The author has adopted the hardware conventions associated with the machine (GIER) with which he is most familiar; furthermore, he devotes one chapter to certain additions to ALGOL which increase the efficiency of the programs produced by the GIER compiler. The instructor who uses this book as a text may well wish to make certain modifications concerning these points. He may also wish to place slightly more emphasis upon such matters as conditional statements in arithmetic expressions—which are relegated to an appendix, on recursive procedures—to which only fleeting reference is made, and to own variables which are dealt with not at all.

There are a few typographical errors (for example on page 3 two signs, $\neq$ and $=$, should be interchanged, and on page 53 there is a redundant open bracket), though mistakes of this nature occurring in the ALGOL texts will doubtless either be recognized by anomalous functioning of the program or be picked up by the ALGOL monitor.

The publishers are to be congratulated on their enlightenment in offering this book at such a moderate price.

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64[Z].—KARL-HEINZ BÖHLING, *Zur Strukturtheorie sequentieller Automaten*, Forschungsberichte des Landes Nordrhein-Westfalen, No. 1279, Westdeutscher Verlag, Opladen, 1964, 73 pp., 23 cm. Price DM 45. (Paperback)

The author defines a *sequential system* as a triple $\langle \epsilon, G, F \rangle$, where ϵ is the union of disjoint sets θ (comprising input and output alphabets) and S (the set of states), and where $G \subseteq \theta \times S \times S$ and $F \subseteq \theta \times S \times \theta$ are ternary relations on ϵ corresponding, respectively, to the transition and output functions of a conventional deterministic sequential machine. The apparent purpose of this monograph is to show that sequential systems are sufficiently general to embrace all of the principle models current in automata theory, including incompletely specified machines, nondeterministic machines, Rabin-Scott machines, and abstract (Ginsburg) machines among others—a conclusion that is hardly surprising. Aside from this, a tedious attempt is made to develop a formalism for distinguishing among the various types of machines, considered as sequential systems.

As the author grants in his introduction, no attempt is made to generalize, unify, or even present the existing theories, though he promises to deduce some consequences in a subsequent publication. At least until this program is carried out and the sequential system is shown to be a fruitful generalization, one must regard the present work as virtually useless, either as a text or a reference book.

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65[Z].—ROY DUBISCH, *Lattices to Logic*, Blaisdell Publishing Co., New York, 1964, vii + 88 pp., 20 cm. Paperback. Price $1.65.

This treatment of lattices, sets, switching circuits and logic is written primarily for mathematical beginners. Partially ordered systems and lattices are introduced