THE boy was odd,” begins Gordon R. Dickson in *The Genetic General* (Ace), and at once we can expect that the boy will somehow survive—not only survive but win success—not only succeed but, ultimately, rule. We can expect all this because this is the way of mutant stories for many a year; what we get instead is a fine, moving, exciting book.

Gordon Dickson is an uneven writer, sometimes matchless, sometimes trite. He has a queerly complicated way of thinking, his best story ideas amounting to long-chain, highly polymerized thoughts. We put down many of his stories and know that the man was saying something interesting . . . but what?

In *The Genetic General*, however, originally a three-part serial, he has space and time, and he uses them well. His “odd boy” starts out as a sketch, but with a trait shown here, an opinion there, Dickson dexterously fills in the outline until at the end of the book we see the man in three dimensions, standing clear; and when we come to the last lines and the true majesty of his difference, we are surprised—yes, and gratified, because Dickson has played fair with us all the way.

The galactic culture Dickson paints as a backdrop to his story must rank low in the hierarchy of future probabilities—surely a feather’s touch would knock over its rococo customs! Dickson’s agility is equal to the problem, though; by sleight of hand he tricks us into suspension of disbelief.

All in all, *The Genetic General* is Dickson at the top of his form, and a credit to his publisher; and it is recommended almost without reservation.

The “almost” is because unfortunately Ace has, according to its custom, made a double volume of the book. The upside-down story is *Time to Teleport*—also by Gordon R. Dickson, also about a mutant threat to a highly developed future society. But here the piece falls apart in our hands. It is only
about half as long as *The Genetic General* . . . and it is far less than half as good.

**WE HAVE** five other novels this month, of which about the most interesting is a curiosity piece.

That is A. Conan Doyle's *The Lost World*, back in print presumably as a tie-in with the recently released movie. Here Professor Challenger takes us to a great mountain-locked plateau on the upper reaches of the Amazon, where dinosaurs frolic and apemen fight them for survival. Well, there have been so many imitations, but all the same, it's good fun.

Doyle's science is orthodox, or even advanced, by turn-of-the-century standards. (He had scientific training, of course. He was a practicing London physician for nearly a decade before Sherlock Holmes set him free of pill-pushing.) His story is excellent adventure and his characters are fascinating because they seem to loom out of a past almost as remote as the monsters chasing them.

The thing is, Doyle was a writer of the pre-Freudian school—not only pre-Freud, but pre-Joyce, pre-Hemingway, pre-almost all the great seminal influences of this century which have given us new insights into the personality, but not entirely without cost. Doyle's characters are all very sure of themselves, very individual. We have little of that sort of thing today in writing—perhaps because we don't have a great lot of it any more in life. It makes a refreshing change to meet them here.

On balance, there are fifty books coming at once to mind, written by our own special pioneers, which are better science fiction and better art than *The Lost World*. But they don't have what Doyle had—and it's a pity.

MARK Clifton's *Eight Keys to Eden* (Doubleday) is a mildly told, ambitious and confusing novel. It touches everything and covers very little. He starts out by telling us that the human race has got itself into so serious a pickle that it has had to create a new social class to haul it out.

These super-thinkers are the "E's" (for "Extrapolators"), who are "outside all law, all frameworks, all duty, all social mores." They are trained from youth to use their minds in ways the ordinary human clod cannot manage; they are so absent-minded that they have special attendants (when Swift invented them for his floating island of Laputa, he called them "flappers") to keep them from getting hurt. They are resented by many ordinary humans, who go so far...
as to try to encroach on their privileges in McCarthy-like inquisitions, and they are envied by practically all. Says one jealous commoner: "Boy, something. Imagine. Take any dame you want. Nobody can squawk. Take any money, riches you want. Nobody can stop it." How this would work out in practice we are not going to know because, as Clifton tells them, no E ever does any of those things.

However, this is not what the book is about. A fledgling E is confronted with the problem of a planet called Eden which is perfectly wonderful in all respects except that it will not tolerate the existence of machines or, indeed, of anything made by man. Machines disappear; men's structures, even men's clothing, revert to their primitive state as tree or vegetable, and will not allow themselves to be reconstructed.

There is then a surprise ending which, according to house rules, we will not discuss; but it seems tacked on. It may be what Clifton was aiming at from the beginning; if so, he took an awfully roundabout way of arriving there.

