

# BOOKS

## WORLDS IN COLLISION

by Immanuel Velikowsky  
Macmillan, N.Y., 401 pp., \$4.50

Reviewed by H. P. Robertson  
Professor of Mathematical Physics

**T**HE CENTRAL THESIS of this incredible book is that the planet Venus broke away from Jupiter, as a comet suffered near collisions with the Earth during the fifteenth century before the Christian era, continued to cruise in a cometary orbit for some eight hundred years, and after a collision with Mars lost its tail and settled down into its present orbit!

The scientific pretensions of this jejune essay at cosmology are too ludicrous to merit serious rebuttal. Support for the thesis is sought in the accounts of catastrophe in the chronicles of civilizations of the past, and in a spate of legend, folklore and superstition. As examples of the method of "historical cosmology" fathered by Velikowsky, it should suffice to mention a few of the effects attributed to the initial contacts of the comet Venus with the Earth. The collision caused a "stasis" of the Earth, thus accounting for the stopping of the Sun and the Moon as recorded in the Scriptures (Joshua 10:12-13); the gravitational perturbations caused the parting of the waters of the Sea of Passage (Exodus 14:21-22); the gases composing the tail of the comet produced, on interaction with the oxygen of the atmosphere, variously naphtha (Numbers 16:35) and manna (Exodus 16:14-15)—and on top of this brought to the earth a swarm of flies (Exodus 8:24)!

But let us turn from the inanities of the book itself to the truly remarkable manner in which it has been promoted by one of the most reputable publishing houses in America. Well in advance of publication a little band of literary apostles spread its message over the pages of *Harper's*, *Collier's*, *Reader's Digest*, and the Sunday supplement *This Week*; none among them is a scientist—only one, a science writer, is listed in the standard reference work *American Men of Science*, which includes some 50,000 names. As a result of their efforts, and the sensational nature of the book, *Worlds in Collision* has hit the non-fiction best-seller lists in various parts of the country.

And more is yet to come. The

author proposes to continue his excursions into historical cosmology in further volumes, the first of which is to establish a synchronical scale for the sesquimillennium immediately preceding our era, under the catchword *Ages in Chaos*. It is sincerely to be hoped that the prospective publisher of these volumes will seek competent editorial advice, which will enable him realistically to weigh the value of his firm's reputation against the monetary rewards to be reaped by catering to those with a taste for sleazy pseudo-science.

## PHENOMENA, ATOMS, AND MOLECULES

by Irving Langmuir  
Philosophical Library, N.Y., \$10

Reviewed by Robert V. Langmuir  
Senior Research Fellow in Physics

**T**HIS IS A COLLECTION of twenty papers by Irving Langmuir, ranging over various subjects from surface chemistry and molecular physics to world control of atomic energy and impressions of a trip to Russia in 1946. The book is of considerable scientific value, for it covers subjects not normally touched on in college textbooks. Surface phenomena are on the borderline between chemistry and physics, and knowledge of the fundamentals of this important field is not widespread among physicists. This collection of important papers by a leader in the field will do much to change this unfortunate situation.

Langmuir has worked in many fields of science, including the early theory of valence in chemistry, thoriated tungsten filaments for radio tubes, high vacuum technique, meteorology, surface chemistry and radio. This wide range of interests is more akin to that of the English "natural philosophers" of the last century, such as Kelvin and Lord Rutherford, than that of the modern specialists who stick closely to one restricted field such as cosmic rays or nuclear magnetic movements. Typical of Langmuir's versatility is his recent work in meteorology, not mentioned in this book. He entered this field as a logical extension of some work he was doing on the problem of reducing snow static in airplane radios. An amateur in the field, he made meteorology an experimental science as well as an observational and theoretical science. The effects

of this recent work in weather may well be as important as his early work on gas filled lamps.

The production of the book itself is an extremely poor job. Several graphs are printed upside down or sideways, and at least two equations are printed upside down. There is no reference to the dates or the original place of publication of the various papers reprinted, although there is a good bibliography of Langmuir's papers in various fields. It is not clear at all that the publishers have contributed anything to the production of this book. Under these circumstances it seems to be almost highway robbery to charge \$10 for it.

## THE INTERPRETATION OF DREAMS

by Sigmund Freud

The Modern Library, N.Y., \$1.25

Reviewed by Hunter Mead  
Professor of Philosophy and  
Psychology

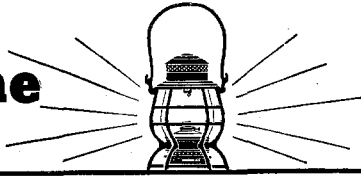
**F**IRST PUBLISHED in 1900 (English translation 1913), this book has always been crucial in psychoanalytic theory. It has also been highly controversial. Freud himself regarded his "discovery" of dream interpretation as his most important contribution to psychology, and his followers have usually concurred in this evaluation. The non-Freudians, however, have been less impressed; while it is no longer smart to refer to the book scornfully as "Dr. Freud's Dream Book," there remain many psychologists who regard some of his interpretations as arbitrary or twisted to fit into his general theory of pansexuality.

The reader who approaches the book with an open mind will probably feel that the seven chapters are uneven, both as to general interest and controversiality. For example, the chapter on "Dreams as Wish-Fulfillment" now seems straightforward and almost obvious—thanks to a half-century of Freud's influence. On the other hand, the chapter on "The Dream Work," in which he attempts to show how dreams are worked over or processed by the subconscious before they enter consciousness, will probably impress the unbiased reader as arbitrary and far-fetched.

