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A Requiem For
Astounding

ALVA ROGERS

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A REQUIEM FOR ASTOUNDING

by Alva Rogers

For thirty years, under several slightly different titles, and from several publishers, only one magazine was always *the* science fiction magazine. That was *Astounding Science Fiction*. Now metamorphosed into *Analog Science Fiction/Science Fact*, the old *Astounding* is considered dead by many older devotees.

Alva Rogers is just such a devoted fan, and he now leads the reader through his nostalgic personal recollections of *Astounding*. This is the definitive history of the magazine, from the first issue in 1930 until the change to *Analog* in 1960. This fascinating biography of one magazine illuminates the whole pulp era. The author has effectively recreated the aura of suspense and excitement which surrounded the heyday of adventure publishing, when the pulps were king of the newsstands and publishers fought to offer at least one title on every conceivable subject, either to beat out the competition or to make sure all bets were covered.

With the visual aid of numerous cover and interior illustrations from *Astounding*, Mr. Rogers evokes a clear image of the magazine itself, and of the intense personal involvement of editors, writers, and fans. For the newer readers of *Analog*, or any other science fiction magazine, this is a rare view of a glamorous past, and a comprehensive history of the growth of science fiction.

Mr. Rogers has the rare gift of seasoning his tireless research with dashes of wit and enormous helpings of love. To read his work is to share his feeling for *Astounding Science Fiction* and the entire pulp era.

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A Requiem for Astounding

A requiem for **Astounding**

by **ALVA ROGERS**

with editorial comments by
HARRY BATES

F. ORLIN TREMAINE
and

JOHN W. CAMPBELL



Chicago: 1964

DEDICATION

This book is affectionately dedicated to my wife Sidonie, who denies that she is a science fiction fan, but who nevertheless agonized with me during its writing and from the very beginning insisted that it should be published as a book.

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AUTHOR'S PREFACE

In the history of magazine science fiction, there are three dates that are of great significance: April, 1926; January, 1930 and January, 1960. April, 1926 marks the appearance of the first issue of Amazing Stories, the first magazine devoted exclusively to science fiction. The second date is that of the first issue of Astounding Stories of Super-Science; a name changed to Astounding Stories in February, 1931 and again, in March, 1938 to Astounding Science Fiction, which was retained by the magazine through January, 1960. Then, in February, 1960 the name was again changed by adding Analog and Science Fact to the title so it now read Astounding (Analog) Science Fact - Science Fiction and, although Astounding wasn't dropped completely from the title until the October issue, it was evident to the legions who truly loved the magazine, Astounding, after thirty years to the month, existed no more.

Shortly after that last title change, I delivered a nostalgic review of Astounding's thirty years to the Golden Gate Futurians, a science fiction fan club in Berkeley, California. Following this talk, I was urged to expand my remarks for publication. In March, 1961 the first of what was tentatively planned as two articles appeared in Bill Donaho's amateur publication, Viper (issue No. 2), a quarterly magazine. These two tentative articles eventually appeared as six long articles under the title, "A Requiem For Astounding."

These installments were enthusiastically received and called to the attention of the present publisher. At the insistence of Advent: Publishers, those original articles were considerably revised and expanded for book publication.

However, this book was not written as, nor is it intended to be a critical work; rather it is a nostalgic excursion into the past, an attempt to recall my impressions and opinions of the magazine during most of that time. Even more, this book was written in the hope that it might

convey to later generations something of the color and excitement generated by pulp magazines.

The pulps, alas, no longer decorate the newsstands with their gaudy and dynamic covers which promised every reading adventure imaginable. The rack space once occupied by those flamboyant dispensers of popular fiction is now filled with girlie magazines, hot-rod magazines, do-it-yourself magazines; everything but fiction magazines. True, we now have the paperbacks, and a great thing they are, too, but they are not the same as the pulps, nor will they ever be.

In my adolescence during the thirties, I read and enjoyed a great number and variety of pulp magazines, but my favorite reading was science fiction. Of the three then regularly appearing science fiction pulps, Astounding was my favorite. The first issue of Astounding (in fact, the first issue of any science fiction magazine) I ever read was the August, 1934 issue containing the first installment of E. E. Smith's magnificently thrilling serial, "Skylark of Valeron."

I was hooked.

I was eleven at the time, but the memory of that experience is still as vivid as though it had happened just yesterday. Until that time my encounters with science fiction had been limited to books; initially the Oz books, then Tom Swift, and finally the work of H. G. Wells, Jules Verne, Edgar Rice Burroughs, etc. I soon discovered there were magazines other than Astounding and read and collected them as well, but Astounding has always remained my first true love.

Consequently, this book is written with warm and happy memories of countless hours of reading pleasure. There will, naturally, be some who will question my story preferences, dispute the emphasis I put on certain issues of the magazine, wonder at my admiration of particular authors or artists, boggle at my high regard for John W. Campbell, or insist that I should have at least mentioned their favorite story, if not discussed it at length.

Here the reader should be reminded that this is a subjective review, with emphasis on those elements of the magazine that had particular appeal for me. A certain amount of critical comment will be found here, true, but every attempt has been made to eliminate them; John W. Campbell needs no defense.

As to why many stories do not even receive a mention, I need only point out that during the thirty years of Astounding's publication, some 350 issues appeared. If it is assumed that there were as many as six stories per issue, approximately 2,100 stories appeared during those thirty years. Obviously, to mention all those, let alone to delve into them at length, would leave room for little more than an index of titles.

Although the full thirty-year history of Astounding is covered here, the heaviest concentration is on the earlier years in the belief that more readers will be relatively unfamiliar with that period than with the later years. Also in the conviction that the pulp Astounding of the thirties and early forties holds more nostalgic interest for science fiction fans than the slicker, more stereotyped magazine of recent time.

Finally, a few acknowledgments: To Bill Donaho whose gentle but persistent whip-cracking kept me working on the original installments in order to meet his deadlines for Viper, and for his encouragement; to J. Ben Stark and Al haLevy for the loan of those issues of Astounding from their personal collections missing from my own; to Norman Metcalf of the encyclopedic knowledge and eidetic memory for invaluable assistance in checking details; to Richard Lupoff for suggesting this book version to Advent: Publishers; to Richard and Rosemary Hickey who supplied the photographs and to Edward Wood who made his collection available for photographing. And most especially to Harry Bates for his overwhelming assistance, to John W. Campbell for reading for errors, and to the members of Advent: Publishers who kept nagging me for this manuscript. To you, to all these people, and to the many others who expressed their approval and enjoyment of the original essays, my heartfelt thanks and appreciation.

—Alva Rogers

Castro Valley, California
June, 1964

EDITORIAL NUMBER ONE

HARRY BATES

"to begin"

Long ago I was a party to the genesis of a magazine which persisted through thirty years and thirty millions of words, and now Alva Rogers asks me to tell you, of the Faithful, the story of that genesis. I have been aware of your long curiosity, so I shall do so in spite of my feeling that a more proper foreword to this Requiem would be not history but eulogy, full of nobilities, with reverent references to our proliferating goddess Science, and with proud pointings to the role of the departed as a prophet of that Science, and with pleasing positings of the potency of the departed as a fecundator of that Science, and such.

But what I say will be not unfitting, for after a death all recollections are possessions apt for sharing.

This book is wholly a sharing: a record of love, offered with love to ones of like love. Among you will be many whose love goes back to the beginnings. Are you aware that you and I then had roles in an historic process? We were members of an avant-garde—the van of the mighty breed of Tomorrow. To your parents and outsiders, you were a sometimes screwy avant-garde—remember? They smiled at you? I hope you laughed at them. The fetuses!—they hadn't really been born!—while you were pioneering in any number of worlds, near- and far-future worlds, topsy-turvy worlds, coming-for-sure worlds, every one more exciting than the obsolete world of the smilers. Your fan clubs and fanzines were a sharing of those worlds. Our magazine was a prime creator of those worlds.

All magazines are born babies. Most pulps live frenetic lives, and few survive into adulthood and old age. But of these few was Astounding Stories. It was I who delivered the baby and served its infant years.

I had thought it also was I who conceived it, so it was with surprise that some ten years ago I read in a fanzine that one Harold Hersey claimed that his was the sperm, and it was with the square of that

surprise that some ten days ago I read in the manuscript of this book that Douglas Dold claimed that his was the sperm. Three sperms? No wonder you have wanted my account of the conception, and no wonder Mr. Rogers still wished I'd tell it here, when I mentioned I was going to omit it as a matter of no importance. Well, importance is one thing and interest another, so I shall describe it as exactly as I can. It will take more space than I'd like, but not perhaps more than it is worth, come to think of it, for, happily, the contrariness of the conception may jar and once more set off the still explodable among you—heart of the hard-core addicts whom science fiction somewhat ruined in youth and whose devotions still are special and a little lopsided, as is the nature of love.

As one somewhat ruined myself, I call the conception beautiful.

It is absolutely accurate to say that Astounding was a baby born of a chance contact in which one party acted solely in lust, not love, and the other solely in repulsion, not desire.

The coming together of the two parties took place in front of a large sheet of glossy paper with thirteen violent, colorful pictures on it. Had there been sixteen, there would never have been a Clayton Astounding.

William Clayton was the successful publisher of a large group of pulp-paper action-adventure magazines. At the time there were, I think, thirteen. They made a diverse family. Among them were magazines devoted to western, detective, air, war, love, and adventure stories—at least one magazine of just about every popular type. Routinely each month, the editors of these and the other magazines bought eye-catching pictures for the covers of their next issues, the engraver made plates from them, and the printer furnished final proofs of them, all thirteen assembled rectangularly on a single large sheet of paper. On this sheet each editor would initial his final okays, then the sheet (or another like it) would be hung in Clayton's office, allowing him unlimited opportunity to study it and perhaps incubate ideas.

Now, there were blank places on this sheet. The proofs occupied places arranged in four rows of four columns each, only thirteen of the sixteen places being filled. This meant that month after month three of the sixteen places would stare empty at Clayton, in effect reproving him for not having three more magazines so that they need not be empty. I venture upon certainly when I say that Clayton on looking at this sheet would often have these particular money-lustful thoughts: "If I had sixteen magazines I'd get the three additional covers cheap...the paper for the covers, now going wasted, would be free...there would be very little added charge for press time..." The empty places would continually have urged him to have one to three more magazines. If the sales of an additional magazine reached only the usual break-even point, there would still be a profit from its absorption of its fraction of the general overhead—and for a while there would not be any editorial cost, for he'd just toss it to Bates, who would merely work double.

So much for background. Perhaps you have begun to see that the aforementioned lust was a normal one on the part of Clayton for more profits. It is the rearward workings of the repulsion felt by the other party, that made the conception beautiful.

One day Clayton's secretary summoned me to his office, where I found the controller of the company with him, both looking at me in a special way as I crossed the wide-open spaces. The controller had an idea for a new magazine, one devoted to period-adventure stories, Clayton told me pleasantly; he'd even thought up a name for it: Torch-lights of History. Here were two shocks in one, bang bang.

However, I had had much experience of shocks in that office, and upon collecting my wits I at once began vigorously to defend myself, making a strong case for not publishing a period magazine and concentrating on the objection that it would be next to impossible for the editor to get enough good or even so-so stories for it. (By reflex, like the duck of a boxer, I spoke as if someone else was to be stuck with the magazine.) Clayton heard me and pleasantly but like a steam roller suggested that I spend an hour or so thinking it over. In a rearguard action I attacked the awful name, at which he naturally suggested that I find a better. All this time the controller said nothing; just looked at me in the manner of a benign bestower of something valuable, free. I saw that Clayton was not to be stopped from having another magazine, and I left his office dismayed and a little angry. It seemed to be becoming a habit, his giving me his more difficult and sometimes impossible editorial assignments.

I have particularized the lust and repulsion of the two parties. I come now to my Trick—the clever, sneaky Trick by which Clayton's lust was diverted, my repulsion subverted, and the fabric of the future frazzled. But first I have to give a last bit of background.

It was a conditioned reflex of the pulp publishers and editors of those days to scan the magazines, when passing a newsstand. When the display was a large one, the scanning tended to become standing and thinking (and perhaps exulting or worrying). With some, part of the thinking would on occasion be a groping to discover a type of magazine not yet being offered to the public. To a publisher in Clayton's position, such gropings amounted to a hunt for gold. He already had all the obvious types: what exploitable one—or three—remained?

