed man of his time on the subject.

Never forgetting that men—scholarly, inquisitive, competently educated—are the prime ingredient in medical education, he soon came to know virtually every able and promising medical scientist in Europe and later in the Americas, with the aid of his card index spotting the leaders of the next generation, offering them fellowships, encouraging their development. As Gregg's philosophy of giving developed, it became evident that he and Simon Flexner, in a sense his predecessor in the Rockefeller Foundation, had fundamentally different approaches to the problem; Flexner favored the concept that support of centers of excellence would result in upgrading all institutions, Gregg that the brightest men wherever found should be the medium through which the foundation would work. The story of the years of giving is well told by Penfield and deserves thoughtful reading by anyone who is on either the giving or the receiving end of philanthropy.

It is difficult to assess the impact of Gregg and the Rockefeller Foundation on medical education in Europe and America, but it was probably great. There is no doubt that Gregg became a seer in his own time, being consulted by persons from all over the world. In May 1953, he turned westward to retirement at Big Sur, leaving the foundation with the timeless quip, "Nothing succeeds like a successor."

Out of his great attachment to Alan Gregg and his intimate knowledge of scientific medicine, Wilder Penfield has drawn a compelling picture of an unusual man. The picture, however accurate, has unresolved paradoxes—a widely ranging warmth of spirit coupled with a need for *Binnenleben*, life within oneself, the loneliness of the poet. As seems proper, Penfield has elected to give us only those thoughts from the commonplace book that he believed Alan would now willingly share. Perhaps in some distant day those that are at present secret may yet reveal the essence of Alan Gregg.

Included in an appendix are the aphorisms of Alan Gregg, selections from his writings, and a list of his numerous publications. There is an index.

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## Factors in Effectiveness

**Institution and Outcome.** A Comparative Study of Psychiatric Hospitals. LEONARD P. ULLMANN. Pergamon, New York, 1967. 213 pp., illus. \$7.50.

A recent summary of the health of the United States population notes that "by far the largest number of patient-days in hospitals results from mental illness." As a public health problem, and a more broadly social problem, mental illness is of such great magnitude that it requires no emphasis. Hence any contribution to the more effective functioning of psychiatric hospitals promises large social dividends; in addition, a heightened understanding of how these institutions operate promises to further our knowledge of human organization in general, whether it be hospital, university, or factory.

In the present volume Ullmann makes such a contribution. His achievement is impressive on at least two counts: he offers a closely reasoned and elegantly executed investigation of how a group of 30 hospitals performs the essential task of returning hospitalized individuals to the community; and he supplies a historical and social-psychological analysis of mental hospital organization within which his specific research findings take on full human meaning.

The measures of the effectiveness of hospitals in reaching the goal of getting patients back to the community were, first, the percentage of individuals who attained early release (defined as being discharged within 274 days after admission and remaining in the community for at least 90 consecutive days) and, second, the percentage of individuals with long hospitalization (two or more years). It should be noted that these were all Veterans Administration hospitals, a fact that made it possible to obtain useful standard records and maximum comparability; at the same time, this restricted the patient population to males and may also have imposed certain organizational idiosyncrasies that limit the generalizability of findings.

Ullmann began with the hypotheses that *small size* and *increased staffing* would be associated with effective hospital performance. His hypotheses were confirmed, although the detailed analyses make it plain that the relationships are complex. For instance, small hospital size is more closely associated with early release as a measure of effectiveness, and increased staffing ap-

pears more intimately related to a lower percentage of patients with long hospitalization. The author goes on to show that small size is already accepted as desirable, but that the uses of increases in both funds and staff need to be specified; more money and more people will not influence discharge rates unless the money is put in the right places and the people are the right people. Still more fundamentally, psychiatric institutions will not change for the better unless the assumptions on which they run are changed. In the Veterans Administration, for instance, the very basis of financial support is tied to an anti-therapeutic premise: the more patients occupying beds, the more nearly the hospital is fulfilling its mission. In reality, of course, such a funding procedure encourages the very kind of custodial long-term care that modern social psychiatry is at pains to combat. The hospital, the author asserts, must shift from the conventional bureaucratic mode of organization, with its emphasis on hierarchical control, toward a more flexible, decentralized mode that brings staff and patients closer together; essentially, he argues for what some have called "collegial bureaucracy" and others term a "neoteric" model of organization.

This is an extremely valuable book. It adds to our knowledge of organizational functioning. If the author's modestly phrased but trenchant suggestions for improvement of psychiatric hospitals were acted upon, hospital personnel, patients, and society at large might profit immensely.

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## Scattering

**Scattering Theory of Waves and Particles.** ROGER G. NEWTON. McGraw-Hill, New York, 1966. 699 pp., illus. \$19.50.

This book is a large treatise on all possible applications of the Schrodinger equation and related wave equations, including those for electromagnetic waves. It contains a detailed description of new and old techniques so far discovered in this field, and many exercises as well. The author has produced a very complete and homogeneous book written in a clear and orderly fashion. His mastery of the