But such criticisms are largely irrelevant. What must impress any

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# The Main Line



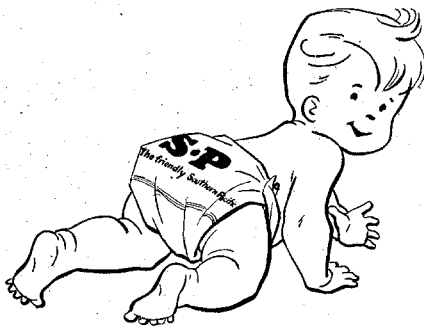
MAY, 1950

In the midst of a welter of correspondence about our "Why Don't Trains Fly?" booklet (and, believe me, we've loved hearing from you) we also received a mash note for one of our *Shasta Daylight* porters. It's too long to reproduce entirely, but we think you'll enjoy a few excerpts.

## Beyond Call of Duty

"A woman got on the train with her two little boys, one not quite two years old and the other just a baby . . . her luggage evidently had not been put aboard and she was almost in tears. What to do about two babies who already needed to be changed!

"Your porter was equal to the emergency. First he begged a few clean dish towels from the dining car steward for her. After that he warmed the babies' bottles and saw that they were fed. At lunch and dinner he did the same thing and brought sandwiches for the mother and older boy.



"By the time evening came, the dish towels had been used up and there was the emergency again. This time the porter asked the conductor if he might have some towels and the answer was yes, because when the train arrived in Oakland, the baby was proudly borne out to meet his relatives with the most conspicuous part of him adorned with a blue-striped diaper with the initials S.P."

This strikes us as a novel solution to the eternal triangle problem. And while we're sorry our passengers' luggage got left in Portland, we're proud of the resourcefulness of *Shasta Daylight* porter John Barnes.

## Looks Like August

These being uncertain times, we don't

want to make any unqualified predictions, but it now looks as if the new *Sunset Limited* will be in service in August.

If you've been aboard our *Daylights*, *Lark*, *City of San Francisco* or new *Golden State*, you've seen some pretty fancy streamliners. But until you see the new *Sunset Limited*, you haven't seen anything yet.

## Woosh—In 42 Hours

The new *Sunset Limited* will flash between Los Angeles and New Orleans in just 42 hours, clipping five hours from the present schedule. It will give you an eye-level, close-up of the spectacular Louisiana bayou country by day in both directions.

The new streamliner is being built by Budd Company to our own specifications. That means lots of special features you won't find in any other train. Watch this space for details.

## Cheap Seats

Sometimes, when a thing ceases to be news to us, we assume that everybody must know all about it. It always comes as something of a shock when we discover they don't. That's the way it is with the low fares in chair cars on some of our finest trains. Few people realize how inexpensive they are.

For example, going back to our lady in distress on the *Shasta Daylight*, her ticket cost just \$12 from Portland to San Francisco (\$21.60 roundtrip) and her two youngsters rode free. For her \$12 she got a reserved seat for herself, as well as one for each of the children.

The same good deal applies on the *California Daylights*—just \$7.50 one way, \$13.50 roundtrip between San Francisco and Los Angeles. (Federal tax, of course, is extra, as it is on all transportation.)

Similar low rates are available to you for trips east. You can ride fine trains like the *City of San Francisco*, *Overland* and *Golden State*. So if you want to s-t-r-e-t-c-h your vacation budget, ask us about those low-fare, luxury chair car seats.

## Books

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person interested in the history of ideas is the fact that here is a popular, low-priced edition of a work originally written as a technical treatise for professionals, and mostly a few sympathetic professionals. In the half century since its publication, its author has risen from a virtual unknown to the rank of one of the most influential thinkers of modern times. There may still be a few die-hard sceptics who still wonder if Freud is here to stay, but the present book is one more evidence that he is very decidedly here at the moment, and probably will be for some time to come.

## SCHOLARSHIPS, FELLOWSHIPS AND LOANS

by S. Norman Feingold  
Bellman Publishing Co., Inc., Boston  
249 pp. \$6.00

Reviewed by Charles Newton  
Assistant to President DuBridg

**T**HIS BOOK LISTS scholarships, fellowships and loans available in the United States today. These are indexed according to granting agency, and cross-indexed according to field of interest; so that it is easy for, say, a biology student to find what is attractive in his line at different universities in the country. The importance of the book lies in the fact that it is the first of its kind ever published. Customarily, information on scholarships is handled the following way: universities spend large sums printing bulletins and posters (Caltech appropriates \$250 a year); these are sent out to be heaped on overloaded college bulletin-boards; most students overlook them; a few draw mustaches on them; some few read them. The distributing center of scholarship information is thus the college janitor. Hundreds of good scholarships and fellowships go begging, hundreds of men miss what might have been just right.

The present book doesn't wholly correct the situation. It is incomplete. Under "Biological Sciences," for example, it lists three fellowships and one scholarship as available in the country. Caltech alone now has at least nine fellowships and two scholarships operating in Biology, and seven of the fellowships are nationally available. It will be a tremendous job to gather all the information that is needed to make such a guide complete. If *Scholarships, Fellowships and Loans* succeeds at the job, it will bring order and economy into a situation that is now irrational, wasteful and chaotic.

**S.P.** The friendly Southern Pacific