I, editor of his adventure magazine, had like all others of my kind been a reflexive studier-of-newsstand-displays—so presently, as I sat at bay behind my desk "thinking it over," there popped up the memory of a certain magazine of large size whose covers invariably were chock-full of preposterous machinery and colored rays and monstrous or monstrously dressed creatures doing things. Amazing Stories! Once I had bought a copy. What awful stuff, I'd found it! Cluttered with trivia! Packed with puerilities. Written by unimaginations! But now at the memory I wondered if there might be a market for a well-written magazine on the Amazing themes, and in my desperation, faced with an obligation to provide for a dubious magazine a continuous flow

of stories that did not exist, I sold myself on possibilities. Perhaps I could get Clayton to let me start a magazine of the science-monster type, instead! I thought it should not be too difficult to obtain the stories.

I prepared for a battle. First, I went out and bought a copy of the current Amazing and looked it over. Then I thought up possible names. I put numbers in front of the names, in the order of my estimate of their value. I assembled possible arguments for and against the better ones, preparing to put over a particular one against possible resistance. I studied each story in the copy I'd bought, preparing for arguments on content.

Next morning I pumped myself full of combativeness and charged into Clayton's office. It was all as easy as pie! There'd be no Torchlights of History! Instead, there'd be an action-adventure Astounding Stories of Super-Science! I was to get right to work on it.

As I walked back through the corridor I was a little drunk, from the charge of fighting juices I'd not used up. I could have used those juices later, on occasions when I lay exhausted, licking my wounds. I had made a big mistake. In my revulsion against the foreseen difficulty of obtaining good stories for the one magazine, I had underappraised the similar but greater difficulty I would have with the other.

I had better interrupt the obstetrics of my history to tell how the name Astounding Stories of Super-Science was chosen. It was a process of elimination. I had thought up about a dozen possible names. Of them all, the one I liked best was Tomorrow, but I didn't even show this one to Clayton, because it was too mild and indefinite and sort of highbrow. My second preference was Science Fiction, which was generic and like the other had dignity, but I killed this one with arguments that as a phrase hardly anyone had ever seen or heard it (Amazing preferring the horrible "scientifiction") and that as a name it would promise only mild and orthodox stories concerned with today's science. In time, the name would come to be known and associated with the stories, of course—but there might not be time. The magazine could easily die of lack of readers before this happened.

It was my third preference which I advocated: Astounding. As a name it lacked dignity, but no matter: it was gutsy and would compel attention, and it generally resembled Amazing and could be counted on to attract the eye of that magazine's readers while pleasantly promising others that the stories would stun them. It was a little better than Fantastic and much better than Astonishing and Future and the remaining ones on my list. I think I remember Clayton's trying it aloud, tasting it. I am not sure that the rest of the name was decided that morning, but I can tell you the reasons for our choice. "of Science Fiction" would in time have become redundant. "of Super-Science" was perfect. The word Science was in it, also that great promiser of extras: Super. As a phrase, the flavor was a trifle vulgar, but the meaning was right on the beam. Super-Science means above and more than science. The science fiction of the early writers was indeed above and more than science.

(To state it bluntly, the science fiction of the early writers had little relation to the science of the scientists. However, it had as much relation as it has had since, in the main. The extrapolations of most science fiction writers rocket starward from pads much too narrow and rickety. If the writers were solidly grounded in the sciences, and if they were aware of the intermeshings of the sciences, and if each one had a stiff conscience, there'd be very little science fiction written. Literally, most writers would not be able to finish a story, from guilty awareness of the piling up of related things that were scientifically incompatible. However, it happens that each member of the species has a permissive conscience which allows the id it should be shushing to march about yelling: "Extrapolate sil—relate no!" And extrapolate they do—far and unconscionably. Zing, in one second they're in the middle of a science-silly but awfully science-seeming culture in Andromeda. Far, far from any entangling alliances with the science of Earth. Way way out. This is perfectly okay: I am just pointing to the misleading use of a name. The naked fact is, almost all of what is called science fiction is fantasy and nothing else but. This has increasingly come to be recognized, but when I began privately saying so, near the beginning, I would get arguments. Do you aging buffs really think there is more science in science fiction nowadays? Do you really think the stories are less impossible? Of course they are better written, many of them, and more thought-provoking, some of them—but science? Hurrah for our honest old Super-Science!)

Back to the obstetrics. You say: "But if your account of the conception and naming is correct, how do you explain the claims of Harold Hersey and Douglas Dold?" Ten days ago I could not have explained them. Since then I've thought up a possibility or two.

You've long known about the birds and the bees, and probably you've learned that an ovum can be impregnated by one spermatozoon only. Well, I now hold it possible that there were three sperms active in the conceiving of Astounding. Hersey, a Clayton editor up to the fall of 1927, may have provided a Sperm No. 1. I arrived at Clayton's a few days after Hersey departed, and I never met him, but there's no doubt he often stood looking at newsstand displays and sometimes passed on with persisting visions of Amazing science-monsters, and it is possible he passed on to Clayton a vision of a new habitat for such monsters. Dold being a fellow-editor, it is possible he similarly provided a Sperm No. 2. It is possible these two men or sperms talked over the idea with each other. It is certain Dold never at any time touched on the idea with me, nor did anyone else, including of course Clayton. (For completeness, it should be lightly mentioned that Clayton, too, may have provided a sperm, for he, a prime looker-at-newsstands, must sometimes himself have passed on with persisting visions of Amazing science-monsters.) From these several facts and possibilities we may hypothesize that we have here three sperms bent on seducing one ovum: those of Hersey, Dold, and Bates (with a bon voyage from Clayton). If this was the case, you have seen that none but Bates' had

the vigor and I might say know-how to conquer it. If it is objected that three conceptual sperms cannot seduce one conceptual ovum, a sufficient answer is, it is an historic fact that the cause of the journeys of the sperms was the science-monsters on the covers of Amazing, and it is an historic fact that the result of the journeys of the sperms was their spawn of science-monsters on the covers of Astounding. (I had better state firmly that the ovum of which I speak was perhaps a maidenly fleck of fluttery-and-willing antimatter waiting hopefully among a pod of non-existing neutrinos in the nothing-space of the Seventh Dimension of the galaxy Iglooon—inside-out-and-crossways of course the space in front of the cover proof sheet in Clayton's office. Every publisher's office is a way station for the tele- and ideopathic spread of the non-stuff of teratological as well as standard thoughts.)

At the time of the accouchement Dold was no longer a Clayton editor (although, as I recall, his name remained on the masthead of his former magazine as a consultant). However, then and later he was often in to see us, pleased with the new baby. He got two or three of his friends to submit pablum for it—among them Murray Leinster, thank heaven.

This is all I know and think possible about the birth of Astounding. I don't see how more than one of the sperms could have been the actual conqueror; however, both of the others could have contributed something secondary but helpful, like, say, opening the door of the bedroom, and, perhaps, cheering. As for the name, it is an obvious one, whose choice by anyone would be inevitable.

No doubt there will be an underprivileged outlander among you who will wonder at such particularizing of a topic so seeming petty. The lordly answer to this is, Sir, everything about Astounding is a cause of wonder. Astounding was bloom and seed of wonder! A more useful answer is, that to many fan-jets of the time, and even later, the conception has been an itch and a mystery and is not petty at all. Loving your wife—if where you come from you have a two-sex attraction-repulsion setup—would you not prefer to know whom her parents were? It is only reasonable. But Earth's Super-Sciencers may be super-reasonable; they are super-lovers; they are super-supers; they outcalif Californial! They are famous for scratching itches and mysteries. Although for nearly all of the past thirty years I have been as on another planet, requests for the story have reached me.

There have also been requests for the story of Astounding's early years—history—problems—anecdotes—anything.

My biggest difficulty, and a never-ending one, was the obtaining of suitable stories. Clayton and I agreed that story elements of action and adventure were necessary for Astounding's survival (as they were of almost all of his pulps). We could think of fewer than half a dozen fair-to-good pulp writers who had ever written stories of the kind we wanted, but we never doubted that some of my adventure writers could produce them. However, I at once found myself locked in a continuing

struggle with nearly every one whom I induced to try. Most of them were almost wholly ignorant of science and technology, so much of what eventually got into their stories had in one way or another to be put there by myself. I spent endless time dictating letters to them (also of course to others)—and then to me eventually would come stories that were cripples. I did very much rewriting. Parts of story after story went heavily interlined to the printer. When I dared, I sent the stories back to the writers for the fixing, but even if they could do it, and did, this required the sending of long letters of detailed instructions, often including brief lectures on some aspect of science, or saving ideas, invented at the moment. The time all this took! And the little return!

I daily faced a danger which you would not be likely to think of: the alienation of prospective suppliers of stories. Most of my draftees wrote with uncertainty and risk and some reluctance, and had to endure the indignity of reworking their stories or seeing me put patches on them: how much of this would they stand? Each had a point at which he would quit trying to write the science stuff. I therefore had to watch like a hen with ducklings, near a puddle—explaining, encouraging, mollifying, and helping—alert for incipient defections, intent first on holding them. It could happen—and did—that a rejection caused me the loss of a writer who might in time have become a fair source of supply. Where else might they sell a story that I turned down? These were not young fans and amateurs, but professionals. They had to make a living. Not infrequently I bought unwanted stories only in the hope of getting better ones later, or just to have something to print on pages which without them would have gone blank. Did you ever buy a copy of a magazine containing empty pages and an editor's apology that he could not find enough good stories to fill them? Much more often than you might think, editors knowingly fill out their issues with indifferent or inferior stories. Issue by issue, all do the best they can—with never a blank page.

Today, when there exists a relatively large body of specialist writers, editors enjoy the ineffable luxury of being able merely to send back and forget the poor submissions, not having to try to salvage them and their authors—and they still publish some clinkers, every one of them, and every one of them knows it.

This writing has unchained fierce memories!

What would have happened if I'd not performed birth control on *Torchlights of History*? The next few years would in some ways have been very different. There would have been no *Astounding* as we knew it, and when an *Astounding* did appear (for an *sf* magazine of that name certainly would have appeared) it would have had another and different history. And so would one or more departments of each of your lives, and mine.

(Later, *Torchlights of History* got itself born after all! Under a more suitable name, it issued as a bimonthly, its appearances alternating with those of another bimonthly, *Strange Tales*, whose chief merit was that it too helped fill the monthly cover proof sheet. I found myself editor of both. I was positively a magnet for Clayton's difficult

and "different" magazines.)

You should know that there were not enough science fiction converts to support the early Astounding. Amazing and Wonder paid their writers chiefly in the glory of seeing their names in print and just managed to squeak along with the same single small body of readers. We expected these readers to buy Astounding, and apparently almost all of them did, but there were by no means enough to support a magazine which paid its writers then, near the bottom of the Depression, almost twice what writers are paid now, in this time of high prosperity. We hoped to capture a sufficient number of readers of the other Clayton magazines, and we very nearly did so.

Astounding was conceived in the weeks just preceding the 1929 stock market crash; it was born in the beginning of the Depression; it neither lost nor gained weight as the Depression dropped to its bottom. In none of those months did it pay a profit. But in most of those months it nearly broke even, and it did this while paying its writers a decent minimum of two cents a word on acceptance. Practically all the pulps then paid one cent, or half a cent, or even a tenth of a cent, and a good many of them paid on publication (which meant, paid months or even years after the stories were "bought," and in fact in some cases meant not paid at all, unless the writer threatened to sue).

You who were the demon fan-letter writers were not very helpful to us as guides. You were indiscriminately enraptured with everything! Some of you clamored for occasional stories of the kind appearing in Amazing, but we knew that large numbers of the other readers would have been repelled by them. You still say that certain of Amazing's stories were classics? Okay, I take your word for it... I'll tell you a secret. Eventually I tried to get a couple of hybrids combining the most conspicuous qualities of Astounding and Amazing, but I failed. It seemed we could not make them mix... I'll tell you something else, not a secret, but something you may not have suspected. I welcomed stories with more refined or scientific values, and when I had the rare luck to receive an uncrippled one I always saw to it that Clayton approved it. I still remember a passage in a letter from Donald Wandrei, in response to a lament from me: "Oh damn the too too serious readers! The two stories I liked best were the humorous 'An Extra Man' and the half-poetic 'Out Around Rigel.'" I've long forgotten the stories, but I've not forgotten that passage, because those two stories were exactly the ones I too had liked best. For me to remember the passage exactly, as I have, it would appear that it hit me in a place not yet calloused by science friction.