Clifton, employing such devices as spotlighting minor characters in a choppy series of blackouts, makes the story move pretty rapidly. But it doesn't really go anywhere.

The Climacticon, which is both title and principal gimmick of the Ballantine novel by Harold Livingston, is a pocket-sized machine which radars the emotional attitudes of girls. Its meters tell you when a willing girl is nearby, and its compass needle points her out. It sounds, indeed, like a handy enough gadget for a young fellow just starting out in life, but it's a thin sort of peg to hang a novel on.

Livingston, whose previous works have been outside the field of science fiction (e.g., The Coasts of Earth, a story of the Israeli-Arab war), does little delving beneath the surface of the notion. What he does is to set it on Madison Avenue and people it with advertising-agency types, and although they are over-familiar they are good for a few laughs. Sketchy, fast and entertaining, the story has enough moments of shrewd observation to make one wish it had more.

ACE has abridged (but not enough) The Dark Destroyers, Manly Wade Wellman's pre-war account of the Cold People from Space and their predictable attempt to invade the Earth. The second novel in the double volume is Bow Down to Nul, which has to do with Earth writhing under the lash of still another set of alien conquerors from
space, the Nuls. Well, things are pretty tough under the Nuls, all right, but reading the story is tougher. The jacket accuses Brian W. Aldiss of writing this, but he has a clean record elsewhere and should be able to cop a plea.

As a better example of what Aldiss can do, consider his newest, Signet short story collection, Galaxies Like Grains of Sand. Here he offers eight stories arranged in a series to picture eight epochs in the future of mankind. The stories are quite uneven, but they all have strengths and the best among them are excellent. Aldiss peoples his The Robot Millennia: Who Can Replace a Man? almost entirely with machines—bulldozers, automatic typewriters and so on—and tells the story through their eyes (or photo-receptors). The machines find that the men who command them have disappeared; they debate the question, then elect to trek to the mountains to start a new, manless life for themselves. When they talk, they talk like machines, every thought a neat computer’s syllogism of major premise, minor premise and conclusion. They are machines, instead of men wearing tin suits, and it is all quite rewarding.

In The Dark Millennia: O Ishrail! Aldiss starts with a familiar theme (an alien, marooned on Earth, is thought mad because of his talk of Galactic civilizations), but he invests it with thought and illuminating detail and makes it come alive. The Megalopolis Millennia: Secret of a Mighty City is again routine in concept, a parody laid in the future of the familiar yes-man conferences of Hollywood producers of an extinct age, but by main strength Aldiss manages to administer a few bites with those dulled old teeth.

These are the best of the eight and a credit to any writer, but even the least of them has an unexpected gift or two for the reader. It is that lagniappe, the baker’s dozen delivered when he is only paid for twelve, that marks Aldiss as a writer worth watching.

One dozen stories by Robert Sheckley have been collected by Bantam into a book called Notions: Unlimited. Sheckley almost never writes the scientific parts of his stories. In fact, about the only science fiction story in the book is A Wind Is Rising, concerning problems in navigating a twelve-ton tank with a chain-link sail across the rocky, hurricane-swept soil of an alien planet. (Sheckley is an amateur yachtsman of great passion.) Still, he writes so briskly that we never miss the hard parts, at least not until the story is
over. His great attraction is his original and unorthodox point of view.

It is the soft spots in the future that interest him. Nothing goes right for his luckless heroes; their inventions work all too well; their fraudulent plots fail because the disaster they aim to simulate really happens; they make compacts with monsters but neglect to read the fine print. It’s too bad for his heroes, but it’s fun for the rest of us.

Isaac Asimov has written so much so well for so long that no one is very excited when another Asimov book comes out and turns out to be good. Like the rising of the sun it is a daily miracle, dimmed by familiarity. Here the dawn breaks in Nine Tomorrows (Doubleday & Bantam). These nine are not the best stories he ever wrote, but then they don’t have to be in order to deserve our attention.

Two regrettably less attractive short story collections appear now to show us that even the best may falter in form. We expect great things, for example, from Basil Davenport. We cannot conclude that we have quite got them here.

Invisible Men is the title of his new Ballantine anthology of stories about invisible men (and invisible women, invisible boys and invisible things), and although the stories are all right, eleven of them are too many. Some would be fine in any surroundings, however—The New Accelerator (Wells), Love in the Dark (Gold), Shottle Bop (Sturgeon)—and the chief thing that puts this book a cut under Davenport’s usual high standard is that he has shirked his duty. The best part of a Davenport anthology is his useful and entertaining program notes, and here he has not given us any.