Would you have guessed that Clayton became a Super-Science buff? We both approved the stories that were bought. I read and readied the stories first—he would usually come himself to my office for those which had received my okay—and if I were not in he would at times take away every story in sight, unread or even rejected! He might even do this when I was in, over my tactful resistance.

During Astounding's first months I sometimes thought wryly that it

would be easier on me and perhaps better for the magazine if I wrote all of its stories myself. After a year, under a pseudonym, I experimentally collaborated with Desmond Hall (later my assistant) in the writing of a story which contained exactly the ingredients wanted. Clayton was quite pleased with it, and so was Mr. Torchlights of History. Propelled by unknown forces, the latter read it of his own accord—a phenomenon—then came specially to my office to tell me how much he had enjoyed it. These office likings were followed by loud reader approval, so I collaborated with Hall on other stories, using two pseudonyms. To insure against possible prejudice for or against the stories I did not disclose to Clayton the real authors, and he never knew I was one of them, but with the first story I took the precaution of confiding in the controller, who okayed the irregularity and encouraged me to keep going.

From the beginning I had been bothered by the seeming inability of my writers to mix convincing character with our not-too-convincing science; so after nearly two years, with the double hope of furnishing the writers an example of a vivid hero and villain and my readers a whopping hero versus villain, I generated the first Hawk Carse story, I creating the characters and plot and Hall as usual writing the basic draft. I still remember Clayton's reaction. Almost at once after departing with it (it seemed) he was back with it in my office, a huge encircled Yes! on the envelope. I had never seen him so openly pleased. He commanded me to get more of the same. (This was not difficult, for I had deliberately built it with open ends, calculated to make the readers cry for a second, and third.) Clayton's enthusiasm for the Hawk Carse stories never diminished. I need not remind you farthest-back of the Faithful that you made a terrific noise over them. Do you remember the great detective hunt, to discover who was behind the pseudonym? The letters to big-name writers asking if they were the author? H. G. Wells! Were you one of those who stayed up nights comparing word counts, word lengths, word usages? All the time, I was laughing.

During the last months of the Clayton Astounding we were committing ourselves to plans which would gradually broaden our policy, but this was aborted by Clayton's sudden and wholly unexpected descent into bankruptcy. I shall not tell the circumstances, except to say they were not what you would think. Street & Smith bought a small but healthy Astounding, one ready at once to show a profit at their much lower word rate, and one for which there was now an almost-sufficient body of somewhat worn writers and a just-emerging group of fresh, young, potent, potential writers, all of them fan condensate.

Astounding was a living being. I served it in its infancy and childhood, Orlin Tremaine brought it through youth and adolescence, John Campbell guided it through adulthood and maturity. If it grew old, so do all living things grow old. It had a long, full, and honorable life.

Farewell, you once vociferous and always effervescing and I hope forever mad lovers of Astounding!

Know that it was you of the thirty millions of words who made Astounding a thing of wonder.

EDITORIAL NUMBER TWO

F. ORLIN TREMAINE (1899-1956)

"in absentia"

I believe we can safely call the years 1933-37 the first golden age of science fiction. It came alive in those years and laid a foundation for much of its present popularity as a story medium. But, more important, the individual enthusiasm of its supporting fans has not lessened. I have had reason to be proud of the large number of young men whose interest has been maintained while they became substantial citizens, moving into the current of modern life without confusion because they knew what was coming in the scientific field.

Science fiction has enabled many of us, who have followed it through the years, to maintain an untroubled poise in what is too often referred to as a "troubled world." And as newer generations grow up within the circle of our fictional forecasts of things to come they learn to feel the serenity which comes from knowledge.

The mysterious doors of nature's secrets are being opened to us one after another in real life, and the population at large finds these revelations a little terrifying. But to those of us who rode jet spaceships to the planets in our stories many years ago, there is no surprise in the actuality of jet planes. To those of us who have lived through interplanetary wars...there is no particular reason for surprise at the...H-bomb.

The picture of the science fiction field a decade ago is not too different from that of today. To compare the two is like the age-old discussion as to which is the greatest figure, Washington or Lincoln. There's no solid basis for comparative measurement. Each faced the problem of his day in his own way and made his mark. So the science fiction of 1940 faced the future with a confidence which made it open the door to the atom(ic) age. The stories of (today) must proceed onward from the point of present scientific accomplishment.

...The thirties provided us with many classics which still hold their fascination for modern readers. Whether the forties provided us with

many outstanding stories will be determined (by) how many (were) remembered clearly, pointed to, reprinted, and referred to affectionately (during the following decade, and so forth, decade by decade)....

Personally, I feel that we must guard against bogging down in too much mathematical science at the expense of fictional interest. We blended them successfully at the first, and many of our modern writers are doing so now, but there is a trend toward pedantic writing in some cases. Perhaps this is best illustrated by recalling the key words of the periods. In the thirties it was the "Thought Variant," in the forties, the "Mutation" (which, of course, means the same thing)—and in the early fifties it (was) "Extensionalism!" Well...more syllables...but the principle (wasn't) changed in the slightest!

When we feel the urge to take ourselves too seriously we must stop and consider the fact that, just as no nation has ever become really great until its people learned to laugh at themselves now and then, so we must recognize a sense of humor in science fiction. It was during the lusty, growing years, the thirties, that Murray Leinster came up with his "Fourth Dimensional Duplicator." Remember it? When the machine went wrong, and instead of duplicating a girl in the fourth dimension, it kept duplicating her and her pet kangaroo until the yard was overflowing with sweethearts and kangaroos? It didn't hurt us to have a good laugh at ourselves then. It wouldn't hurt us now.

It's to be regretted that magazine word-rates haven't kept pace with the expanding audience. Many of our good writers have been forced in self-defence to turn to the general magazine field for basic incomes, and to write science fiction stories only when they can "afford to do so." If there's a danger signal this is it, the one and one-quarter cent per word of the thirties should be the three cent per word for magazine rights only as a basic rate in order to maintain the quality of writing we want and need. Give our writers that incentive, and the magazines will climb to a new high. It isn't impossible for us to make (today a part of) the decade of...a new era of classics.

Accept the classics of the thirties as glorious in their own right. Accept the adjustment of our stories during (scientific advancements)... Give them their just due, but drive for the greatest decade of them all....

...You and I play a key part in this progressive pattern as science fiction outlines the things to come. Support it, guide it, criticize and drive it forward.

The kinship of interest among science fiction fans is a bond like a common language. Nowhere, outside of our own particular group, can we talk as freely about the things which will happen tomorrow—just as, fifteen years ago we were discussing scientific expectancies which today are actualities.

I am proud to have played a part in the development of science fiction, not so much because it meant editing a magazine as because it enabled me to become a part of one of the most imaginative and worthwhile groups of people now inhabiting the Earth—the science fiction fans—the settlers who lay the foundations for the future.

JOHN W. CAMPBELL

"letter from the editor"

In being asked to write an introduction to Requiem, I feel a little like the man who was invited to his own funeral and asked to say a few kind words.

In a sense, I don't think I should. Requiem is an entertaining literary history but I don't believe any thinking person in the audience is going to mistake it for a scholarly work of bibliography. Except, of course, for the "Literateurs"—those library tribesmen who make a profession of criticizing things they haven't read by studying what other people said about them in books. They will, quite naturally, learnedly discourse on the disintegration of that brief literary fad, science fiction, and quote this book to prove it.

You don't think so?

The modern set-up in "literature" is that the term is restricted to things that meet the approval of the small, self-adulatory clique of Literateurs who have decided that they, and they alone, are fit to determine what is Good and what is Worthless. The number of those who constitute the Literateurs is remarkably small—but they are most remarkably effective in guiding the reactions of the Sheep of Suburbia. What they say is Bad, the sheep baah at faithfully—and they can do a remarkably effective job of lousing it up commercially. What they say is Good, the sheep ooh at and buy, even if it has no intrinsic merit.

The Literateurs do not like any form of literature that incites the sheep to think for themselves—which is the avowed purpose of science fiction. They are, therefore, very ready to grasp any evidence that science fiction is Bad. Being pure scholars, lacking all sense of humor themselves, they will see this book as a Scholarly Work and react to it as such.

And don't for a moment think that they won't know that an introduction is a stamp-of-approval on the said Scholarly Work of Research and Bibliography!

There is another reason why I'm a little reluctant to write this introduction and that is because I think it should be more of a rebuttal than an introduction. Requiem, I'm afraid, may be doing modern science fiction a distinct disservice. The readers are told, "Science fiction used to be perfectly wonderful; of course, it's gone down hill terribly recently. And this new Analog isn't anywhere near as good as the old-time Astounding was." Frankly, most of this kind of complaint boils down to the old refrain of "They don't make ice cream sodas as good as they did when I was a kid," and "We don't have winters like we used to; why I remember snowdrifts clear up to my shoulders!" (And what Alva is not remembering is that, at that time, his shoulders were about three feet from the ground, not five!) And he is also unaware that, now he's 40-odd, his sense of taste isn't as sharp and clear as it was when he was 10. As we age, unfortunately, the bright mosaic of life gets a little chipped and dulled around the edges.

Movies aren't as good, either; of course, they don't flicker any more, and they have sound, but "they aren't as funny as they used to be. Why Charlie Chaplin and Harold Lloyd..." And there was a time when the Model T Ford was the greatest piece of transportation the world had ever seen, too. Man, no car I ever owned gave me as much satisfaction as my Model T—believe me, these modern cars are just no good. (It was eleven years old when I bought it for twenty dollars, and I installed the 30-minute bands myself, and I was seventeen—which might possibly have something to do with my evaluation.)

What this book is, actually, is "A Requiem For My Youth." And I know that it's tough to admit it. I appreciate the fact that the "Sense of Wonder" has, indeed, been lost for many old-time fans. The reason is three-fold: they aren't young, enthusiastic and open-minded as they once were. You know, A, age 50, says that B, age 16, is "naive and unsophisticated," while C, age 30, may say that A is closed-minded, while B is young and open-minded. They're both saying the same thing—but simply with different emphasis! They mean that B will listen to a new idea, consider it possible and intriguing, and try to develop it mentally himself.

It should be obvious, of course, that "you can't go home again." Could "Skylark of Space" be published, as a brand-new work, today? No, it could not. The present readers, without previous indoctrination that Skylark is a classic, would see that the love interest was poured from the syrup bottle, the science was nonsense, and, as E. E. Smith said, the whole thing is indefensible. You think "Hawk Carse" could get published today? Why not? Well, the science stunk, the whole thing was wildly improbable, it was made up of cliches, it had no characterizations, and it was all black-white-good-evil-yes-no-without-evaluation nonsense. Totally unacceptable after "The World of A."

The readers of today are far too sophisticated for stories patterned after the classics of yesterday. The men who wrote the stories in the forties lifted the level of science fiction tremendously. That had two effects: it made it a more satisfying and powerful influence on readers

—which expanded the readership in the field—and it made it enormously tougher for the younger would-be writers to start writing in the field. Most of the writers who had their first appearances before 1940 were under twenty-five—a number in their teens. (Myself, for instance.)

Writers trying to break into the field at that age now don't have the experience and the polish required—the standards have been made much tougher by the men who developed the field in the forties and fifties. So it's a damn sight harder for me to get good, new, young authors.

So what about the Great Old Authors (please remember that 1940 was almost a quarter century ago)? Well, they're convinced that they already know how to write and aren't gonna be told what they should write by that dictatorial, authoritarian, uncooperative Campbell. They aren't going to sell their immortal birthright of Great Authorhood for any mess of dollars! And granted that the Sense of Wonder is gone, in large part, because the Old Fans are old now. But the Great Old Authors are old, too! Most of them got their scientific orientation back in the early thirties, and they've been running on it ever since. How many of them are in contact with actual research work being done today—and getting the feel for the major direction of science now? Who's done any extrapolation of the possibilities of super conductive systems, for instance?

They know that science fiction is about rocket ships—so they persist in using rocket ships in stories of the centuries—hence future, when it's perfectly obvious the damn things are hopelessly inefficient and impractical as useful transportation. And the Great Old Authors will not recognize that we've already told those stories; that we've already exercised our Sense of Wonder wondering about those ideas.

Will somebody tell me why the Great Old Authors will not get off their literary tails and consider something new? They hate me for shoving new concepts and new ideas at them—and damn me for their lack of a Sense of Wonder!

The world rolls on and we either roll with it or get left behind to mumble about the Good Old Days. If you think science fiction is getting dull, it just possibly could be you. And I've got a pretty good idea of what's wrong but I don't know of anything that can be done about it.

I don't know of anybody who's growing any younger....

ACKNOWLEDGMENTS

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F. Orlin Tremaine: Hail! the rest "of the most imaginative and worth-while" group salutes your job well done.

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Various logos including the progressive change from Astounding to Analog.

House advertisement, November, 1933

Readers Guild, Inc., 1931

October, 1931; page 24

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September, 1934; pages 30-31
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April, 1937; page 35
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July, 1939; pages 148-149
October, 1939; page 9
March, 1940; page 122
February, 1941; page 132
June, 1941; page 65
December, 1941; page 25
April, 1942; page 79
December, 1942; page 87
June, 1943; page 47
June, 1947; pages 32-33
April, 1948; page 31
June, 1949; page 29
December, 1949; page 7
April, 1950; pages 76-77

Last of all, in humble gratitude, to Astounding and Analog.

THE KING IS DEAD!

LONG LIVE THE KING!

A Requiem for Astounding

THE BEGINNING: CLAYTON ASTOUNDING 1930-1933

Science fiction magazines as we know them had their beginnings with Amazing Stories in April, 1926. This first of the all science fiction magazines was the inspired brainchild of Hugo Gernsback, scientist, inventor, prophet of scientific wonders to come, and publisher. Prior to that date, science fiction was found only in books and in a few general fiction magazines identified for those looking for it by such labels as: scientific romances, imaginative tales, or different stories. This last tag was used at times by Bob Davis, editor of Argosy and All-Story Magazine, to distinguish science fiction and fantasy from the straight fiction in his magazines.

Although Gernsback is rightly considered the father of magazine science fiction, it would be a mistake to ignore the great part that Bob Davis played in its development during the teen years and early twenties. In the years before Amazing Stories, Davis presented to an eagerly receptive audience the "Martian" and "Tarzan" novels of Edgar Rice Burroughs; the immortal fantasies of A. Merritt, probably the most popular author ever to appear in Argosy; "The Girl in the Golden Atom" and other science fiction tales of Ray Cummings and memorable stories and novels by George Allan England, Garrett P. Serviss, J. U. Giesy, Austin Hall and Homer Eon Flint, Otis Adelbert Kline, Murray Leinster, and others. Many of these classics today are regarded as fantasies or occult romances rather than legitimate science fiction. However, the line was not so finely drawn between fantasy and science fiction then as today, and whether science fiction or fantasy, they were immensely popular with their public.

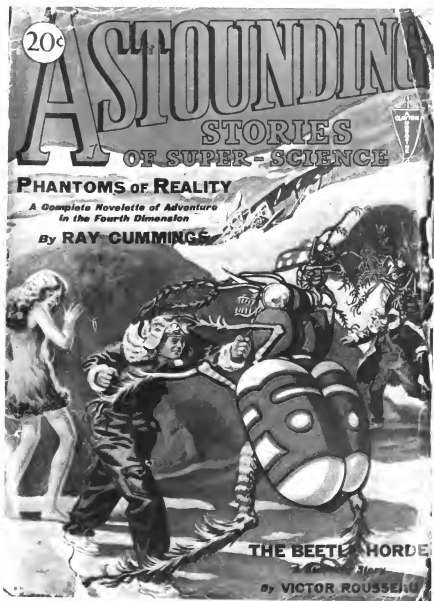
It remained for Hugo Gernsback to see the potential in this popularity and to gamble that it would give him a guaranteed readership for a magazine devoted exclusively to this type of fiction. The gamble paid off.

Amazing Stories was a little different than the familiar pulp magazine, being a large size, 8-1/2 x 11 inches with 96 pages of heavy pulp stock, trimmed edges, and selling for twenty-five cents. At first it drew heavily on reprints of recognized authors and classics from both the book and magazine fields: H. G. Wells, Jules Verne, A. Merritt, George Allan England, Garrett P. Serviss, Edgar Rice Burroughs, Ray Cummings, etc. It wasn't long, however, before new writers came to the fore with new ideas developed with increasing confidence and the revered classics of Verne, Wells, and others became old hat and stodgy to the eager young fans that made up the bulk of Amazing's readership. David H. Keller, M.D., Edmond Hamilton, Philip Francis Nowlan, Stanton A. Coblentz, Edward Elmer Smith, Miles J. Breuer, Bob Olson, A. Hyatt Verrill, and later John W. Campbell, Jr., Jack Williamson, P. Schuyler Miller, to name a few, all contributed mightily to the evolution of modern magazine science fiction.

In the late twenties, Gernsback lost control of Amazing Stories. Not to be daunted, in June of 1929 this indomitable genius bounced back with Science Wonder Stories, a powerful competitor to his firstborn which was being temporarily edited by Arthur H. Lynch who would be replaced in November by the conservative near-octogenerian T. O'Connor Sloan, Ph.D. For added measure, Gernsback backed his new entry up with a companion magazine, Air Wonder Stories, the very next month. These two magazines were eventually combined into one as Wonder Stories. Like Amazing, Wonder was large size with 96 pages, trimmed edges, and sold for twenty-five cents. For several years both magazines had companion quarterlies which were about twice the size of the monthlies and sold for fifty cents; they featured complete book length novels. (Gernsback also published Scientific Detective Monthly which lasted from January, 1930 to October, 1930 with a name change to Amazing Detective Tales with the June issue. This magazine is notable mainly for having published a number of "Craig Kennedy" scientific detective stories by Arthur B. Reeve, who was also editorial commissioner of the magazine, and is usually not considered a science fiction magazine.)

The term "science fiction," it might be noted here, was first used by Hugo Gernsback in the first issue of Science Wonder Stories. As near as can be determined this was the first time this particular combination ever saw print anywhere in any magazine. Until then the most popular term used to describe the literature was "scientifiction," a word coined by Gernsback in 1925 and originally intended as the title for what finally became Amazing Stories. Scientifiction in turn was a contraction of scientific fiction which was used extensively by Gernsback during the early twenties to describe the stories he ran as a regular feature in his magazine Science and Invention. However, it would be almost nine years from the launching of Science Wonder Stories before the words science fiction would be incorporated into the title of a professional science fiction magazine.

By this time it was evident to any discerning publisher that the



January, 1930, the first issue, cover painting by Wessolowski

science fiction field would support more than one or two magazines. So, in December, 1929 W. L. Clayton, publisher of a chain of pulp magazines, introduced Astounding Stories of Super-Science, dated January, 1930, edited by one of his most able editors, Harry Bates. Also on the editorial staff of the new magazine were Desmond Hall as assistant editor and Dr. Douglas M. Dold, consulting editor. Douglas Dold was the brother of Elliott Dold, the artist who would one day be regarded as one of the greatest illustrators in the science fiction field. Douglas Dold is mainly remembered as the author of the novel "Valley of Sin" in the April-May, 1931 (the first) issue of Harold Hersey's Miracle Science and Fantasy Stories, a magazine which saw only two issues and is today one of the rarest of collector's items. It has been claimed by Elliott Dold that his brother Douglas was primarily responsible for inspiring William Clayton to launch Astounding Stories of Super Science. Harold Hersey has also made this claim for himself. However, during the gestation period of the magazine, neither of these men were actively associated with Clayton (although both were ex-Clayton editors), whereas Harry Bates was, as an editor of one of Clayton's pulps. Bates would therefore seem to be the one most likely to have influenced Clayton to bring out Astounding.

Astounding Stories of Super-Science was an honest-to-goodness pulp magazine of the standard pulp size, 6-3/4 x 9-3/4 inches with 144 pages with untrimmed edges. It sold for twenty cents a copy and appeared on the newsstands the first Thursday of each month. One volume of the magazine was comprised of three issues and the page count was continued consecutively through three issues, page 1 to 432.

Astounding was unabashedly an action adventure magazine and made no pretense of trying to present science in a sugar-coated form as did, to some extent, the other two magazines. The amount of science found in its pages was minimal—just enough to support the action and little more. Lessons in science could be obtained in school or in text books; driving action and heroic adventure was what the reader of Astounding wanted. Interplanetary wars and space battles, hideous and menacing Bug Eyed Monsters (fondly referred to as BEMs), the courage, ingenuity and brains of a single puny man, or small group of men, pitted against the terrible might and overwhelming scientific knowledge of extra-terrestrial aliens—with defeat the inevitable fate of the invaders: That was what set the reader's pulse to pounding. That was the type of story he could identify with, become the hero of. Action was the hallmark of Astounding Stories of Super-Science.

The first issue featured the first installment of a two-part novel by Victor Rousseau, "The Beetle Horde." This story had most of the classic ingredients of an early Astounding story: a mad scientist named Bram seeks revenge by releasing his trillions (!) of man-sized beetles on an utterly defenseless world with only two young men, Jimmy Dodd and Tommy Travers, standing in his way.

The second feature in this first issue was a novelette by Ray Cum-

mings, "Phantoms of Reality," a story of a primitive shadow world occupying the same position in space-time as Earth, but in the fourth dimension. Ray Cummings, one of the all-time great early science fiction writers, was a former associate of Thomas Alva Edison and became a writer with the publication of his first and perhaps greatest story, "The Girl in the Golden Atom" (All-Story Weekly, March 15, 1919). An acknowledged classic, this was the first of several stories and novels having to do with the sub-submicroscopic universe within an atom of a gold ring. During the twenties Cummings wrote a number of novels which established his reputation as an innovator to whom many later writers owe a great debt, a writer with a wide-roaming imagination, a teller of spellbinding tales of high adventure: "The People of the Golden Atom," "A Brand New World," "The Fire People," "The Man Who Mastered Time," "The Man on the Meteor," "Around the Universe," "Tarrano the Conqueror," "The Princess of the Atom," and "The Shadow Girl." He had a large and loyal following and his presence in the first issue of Astounding and his subsequent appearances contributed a great deal to its immediate acceptance and continuing popularity with the fans.

The balance of the first issue was taken up with short stories: "The Stolen Mind" by M. L. Staley, "Compensation" by C. V. Tench, "Invisible Death" by Anthony Pelcher, "The Cave of Horror" by Captain S. P. Meek, and "Tanks" by Murray Leinster.

Captain Meek's story was the first of the popular Dr. Bird stories to appear in Astounding. Dr. Bird was a multi-talented scientist who, with the cooperation and help of his friend Operative Carnes of the United States Secret Service, went about solving scientific mysteries which had everyone else baffled. In this story, Dr. Bird and Operative Carnes go to Kentucky's Mammoth Cave to solve the mystery of several strange disappearances and, once there, discover and dispose of a ghastly monster inhabiting the cave's nether regions as well.

Murray Leinster's "Tanks" was one of the most popular stories in the issue and has always been acclaimed as one of the best to have been published in any Clayton Astounding. The action takes place in 1932 during a war between the United States and the "Yellow Empire." This war is the first in which the infantry has been practically discontinued as an effective fighting force, the emphasis on both sides being placed on vast tank armadas supported by aircraft, helicopters, and fog-gas. The story is told from the viewpoint of two lone, bitter infantrymen with a fine contempt for tanks who, nevertheless, play significant roles in the climactic victory of America's great tank army over the enemy's. The story was smoothly written with reasonably believable action, motivation, dialogue and solid characterization, as was to be expected of Murray Leinster who had been writing since his first science fiction story (his first professionally published story appeared in Smart Set in 1915), "The Runaway Skyscraper" appeared in Argosy, February 22, 1919. Leinster (who writes non-science fiction under his real name of Will F. Jenkins) is still writing today, is as

popular as ever, and was given long overdue recognition for almost fifty years of contribution to the science fiction field in 1963 by being designated Guest of Honor at the 21st World Science Fiction Convention held in Washington, D.C.

Leinster's only serial for the Clayton Astounding was "Murder Madness," a four-part novel beginning with the May, 1930 issue, and later published in book form as a straight mystery (Brewer and Warren, 1931). A mysterious person known only as the Master is bent on world domination and to accomplish his ends uses a strange poison on selected individuals which produces "murder madness" two weeks after taking it. The victim experiences a horrible writhing of the hands followed by an irresistible compulsion to commit murder. The antidote is obtainable only from the Master or one of his agents but, unknown to the victim seeking relief, within the antidote is another dose of the poison which insures his perpetual enslavement to the Master.