A fine-tooth comb passed over the works of Theodore Sturgeon has extracted yet another collection of his shorter pieces, but not one which does him sufficient credit.

In Beyond (Avon), we are given four ancient stories (Abreaction, Nightmare Island, Largo and The Bones—all originally published in the forties, and all showing their age), one recent reprint, Like Young, and one story so new that it has never before been published. This one is entitled Need. It is a long story, almost half the size of a book; if it were up to Sturgeon’s elevated plane of accomplishment, its inclusion here would be all the recommendation this volume needs. But it isn’t. There are a lot of words in the piece, but the story itself is a slight and unresolved fantasy, characters
queer without being compelling, plot hanging on air. There is, says the story, a man living in Nyack who can detect what people need. He gives it to them. That's it. That's all.

Sturgeon can, should and often does give us so much more than this. Of all the writers practicing science fiction today, there are only about a dozen true leaders. The others are excellent craftsmen, surely—their contributions are considerable and welcome—but they are the infantry troops who occupy and consolidate the gains of the advance party. Sturgeon is one of the leaders. The disappointment is that in this book he leads us nowhere we have not already been. Derivative, minor and rather weary, it does not do justice to a man who, at the peak of his form, simply cannot be matched.

At the last we come to a look at what the publishers are providing for us in the way of non-fiction. If you like mathematics, for example, you will be interested in Constance Reid's *From Zero to Infinity*, a new revised edition of which is now available from Crowell.

Mrs. Reid does not intend to tell you how to add and subtract, but to inform and entertain you with some of the properties and curiosities of numbers themselves. See, for example, if you can make any sense of this arrangement of the digits from 0 to 9:

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8 5 4 9 1 7 6 3 2 0
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They are arranged according to system, but what is the system? "Secretaries usually outwit mathematicians on this one," says Mrs. Reid. The reason for this is that the arrangement is not a mathematical one; and if you wonder why then it is relevant to this mathematical book, it is because the attractions of number study are not confined to its mathematical aspects. There is something grand and terrible about the properties of numbers and their subtle, unexpected relationships, something which for thousands of years has caused amateurs of number study to assign metaphysical or superstitious properties to the various integers.

It is the triumph of mathematics that all of its laws are true always—in every case—not only in the case of the numbers and quantities we know, but in the case of every number and quantity that anyone can ever know. A mathematical proof does not rest on a series of test observations, but on a statement of general laws which can be shown to be universally, necessarily true. Mrs. Reid points up the difference:
“In sciences other than mathematics a sampling must often serve as verification of a hypothesis. Mathematicians, who by the nature of their science can prove or disprove a hypothesis with complete finality, have a smug little joke that they call ‘The Physicist’s Proof that All Odd Numbers Are Prime.’ The physicist, so the story goes, starts out by classifying one as prime because it is divisible only by itself and one. Then three is prime, five is prime, seven is prime, nine—divisible by three? Well, that’s just an exception—eleven is prime, thirteen is prime. Obviously all odd numbers with the exception of nine are prime!”

*From Zero to Infinity* is a catch-all, and as it is quite short there is much that has not been caught. By and large, though, it is the best brief, popular introduction to number lore on the market, accessible to those with no mathematical training but rewarding even for those who have.

Oh, and that arrangement of the digits? Spell out the list and you will see the answer at once:

They are in alphabetical order.

IT WOULD be hard to find a better popular history of astronomy than Rudolf Thiel’s *And There Was Light* (New American Library.) Some five thousand years of star-gazing need to be covered. In less than 400 pages Thiel encompasses the lot.

Just about everything is here. Thiel outlines for us all the major theories of past and present and describes for us the observations from which they sprang; he even finds time for human sidelights like Tycho Brahe’s youthful dueling accident (which forced him during all his adult life to wear a gutta-percha nose) and the fussy housewifery of the founder of Greenwich Observatory (he spent endless hours lettering the word “empty” on boxes from which equipment had been removed). Admirably organized, well illustrated, the book has only one serious flaw. That lies in its closing pages where, in an attempt to keep it “up to the minute,” some of its conjectures are outdated and already nearly forgotten.

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