The cover on the first Astounding was the work of H(ans). W(aldemar). Wessolowski, or Wesso, who illustrated "The Beetle Horde" in a fashion that was typically his own. Wesso did all thirty-four of the Clayton Astounding covers; his medium being watercolors, his style garish. Wesso's covers were a joy to behold—brilliantly colorful and jammed with action, they were so awful as to be positively beautiful. His first science fiction cover was for the September, 1929 Amazing Stories and illustrated "The Red Peril" by Captain S. P. Meek, his last for the March, 1942 Astonishing. He was one of the most popular of all science fiction illustrators, his popularity lasting well into the forties when his work gradually disappeared from the pages of science fiction magazines. By the end of 1930, virtually all the interior illustrations for Astounding were being done by Wesso and, what with his covers, he is naturally thought of as THE Clayton Astounding artist.

Most of the stories published in the Clayton Astounding have long since disappeared into oblivion (well deserved in most cases), remembered by relatively few, except possibly as disembodied but evocative titles: "Pirates of the Gorm" by Nat Schachner, "The Raid on the Termites" by Paul Ernst, "Hellhounds of the Cosmos" by Clifford D. Simak, "The Sargasso of Space" by Edmond Hamilton, "The Doom from Planet 4" by Jack Williamson, "Wanderer of Infinity" by Harl Vincent, "Spawn of the Stars" by Charles Willard Diffin, etc. ("Spawn of the Stars" was reprinted in Groff Conklin's first and best anthology, The Best of Science Fiction, published in 1946 by Crown.)

If any can be said to have escaped this fate, they are the novels of Ray Cummings. With the possible exception of Murray Leinster, Cummings was the biggest "name" writing for Astounding during its first two years, and was one of the few writers of pulp science fiction in that era who regularly had his novels subsequently published in hard covers. Because of his reputation and because his novels and novelettes were among the best to appear in the Clayton Astounding, the Cummings novels survived in the memories of fans far beyond the period in which they were written. Read today, the novels of Ray

20¢
ASTOUNDING
STORIES



May, 1931; another Clayton issue. Illustration by Wesso.

Cummings are uncomplicated, even naive, and many of them bear a certain similarity to each other in terms of plot. But, if read simply for fun, they are enjoyable stories and excellent examples of the general type of stories featured in Astounding during its first two years.

The hard bound versions of most of Cummings' novels are today fairly rare, but three of his Astounding novels have been reprinted in paperback in recent years and offer one a marvelous opportunity to savor the flavor of the early Astounding: "Brigands of the Moon" (March-June, 1930), a story of space piracy and the conflict between Earth and Mars over the mining of the super powerful radium ore found on the moon. This was the only one of Cummings' Astounding novels to appear in an American hard cover edition, A. C. McClurg, 1931 (Ace, 1958); "Beyond the Vanishing Point" (March, 1931), a return to one of his favorite themes, the submicroscopic world of the golden atom (Ace, 1958), and "Wandl, the Invader" (February-May, 1932), a sequel to "Brigands of the Moon," in which the heroes of the earlier novel are confronted with the menace of a small planet invading the solar system from interstellar space and heading directly toward the Earth-Mars spaceways. The planet, needless to say, is under the control of alien minds and monsters and its invasion of the Solar system is no accident (Ace, 1961).

No discussion of the Clayton Astounding would be complete without mentioning that giant of the spaceways, Hawk Carse. The adventures of Hawk Carse, of which there were four, epitomize the Clayton Astounding type of science fiction more nearly than any other stories including those of Ray Cummings. With steel nerves, raw courage, and flashing rayguns, the Hawk and his faithful companion, the giant Negro Friday, ranged the Solar system in deadly pursuit of their great enemy, the evil space pirate Dr. Ku Sui, whose one aim was to dominate the Solar system, but whose evil plans were frustrated at every turn by the implacable Hawk. The prototype of Hawk Carse was the ideal Anglo-Saxon frontiersman; hardy, resourceful, basically good but with a healthy streak of the rogue in his character, a law pretty much unto himself. The prototype of Dr. Ku Sui was quite obviously the sinister Dr. Fu Manchu.

The "Hawk Carse" stories contained just about every cliché and stereotyped character to be found in what later came to be known as "space opera," but have been saved from oblivion by the spell they cast on the readers by their colorful, even if stereotyped, characters and the unflagging drive of the action that characterized the stories. The adventures of Hawk Carse appeared as four quite long novelettes: "Hawk Carse," November, 1931; "The Affair of the Brains," March, 1932; "The Bluff of the Hawk," May, 1932, and "The Passing of Ku Sui," November, 1932. All of them were authored by Anthony Gilmore. The demand for more "Hawk Carse" stories persisted over the next ten years as he passed into legend and older fans waxed nostalgic over the greatness of the stories, whetting the appetites of newer fans who had not tasted the thrill of the adventures of the mighty Hawk. In July,



October, 1931; "Head of Apex," by Francis Flagg
Illustration by Wesso

1942 *Amazing Stories* printed a short novel by Harry Bates in an attempt to revive the Hawk, "The Return of Hawk Carse," but by this time the magic had worn thin, the day of the "Hawk" had passed.

Although printed as separate stories, they form in effect one continuous narrative of novel length, and it was as a novel that the adventures of Hawk Carse eventually appeared in book form (excluding "The Return of Hawk Carse"), unchanged in any discernible way from their original magazine versions. (*Space Hawk*, by Anthony Gilmore, Greenberg, 1952.)

An interesting sidelight to the Hawk Carse stories was the mystery that for so long surrounded the true identity of Anthony Gilmore. It was known that Anthony Gilmore was a pseudonym, and it was believed by most to be that of a collaboration between editor Harry Bates and



another writer. As late as 1934 fans were speculating on the identity of Gilmore. In the leading fan magazine of the day, Fantasy Magazine, October-November, 1934 Raymond A. Palmer (later to become the editor of Amazing Stories), in his column "Spilling the Atoms With RAP," disputed the claim of a fan from Ohio that he'd solved the "Anthony Gilmore mystery" by extracting a confession from the guilty party: "If you had solved the Gilmore case you wouldn't get a confession," declared Palmer, "There are some stories too hot to let out. Why do you suppose we (Fantasy Magazine) suddenly stopped investigations?" In time it was admitted that "Anthony Gilmore" was a collaboration between Harry Bates and Desmond Hall who, in addition to having been Bates' assistant editor for about nine months, was a writer of indifferent science fiction as D. W. Hall. Bates and Hall also collaborated on four stories under the name of H. G. Winter, and on one

story, "A Scientist Rises," in the November, 1932 issue as D. W. Hall. Anthony Gilmore wrote a handful of other stories, but these are long since mercifully forgotten. The important thing is that "Anthony Gilmore" wrote the immortal "Hawk Carse" adventures, the enduring symbol of the Clayton Astounding.

The magazine remained Astounding Stories of Super-Science for exactly one year from January, 1930 to January, 1931. In February the name was changed without notice to simply Astounding Stories. Another change of minor significance also occurred in 1931: the name of Dr. Douglas M. Dold, which had been listed on

April, 1932, "The Finding of Haldgren," by Diffin. Illustration by Wesso



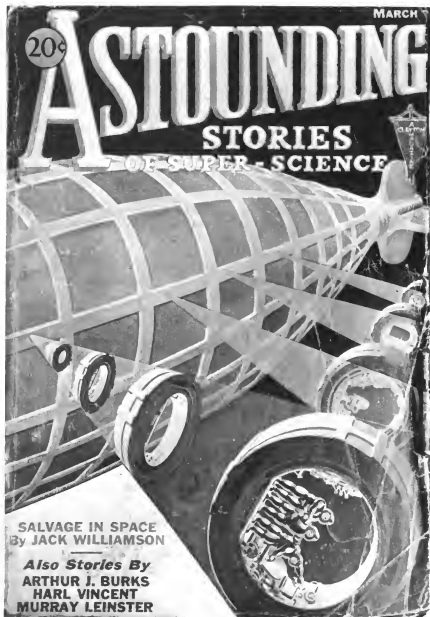
the masthead as consulting editor since the first issue, was missing as of the August issue.

Astounding was born in the first months of the Great Depression, but the depression had little adverse effect on most pulp magazines as far as the man on the street, the average reader of pulp magazines, could tell. Pulp magazines were cheap and offered a few hours of escape from the grim realities of the economic situation. Science fiction has often been characterized as escape literature, but in the thirties this could just as well be ascribed to all pulp fiction magazines—the science fiction reader merely escaped a little further out than readers of more mundane pulps. A majority of the pulps (and pulp publishers) survived the most grueling years of the depression, but a few dropped by the wayside for one reason or another, some never to be seen again, others to be revived or taken over by another publisher. The Clayton chain was one that didn't survive.

By the middle of 1932, economic factors forced Astounding onto a bi-monthly schedule starting with the June issue and after publishing the March, 1933 issue, the Clayton chain went out of business and Astounding ceased to exist.

The economic factors affecting the continued existence of Astounding (and the Clayton chain) were internal, not external. Since its founding, Bates had steadily increased the sales of Astounding until at the end it was on the point of breaking even. This, in the depths of the depression. And from the beginning he paid a minimum of two cents a word on acceptance to all authors, and as much as four cents a word to Ray Cummings and Murray Leinster. This also in the depths of the depression. A short time before Astounding folded, William Clayton found himself in need of ready cash, a need that became increasingly more desperate: he had bought out his partner (the money half of the partnership). Although he was now in sole possession of a string of magazines, many of which were making money, and two or three a good deal of money, he was facing bankruptcy because of his legal obligation to pay off his former partner immediately. Before, when he needed a large sum of money in a hurry, he was able to get it from his partner; now, of course, he could no longer do this. He had to raise the money somewhere. His first step in raising the money was to put Astounding on a bi-monthly schedule and then, a couple of months before the end, he requested Bates to start paying on publication. But even these measures failed to save Astounding and, eventually, the entire chain. To get some idea of what it was costing Clayton to buy out his partner: a quarter-million-dollar check he sent his partner in part payment for his interest was shown about the editorial offices by the Clayton controller as a curiosity. It has been reported that the final margin of failure, the difference between survival and extinction for the great Clayton chain of magazines, was a paltry twenty-five thousand dollars.

Although going bi-monthly from a monthly schedule is usually a strong indication that things are getting a little rocky in the financial department, the general editorial tone of Astounding was determinedly



SALVAGE IN SPACE
By JACK WILLIAMSON

Also Stories By
ARTHUR J. BURKS
HARL VINCENT
MURRAY LEINSTER

optimistic. In an editorial statement in the January, 1933 issue (the next to the last), editor Harry Bates directed the attention of those who may not have already noticed to the cover and the fact that the magazine's full name had been restored; it was again Astounding Stories of Super-Science. In addition to this he was establishing as a regular feature with this issue a "Science Forum" under the direction of Carlyle Elliott, Ph.D., to satisfy the scientific interest of the readers, and he was asking his writers to increase the science content of their stories and promised that from this point on the stories would be checked more rigorously than ever for scientific accuracy. He also pointed out that he was giving the opening of every story a double page layout. All this was well and good, but what excited most readers was the announcement that, beginning with the next issue, Astounding would print the latest novel of the premier science fiction writer of the day, Edward E. Smith, Ph.D.

"Triplanetary" would appear in an undisclosed number of installments but, according to the announcement, the first installment would contain the first full half of this great new novel. This was one of the most—if not the most—exciting and significant events to occur in the two-and-one-half years of the magazine. Not only was "Skylark" Smith the most highly regarded writer in the field, but all his previous novels had been published by Amazing Stories.

"Triplanetary" was written for Astounding at the request of Harry Bates. Dr. Smith agreed to write a novel for Astounding instead of Amazing for two reasons: First, higher rates; two cents a word against something less than one cent. Second, he was thoroughly sick of Amazing's rewriting his material. However, by the time the novel was completed, Bates was paying on publication, not on acceptance; so although the yarn was accepted and announced for publication, Bates never paid Smith anything for it.

The absence of "Triplanetary" in the March, 1933 issue without any explanation was a bitter blow to Doc Smith's fans. Although the story never appeared in Astounding (it was finally published by Amazing Stories after all as a four-part serial beginning in January, 1934), Wesso had already painted a cover for it and this painting was used as the cover for this last issue of the Clayton Astounding, ostensibly illustrating Jack Williamson's "Salvage in Space."

The sudden folding of Astounding without hint or notice came as a huge surprise to most readers. What most readers didn't know: Bates' editorship of Astounding had terminated with the preceding issue, January, but Clayton called him back to get out one more. There were enough bought and paid for stories to fill it, as well as illustrations and an already painted and paid for cover. Assuming he'd lose money with the last issue, he figured he'd lose less by issuing it than by not issuing it.

But unforeseen by everyone, and sooner than could be expected, Astounding was to rise Phoenix-like from the ashes of its past and initiate a renaissance in science fiction beyond anyone's imaginings.



LOST
CITY
of
MARS
by
HARL VINCENT

REBIRTH
by Thomas McClary

February, 1934, cover painting by Brown.

THE TREMAINE ERA: FIRST PHASE 1933-1935

After an absence of six months, Astounding reappeared on the stands in September (dated October, 1933) as a member of the Street & Smith family of magazines, with its old familiar title slashing boldly across the top of the cover, but otherwise looking strangely different than the Astounding of old. For one thing, the cover obviously was not by Wesso and, secondly, the scene depicted on the cover was not even remotely science-fictional. That, and the next two covers of the Street & Smith Astounding were the work of Howard V. Brown, the great successor to H. W. Wesso as Astounding cover artist.

The story announced on the cover was "The Orange God," by Walter Glamis (a pseudonym of Nat Schachner); the cover painting, however, illustrated another short story, "Anything Can Happen!" by Peter Gordon. Neither story was science fiction. In fact, of the total of eleven stories in this issue, only three were science fiction, the rest being straight adventure or vaguely occult in theme. Because of the strange makeup of the magazine, it was hard to determine whether Astounding Stories was to be a science fiction or a general fiction magazine (on the order of Top-Notch or Argosy, which usually had one or more "different" stories in each issue) under its new publisher. It was not long before these questions were answered.

Although the November issue didn't fully allay the doubts many had about the magazine, it was more science-fictional in appearance and tone than was the October issue and the announcement for the next issue—a full page broadside—indicated that Astounding was indeed a science fiction magazine. This announcement also hinted that the new Street & Smith Astounding was to be markedly different from the old; would be something more than a science fiction adventure magazine specializing in thud and blunder, BEMs, and the like.

The full page announcement read:

The Next Issue of Astounding Stories
WILL CONTAIN

A story that will awaken
MORE CONTROVERSY

Than any story ever published in a
SCIENCE-FICTION MAGAZINE

ANCESTRAL VOICES

By Nat Schachner

Slices daringly through the most precious myths, legends, and folklore of mankind, and attacks boldly a present-day wave of race-hysteria.

This is not just "another story."

You will LIKE it; or HATE it; and will READ it AGAIN.

ANCESTRAL VOICES

in the December

ASTOUNDING STORIES

The socially significant implications in this announcement alone, regardless of how the story lived up to it, were unprecedented in Astounding.

December, 1933 can rightfully be regarded as the beginning of the Tremaine Era, the beginning of the renaissance of magazine science fiction. The name of the new editor of Astounding was disclosed in this issue: F. Orlin Tremaine. Tremaine was relatively unknown to

most readers of Astounding, but he had an impressive background: Frederick Orlin Tremaine was thirty-four years old when he assumed the editorship of Astounding, was a graduate of Valparaiso University, and during the twenties had at various times edited Metropolitan, True Story, Miss 1929, and Everybody's Magazine. In more recent years he had been associated with Clayton magazines. With the folding of the Clayton chain he went to work for Street & Smith and now in addition to Astounding also edited Clues, Top-Notch, Cowboy Stories, and Bill Barnes, Air Adventurer. That Astounding rose to the heights it did with such meteoric speed is truly remarkable in the light of this editorial workload carried by Tremaine.

Incidentally, for a time Tremaine's associate editor was Desmond Hall, the same Desmond Hall who was for nine months Harry Bates' assistant editor and his collaborator in the Anthony Gilmore pseudonym.

Tremaine announced the institution of a new editorial policy for Astounding in an editorial statement at the beginning of the new letter section, "Brass Tacks." Wrote Tremaine: "Our purpose is to bring to you each month one story carrying a new and unexplored 'thought variant' in the field of scientific fiction. This month you will find it in 'Ancestral Voices' by Nat Schachner. It carries a thought which has been slurred over or passed by in many, many stories." He goes on to declare that Astounding will bow to no prejudices and will speak its mind frankly, without regard for the restrictions formerly placed on science fiction.

Not always did the thought variant contain the sensationally new idea claimed for it, but generally the thought variant policy did inspire many writers to give more thought to the essential idea in their stories rather than to rework the old timeworn ones that had been around since the year one. Writers being what they are and anxious to sell their work, most of those submitting to Astounding took their cue from this announcement and placed increasingly heavier emphasis on "ideas" in their stories, and just sort of brushed in characterization, mood, and background detail. Regardless of its inherent deficiencies, the thought variant policy was largely responsible for the rapid rise of Astounding to top position in the science fiction field. The response to the thought variants by the fans in the upcoming year was so enthusiastic that Charles D. Hornig, the seventeen-year-old managing editor of Wonder Stories, early in 1934 inaugurated a "New Plot" policy in an effort to beef up his dwindling circulation.

The "thought variant" element of Schachner's "Ancestral Voices" is today an accepted cliché of time travel stories, but at the time it was moderately revolutionary. What happens when one goes back in time and for some reason kills one's own direct ancestor? Why, one ceases to exist or ever to have existed, of course. This basic idea was not new, but Schachner developed it beyond the simple one-to-one ratio and carried the idea to its logical conclusions. Going back to 452 A.D., a time when the Roman Empire was crumbling before the invading Hun, he has his time traveler kill a Hun during a fight. The

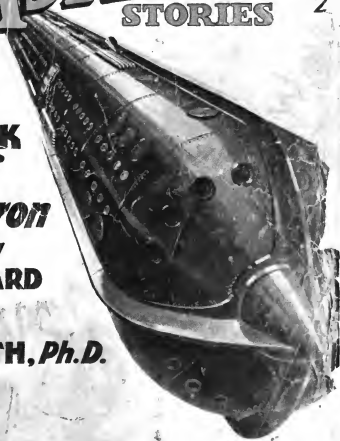
A STREET & SMITH PUBLICATION

ASTOUNDING

STORIES

AUG
2

The
SKY
LARK
of
Valeron
by
EDWARD
E.
SMITH, Ph.D.



August, 1934; Edward E. Smith's "Skylark of Valeron." Illustration by Brown.

Hun, it turns out, would have been his great-grandfather many times removed had he lived long enough to mate. As a natural consequence of this act he, as well as fifty-thousand others of all races in all parts of the world, disappeared from modern time for they should never have existed because the Hun had not had time to procreate. Schachner attempted in this story to show the imbecility of ancestor worship, but more importantly the fallacy of the rising Hitlerian anti-Semitism and doctrine of Nordic superiority. There were incongruities in the story and a real lack of depth to it, but when it is considered in relation to the time in which it was written and the themes in science fiction that preceded it and were currently popular, this was a remarkable story and one of the first of the sociologically oriented type science fiction that dominated the forties.

With the exception of a story called "Last Sacrifice" by J. Gibson Taylor, a tale of psychic possession and Haitian voodoo, and "The Demon of the Flower," a moody, hard to classify, little gem by Clark Ashton Smith (originally intended for the defunct Strange Tales, a Weird Tales type companion to Astounding under the Clayton banner), everything else in the December issue was science fiction: "Farewell to Earth" by Donald Wandrei, a time travel story which goes a million years into the future, and a sequel to "A Race Through Time" in the October issue; "Terror Out of Time" by Jack Williamson, which dealt with another form of time travel, the transfer of brains or personalities through time, and "Land of the Lost," the first installment of a two-part novel by Charles Willard Diffin, an indifferent story of extra-dimensional menace by one of the most prolific of the old Clayton writers.

The thought variant for January, 1934 was Donald Wandrei's story "Colossus," an ambitious and controversial excursion into relativity, a sort of reverse approach to the "golden atom" concept of Ray Cummings. Instead of shrinking into infinite smallness within the universe of the golden atom, Wandrei's protagonist expands his mass through the attainment of speeds of thousands of light-years per second to such gigantic proportions that he bursts through the ultimate limits of our universe to suddenly find himself in a greater universe in which ours is but an atom.

A much better story was Nat Schachner's "Redmask of the Outlands," a minor classic which probed the problem of individuality versus enforced conformity, and rebellion against an autocratic state. This again was an attempt by Schachner to explore the possibilities of sociological themes for science fiction and was a far superior story to "Ancestral Voices."

February featured the first of two installments of one of the great classics of the mid-thirties, "Rebirth" by Thomas Calvert McClary. "Rebirth" told of the consequences arising out of a brilliant scientist's idealistic but catastrophic tampering with nature—in this case causing universal total amnesia with the hope that man will rapidly relearn language and science and rebuild a new and greater civilization, leaving behind greed, hate and war. The science on which this was based



July, 1934; "Spoor of the Bat," illustration by Dold.

was so much preposterous double-talk, but once one surmounted this hurdle and got into the story of man's involuntary plunge into savagery and his return to civilization all thought of the story's improbable science was soon forgotten.

Two thought variants were offered up to the readers in the March Astounding. Featured on the Howard V. Brown cover was John Russell Fearn's "The Man Who Stopped the Dust," which was about a slightly unhinged scientist's invention of a ray that would eliminate dust; the ray destroyed all electrons within the molecules making up the dust particle thus causing the collapse of the molecule and of the dust particle as well. The result of all this, needless to say, was unexpected and dramatic. The second thought variant was Jack Williamson's "Born of the Sun," a wildly improbable tale of the end of the Solar system. One by one the outer planets, then the moon, the Earth, and then the inner planets start to show cracks on their surfaces, change to a strange green color, then break open like an egg as a colossal dragon-like creature with wings "more than anything else like the eldritch, gorgeous streamers of the Sun's corona, which is seen only at the moment of total eclipse," emerges, preens itself for a moment, wheels across the sky and disappears into interstellar space. And the Sun died. The Sun—all suns—were once creatures like this who absorbed energy, devoured cosmic debris, consumed old suns until they themselves become suns, spawning planets, thus continuing the cycle of life. Add to this a secret Cult of the Great Egg hidden in the Gobi Desert, murderous disciples of the Cult, the kidnapping of a beautiful girl, a desperate race to complete a space ship before the breakup of the Earth so the seed of man may carry on, riots and what-not, and you had what the table of contents described as a "great thought variant story."

With this issue the page count for Astounding went from the 144 it had been since the first issue to 160 with no change in the twenty cent cover price.

Who can ever forget the thrill of reading "The Legion of Space" by Jack Williamson for the first time? The first part of this classic began in the April issue and ran for six breathtaking installments. The adventures of John Star, Giles Habibula, the mighty Hal Samdu, and Jay Kalam on the evil world of the Medusae, the planet Yarkand, as they fought to save the lovely Aladoree Anthar and the secret weapon, AKKA, which she alone held in her mind and which was the only salvation of Earth, were high adventure indeed with a Sense of Wonder in ample measure.

Also in this issue was "A Matter of Size" by Harry Bates, a long novelette on the shrinking man theme—and one of the best of that type—which established the former editor of Astounding as one of the better, if infrequent, contributors to the new magazine. Nat Schachner had another thought variant, "He From Procyon," about a god-like visitant from another world who experimented with the lives of a number of ordinary people of Earth. And finally, "Lo!", Charles



Fort's controversial and fascinating collection of unexplained phenomena was presented in the first of eight installments. In addition to these outstanding features there were four short stories and a dramatic cover by Brown to round out one of the best single issues of the thirties.

May was unspectacular except for the second installments of "The Legion of Space" and "Lo!", and a couple of teasers about the greatest announcement of the year to be made next month.

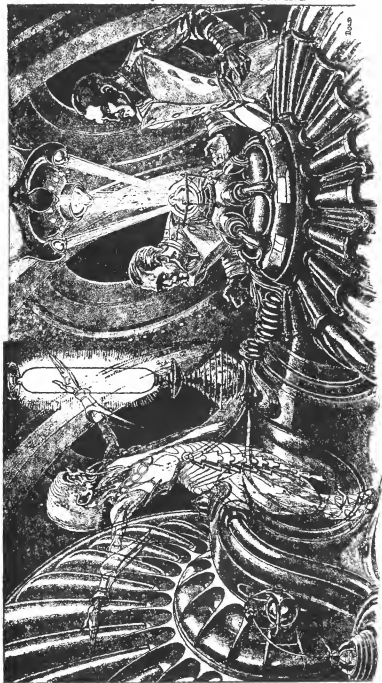
June featured a thought variant by the old master, Murray Leinster, which was in the truest sense of that much abused term a thought variant. "Sidewise in Time" presented for the first time the concept of parallel time streams impinging upon each other with each time stream the result of events taking a divergent course at a crucial moment in history from that which ours took. Stories dealing with single alternate "worlds of if" were not new, but this story dealt with a multiplicity of worlds and their impact upon each other, and served as a model for such future stories as Jack Williamson's "The Legion of Time" and L. Sprague de Camp's "The Wheels of If."

The subject of Brown's colorful cover painting of a space ship was a story by a relative youngster, "Crater 17, Near Tycho" by Frank K. Kelly, a well conceived and thoughtful adventure of the early days of space flight. A letter by Mr. Kelly in the October issue commenting on his story points up the advances that have been made in the science of flight in a short thirty years. In justifying the slow speeds used by his space craft he said: "No one has yet demonstrated that men, human beings, can stand an acceleration of even a thousand miles per hour (sic) and live. A number of experiments in this field of acceleration effects have been conducted with confused and contradictory results."

The announcement promised last month was truly an electrifying one. THE SKYLARK IS COMING! proclaimed the full page notice on page 47. Starting in August, Edward E. Smith, Ph.D. would bring his great saga of the Skylarks to a titanic conclusion with "The Skylark of Valeron," an 85,000 word novel surpassing by far its two predecessors...mighty in its concept of cataclysmic forces...propounding new theories—thought variant theories...and containing Dr. Smith's amazing conception of the fourth dimension. This news was enough to put most fans into a state of almost unbearable anticipation as they waited for the great day.

In the July issue, Tremaine announced that effective with the August issue Astounding Stories would contain 25,000 more words than previously, giving the reader one more novelette or two more short stories, and jumping the letter section, "Brass Tacks," from the five or six pages it had been to a permanent ten or twelve pages. This increase in wordage in addition to the increase in pages with the March issue made Astounding the biggest and least expensive magazine in the field.

Howard V. Brown's memorable cover for August, picturing a gigantic space ship viewed three-quarters head-on had emblazoned down one side of it in letters taking up fully half the cover, THE SKYLARK OF



September, 1934; "Skylark of Valeron," illustration by Dold.

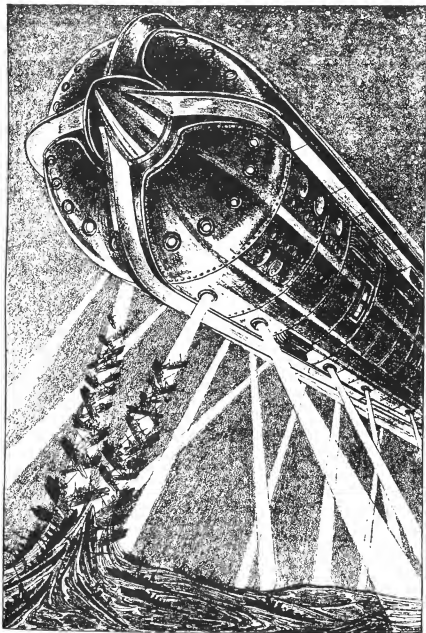
VALERON, by Edward E. Smith, Ph.D.--and the climactic episode of the great Skylark Saga was begun with the first of seven installments.

The present generation of fans, those who started reading science fiction in the more sophisticated forties or fifties, are inclined to dismiss the "Skylark" novels as quaint relics of the dawn years of science fiction. But to the fan of an earlier generation, a novel by E. E. Smith, Ph.D. was an adventure in reading scarcely to be equaled. The sweep of a Smith novel that used the entire galaxy (and then some) as a stage, the slashing space battles so well described, the super-human qualities of Richard Seaton and Martin Crane who (with a little help here and there from friendly alien races) overcome the most inconceivable obstacles, and that wicked but delightfully wonderful villain, Dr. Marc C. "Blackie" DuQuesne, all combined to enthrall the reader as very few science fiction stories are able to do today. It is probable that never before or since in the history of science fiction have any stories so captured the fan's imagination and favor as did the "Skylark" stories.

The first, "The Skylark of Space," was written during World War I (with the collaboration of Mrs. Lee Hawkins Garby who provided the saccharine love interest), and submitted to and rejected by a dozen or more magazines for almost ten years before it was accepted by Amazing Stories and published as a three-part serial beginning with the August, 1928 issue. And with its publication science fiction was forever freed from the confining limits of our Solar system. This novel was the first to deal to any extent with the incredible power to be had from the release of intra-atomic energy and its application to space travel. The Skylark and its passengers tour the universe, encountering all sorts of wild and wonderful adventures, strange beings, and creatures, and marvels beyond compare.

In the second novel, "Skylark Three" (Amazing, August-October, 1930), wonder piles upon wonder, ending with the creation of the two-mile-long, Skylark III, the epic battle between the giant Skylark and the last of the evil race of the Fenachrone in their inter-galactic cruiser in extra-galactic space, and the utter, final, total and complete annihilation of Seaton's old enemy Blackie DuQuesne who was reduced to dust by a Fenachrone heat ray. By killing off DuQuesne—a key character in the series—Smith hoped to kill off the Skylark series which he felt was based on a universe that was mathematically indefensible. It was not science fiction at all, but pseudo-science. In his next novel, "Spacehounds of the IPC" (Amazing, July-September, 1931), he wrote what he considers his only science fiction novel, with a universe based on what is now known as the ion-drive and the action confined to the Solar system. But the fans weren't buying it: "Doc" Smith had to be a Galactic Roamer, not a stay-at-home stick-in-the-mud.

Dr. Smith had not planned, and did not want to write a sequel to "Skylark Three." He was talked into it. Tremaine, in his unceasing effort to build the circulation of his magazine, knew that a new "Skylark" novel would be a big boost to Astounding's prestige and circu-



October, 1934; "Skylark of Valeron," illustration by Dold.

lation. He asked Smith for it. He wanted it; to such an extent that he published the rough draft sent to him for comment and criticism instead of returning it to the author for final polishing! Incidentally, Blackie DuQuesne, in the best Perils of Pauline cliff-hanging tradition, turns out not to have been killed after all and shows up to continue to plague Seaton and Crane.

So popular have the "Skylark" stories been over the years that Doc Smith finally gave in and wrote the fourth and final "Skylark," published in IF Worlds of Science Fiction (June-September, 1965) as "Skylark DuQuesne." To appreciate this title it would be well to recall what happened to DuQuesne at the conclusion of "Skylark of Valeron": Seaton dematerialized DuQuesne leaving him a pure intellect, immaterial and immortal; then he compressed him into a spherical capsule and surrounded him with a stasis of time; he then shot him into space at an acceleration of approximately three times ten to the twelfth centimeters per second per second, on a trip that would last better than one hundred thousand million years, and finally, to make sure he would have a hard time finding his way back, the capsule was programmed to rotate into the fourth dimension at the end of this inconceivable journey. So you can see, the new novel offers tantalizing possibilities.

For the first time in the short history of Astounding, a novel was given two consecutive covers. "The Skylark of Valeron" was featured on the cover of the September issue and the second installment dominated the contents of the magazine. Williamson's "The Legion of Space" concluded in this issue, and the sixth installment of Charles Fort's "Lo!" was present with two more to go. In addition to the three serials, there were two novelettes, five short stories and ten pages of "Brass Tacks"; Astounding was now indeed bursting with goodies.

In October, C. L. Moore, who had been establishing an enviable reputation in Weird Tales with her "Northwest Smith" stories, made her first appearance in Astounding with a brilliant novelette, "The Bright Illusion." This was a story of a cataclysmic death struggle between two strange gods and of two beings, one human and the other weirdly unhuman, caught in the backlash of this war of gods, and of their love which triumphs over the complete and utter alienness of their two physical forms and cultural matrices, told in the colorfully vivid style that was to be Miss Moore's trademark.

November featured a thought variant "novel" by Murray Leinster, "The Mole Pirate," about a gadget that permitted one to pass unhindered and unharmed through solid matter, and "The Great Thirst" by Nat Schachner, a story about the recently discovered heavy water and its potential force. This issue also contained the fourth dazzling installment of "The Skylark of Valeron," and the concluding installment of Charles Fort's "Lo!" But walking away with all honors was a short story, "Twilight" by a new author, Don A. Stuart.

Don A. Stuart, it was eventually revealed, was the pseudonym of John W. Campbell, Jr. Campbell, in the brief time since the publica-

tion of his first story, "When the Atoms Failed" (Amazing, January, 1930), when he was just nineteen years old, was already regarded as the second greatest living writer of science fiction; second only to E. E. Smith. Even though he had been writing for only four years, Campbell had been considerably more prolific, with eight short stories, two novelettes, and four novels in that short time, than had Smith with five novels over a seven year span. Campbell's reputation as the near equal of Smith as a master of super science was based primarily on his two novelettes and three of his four novels, the "Arcot, Wade, and Morey" stories, so called after the names of the main characters of these super extravagant epics: "Piracy Preferred" (Amazing, June, 1930); "Solarite" (Amazing, November, 1930); "The Black Star Passes" (Amazing Stories Quarterly, Fall, 1930); "The Islands of Space" (Amazing Stories Quarterly, Spring, 1931), and "Invaders from the Infinite" (Amazing Stories Quarterly, Spring-Summer, 1932). Campbell, who had been a student at MIT and a physics major at Duke, larded his stories, particularly the novels, with pages of impressive but nearly incomprehensible and dull explanations of his scientific wonders, but surmounted this fault with the sheer brilliance of his concepts and his natural born genius for story telling.

"Twilight" was a completely radical departure in idea and style from that which was identified with him and was rejected by all the editors he submitted it to. Tremaine, when he finally received it, was overwhelmed by it and scheduled it for as early publication as possible. However, he had a problem. He had already purchased a sensationally cosmic novel from Campbell, one to rival the powerful "Skylark of Valeron," to start in December and was planning to start publicizing it in the October issue. He found a slot for "Twilight" in the November issue, but if it were published under Campbell's name it would detract from his publicity campaign for the great Campbell novel which was to climax the year. He was playing up big the fact that in just one year as editor he had managed to snag the two greatest names in science fiction with their greatest novels to date, and didn't want anything to lessen the impact of that. Campbell solved his dilemma by adopting the name Don A. Stuart, from his wife's maiden name, Dona Stuart.

Don A. Stuart created something of a sensation with his first story, a picture of the twilight of Earth, seven million years in the future. Although "Twilight" contained a strong idea element, it was essentially a beautifully and effectively and almost poetically written tone poem, a story that imparted a feeling of the endlessness of time and the aching loneliness of a dying Earth.

Whether he intended it or not, Tremaine produced in the December, 1934 Astounding what many old time fans consider the greatest single issue the magazine has ever seen. Howard V. Brown's powerful cover painting of a huge and complex engine, illustrated the latest and greatest of John W. Campbell, Jr.'s cosmically scaled superscience tales, "The Mightiest Machine." Starring Aarn Munro, a mental and physical superman born and reared on the planet Jupiter of parents descended

from Earthmen, this novel eclipsed all his previous ones in concept, scope of action, multiples of light speeds traveled by his space ships, and the use of incomprehensible and universe shattering forces. "The Mightiest Machine" as well as "The Skylark of Valeron" marked the apogee of the super science epic in Astounding and science fiction generally. There would be more in the years to come, but none approaching the unique and exuberant quality of these two novels. Campbell, from this point on, would add to and enhance his reputation with his Don A. Stuart stories; Smith would continue to be a Galactic Roamer, but more logical and mature than in his "Skylark" period.

This issue seemed almost an all-Campbell issue for in addition to his novel he had his second Don A. Stuart story, "Atomic Power," in which scientists prevent the destruction of our solar system by atomic experimenters in the macrocosm, and "The Irrelevant" written under the name of Karl Van Kampen, which seemingly violated the law of conservation of energy, and stirred up a heated controversy in "Brass Tacks" for months to follow.

Sharing top billing with "The Mightiest Machine" was the fifth installment of "The Skylark of Valeron" which was entirely devoted to relating the story of Valeron and the hideous enemy that assaulted its civilization.

Rounding out the issue was Donald Wandrei's "Colossus Eternal," the sequel to "Colossus" (January, 1934), in which the hero comes at last to the beginning and the end of all creation, and "Old Faithful" by Raymond Z. Gallun which dealt with the problem of communication between Earth and Mars, and the Martian Number 774's (the "Old Faithful" of the title) heroic and tragic solution to the problem. This was one of the most popular stories of the year, a popularity that would lead to two sequels over the next two years adding up to one of the most fondly remembered series of the thirties.

In the twelve months just past, Astounding leaped almost overnight to the leading position in the science fiction field, a position it was to hold practically uncontested for most of the next thirty years. And as far as Astounding itself is concerned, 1934 remains one of the most important and significant years in its entire history. In these twelve issues, Tremaine probably published more superior and more memorable stories than appeared in all 34 issues of the Clayton Astounding and with the institution of the thought variant policy he encouraged his writers to deal more in ideas than in action, without abandoning action and conflict altogether. The idea, or gadget story remained pre-eminently identified with Astounding for the next two-and-one-half years, but it was in 1934 that it was probably given the heaviest emphasis.

1934 was the year that gave us "Rebirth," "The Legion of Space," and Harry Bates with a story, "A Matter of Size," as different in ideas and literary execution as it could possibly be from anything he wrote in the Clayton Astounding as Anthony Gilmore. It was a year which

saw the first serial-length article published in Astounding, Charles Fort's irreverent (toward established science) collection of mysteries, "Lo!" The year in which Murray Leinster came up with the first multiple time streams story, "Sidewise in Time." (This, however, is disputed by some authorities who attribute this milestone to Francis Stevens and her novel "The Heads of Cerberus" published serially in Street & Smith's Thrill Book in 1919, and later published in a limited edition by Polaris Press, a subsidiary of Fantasy Press, in 1952.) 1934 will long be remembered as the year in which both E. E. Smith, Ph.D. and John W. Campbell, Jr. appeared simultaneously with an installment of their greatest epics to that date.

1934 was also the year in which Howard V. Brown on covers and Elliott Dold on interior illustrations provided some of the best science fiction artwork of all time. Howard Brown had a number of covers on Gernsback's Electrical Experimenter back in 1916 and 1917, or thereabouts, depicting future inventions, but his employment as cover artist for the new Street & Smith Astounding Stories was the first utilization of this veteran artist's superior talents by a science fiction magazine. Elliott Dold had been a commercial artist, scenic painter, and illustrator before the World War. After the war he drifted into the pulp magazine field and all through the twenties did covers and some black and white illustrations, mostly for western and adventure magazines. In 1930 he conceived the idea for Miracle Science and Fantasy Stories, and talked Howard Hersey into publishing it while he rounded up most of its contributors himself, including his brother Douglas. The two issues of this magazine (April-May and June-July, 1931) featured covers by Dold as well as most of the interior illustrations, and his only published work of fantasy, "The Bowl of Death," a novel in the last issue. The magazine folded due mainly to Dold's illness at the time and his inability to keep up with the editorial chores. With the possible exception of one or two unsigned drawings in earlier issues which might have been his, Dold's first appearance in Astounding was in the April, 1934 issue. By the end of the year with his superb illustrations for "The Skylark of Valeron" and "The Mightiest Machine," Dold was unquestionably the most exciting illustrator in the field.

This year served to introduce to the readers of Astounding the incomparable C. L. Moore with her beautiful and haunting novelette, "The Bright Illusion." But most importantly it introduced Don A. Stuart with the classic "Twilight," an event of far-reaching significance for, as Campbell said in the introduction to his first Don A. Stuart collection: "It led to the development of the Don A. Stuart stories, and thus to the modern Astounding." (Who Goes There?, Shasta, 1948.)

And along with all this there was the atmosphere of excitement surrounding Astounding, the knowledge that great things were happening and the feeling that even greater things might be expected in the future, that the potential of Astounding was limitless. In all, for the rabid fans a highly satisfying twelve months.

THE MID-THIRTIES 1935-1937

The pattern set by Tremaine in 1934 was to be continued without much change in 1935 with a continuing emphasis placed on the thought variant, better plots and newer ideas, and the acquisition of the best writers in the field. In his editorial for January, titled "Into 1935," Tremaine looked back at the year just past with understandable satisfaction, and into the year ahead with optimism:

"And now in the new year, if we keep driving through, interesting new readers, our aim is to go twice-a-month.

"We've awakened the whole field of science fiction from the coma in which it rested in 1932 and early 1933. It has been a happy awakening with new interest, new writers here and there and a scintillating galaxy of great stories to remember in 1934.

"1935 stretches ahead full of promise for greater things. We have been building carefully and well. All of us, thinking back, realize that. 'Star-Ship Invincible' (the lead story for January, by Frank K. Kelly) would not likely have grown on the barren soil of 1933."

Astounding, to the great disappointment of most fans, never went bi-weekly, but otherwise it lived up to the expectations of its editor and the fans. There would be nothing to equal "The Skylark of Valeron" or "The Mightiest Machine" making an appearance this year, although both these classics were carried into and concluded in 1935. But to offset this there would be John Taine, Don A. Stuart, and the new sensation, Stanley G. Weinbaum. Not to mention Murray Leinster, Jack Williamson, Harry Bates, Nat Schachner, and Raymond Z. Gallun.

John Taine (Dr. Eric Temple Bell, Professor of Mathematics, California Institute of Technology), before his death in 1960 wrote thirteen science fiction novels, three science fiction short stories, and a number of technical and semi-technical books dealing with mathematics. As a science fiction author, John Taine was in the very first rank, his books

considered classics. His sole appearance in Astounding was with a five-part serial beginning in May, "Twelve Eighty-Seven," a fine novel of biological warfare between the East and the West that, despite its obvious merits, received a mixed reception from the fans.

Don A. Stuart followed up his signal successes of the previous year with six outstanding stories in 1935. This was a veritable flood of stories; for in the next four years, until he stopped writing in 1939, "Stuart" only wrote a total of seven novelettes and one novel ("The Elder Gods" featured in the October, 1939 issue of Unknown), two in each year. "The Machine," the first tale in "The Teachers" series, or as it is more commonly called, "The Machine" series, appeared in February. This story told of the abandonment of humanity for its own good by a sentient machine which had provided it with every luxury. In "The Invaders," the second of the series in June, Mankind has sunk to savagery and is enslaved by invading extraterrestrials, the Tharoo. Three thousand years later, Man throws off the yoke of slavery and drives the Tharoo forever from Earth in the final story in the series, "Rebellion," in the August issue. This was adult science fiction on a theme Campbell would return to in the "Aesir" stories a few years later. "Blindness," in March, was a little tale of irony and pathos, about a scientist who is blinded as he almost literally journeys to the sun to bring atomic power back to Earth and finds on his return that one of his earlier discoveries has already given Earth a cheaper power source. His atomic power is not wanted. "The Escape," May's Stuart story, was written by Campbell on a dare that he couldn't write a love story within a science fiction frame. Campbell told of a boy and girl's attempt to escape the implacable will of the genetics board which had the girl lined up for pairing with another boy. They're caught, and the girl is psychologically conditioned to love the "right" man. In October Campbell returned to the haunting mood of "Twilight" in the sequel to that story, "Night," in which a man of today travels to the ultimate future limits of time and there gains insight to the true meaning of man and his relationship to his machines. A beautiful story and a fitting sequel to the first.

1935 was essentially Stanley G. Weinbaum's year. Weinbaum exploded on the science fiction world with the impact of a 100-megaton bomb with his first story, "A Martian Odyssey," in the July, 1934 Wonder Stories. On December 14, 1935, Stanley G. Weinbaum died of cancer at the age of thirty-three, cutting short almost before it began a writing career that promised to be one of the most brilliant ever to come out of science fiction. But in that brief breath of time he produced seventeen stories and three posthumously published novels on his own, one story in collaboration with his sister, Helen, and two in collaboration with his good friend and mentor, Ralph Milne Farley. Of this total, ten were published in Astounding, seven of them in 1935: "Flight on Titan" (January), "Parasite Planet" (February); "The Lotus Eaters" (April), "The Planet of Doubt" (October), "The Red Peri" (November), and "The Mad Moon" (December). These were all interplanetary



adventures with original plots, crisp, believable dialogue, and mature and human love interests. The uniquely (for that time) distinguishing feature of Weinbaum's interplanetary stories was in his attribution of genuinely non-human, non-Earthly characteristics to alien forms of life found on other planets.

Weinbaum, who studied chemical engineering at the University of Wisconsin, took particular pains with the science content of his stories and they are all models of accuracy in fact and logic and reason in extrapolation. However, in one of his best stories, "The Red Peri,"



January, 1935; "Mightiest Machine," by John W. Campbell.
Illustration by Dold.

he violated one of the most inviolable "facts" of science fiction: that man cannot survive even for a minute in the vacuum and absolute zero of space without some form of protection. Weinbaum had two of his characters traverse a thousand feet of Plutonian landscape unprotected by any form of spacesuit without either freezing to death or exploding. Possible or not, he defended his audacity with impressive arguments.

The seventh Weinbaum story in 1935 was one written under a pseudonym, John Jessel, the justly famous "The Adaptive Ultimate" in the November issue. This was not an interplanetary story, but one of laboratory science in which a serum derived from fruit flies is injected into a girl dying of tuberculosis. The serum brings about a dramatic cure and at the same time endows her, due to some vague hormonal action, with the ability to physically adapt in every way instantly to any environment. The story has been adapted for theatrical presentation numerous times, both for motion pictures and television. The enthusiastic response to this story was evidence that Weinbaum's reputation rested solidly on his ability as a writer, regardless of what name he wrote under.

Harry Bates returned in June with a marvelous novelette, "Alas, All Thinking!" This is a story of the extinction of Genus Homo Superior three million years from now by a man from the present who is transported to that remote time in a time machine operated by one of the forty-one remaining members of the race of Man. The story is told with humor and irony in its examination of the meaning of intelligence and thought and its terminus in the incomprehensibly distant future, but at the same time it has a mood overlying it and underscoring its message that is comparable to the feeling Stuart transmitted in "Twilight" and "Night."

In September C. L. Moore returned to Astounding with her second science-fantasy novelette, "Greater Glories," a weird and wonderful tale of a strange presence on a deserted isle, a mood piece of almost hypnotic quality, beautifully written in the inimitable Moore style. In March, Murray Leinster found favor with a great space tale, "Proxima Centauri." Nat Schachner continued to present popular, although not great, stories in this year: "Mind of the World" (March), "Son of Redmask" (August), sequel to his fine "Redmask of the Outlands," "The Orb of Probability" (June), and a two-part serial, "I Am Not God" (October-November). Jack Williamson, ever popular, had a thought variant novelette in August, "The Galactic Circle," dealing in a grand manner with space and time and followed it in September with a two-part thought variant novel concerning the gaseous origins of the Earth—the planets with their civilizations floated like islands within the fiery sea of the Sun, in a sort of subspace protected by etheric shields. This was titled, oddly enough, "Islands of the Sun" (September-October). And Raymond Z. Gallun, responding to the insistent requests for a sequel to "Old Faithful," his immensely popular novelette in December, 1934 obliged with "The Son of Old Faithful," the cover story for July, a story every bit as popular as the first.

This is actually just a skimming of the surface of all the well-remembered stories of this year, but it is representative of the best as well as of some of the more popular stories printed. In some respects the year was not up to the one previous in terms of individually outstanding and memorable stories, but in terms of literary quality it was undoubtedly superior with the wealth of Stuart and Weinbaum gems



November, 1935; "The Red Peri" cover painting by Brown.

that pointed the way to a new and better and more mature science fiction.

Howard V. Brown, if anything, excelled over his work of 1934 with some outstanding covers, and Elliott Dold, with his magnificently imaginative and stark drawings, handled most of the interior artwork, with a feeble assist from Marchioni, a pale imitator of Dold. A sad announcement was made in December when Tremaine disclosed that Dold had been suffering from increasingly frequent periods of nerves and illness and would have to take a complete rest for a year. (There was also an unconfirmed rumor that Dold's eyesight was beginning to fail him. True or not, Dold's great productive period ended with 1935 and henceforth, for the next three years or so, this great artist would be represented in Astounding with at the most two or three illustrations per issue, and sometimes not at all.) To offset this sad news, Tremaine promised more work from Marchioni—which elicited few cheers—and the return of Wesso to Astounding—which did elicit cheers.

Virtually unremarked by anyone was the appearance in the July issue of a new artist, an artist who would one day be considered one of the greatest black and white illustrators of science fiction, and who would forever be identified with the Golden Age of Astounding; Charles Schneeman.

1936 found Astounding leveling off somewhat from the preceding two years with a marked lessening of the aura of excitement that had surrounded the magazine. One might almost say the magazine had settled into a comfortable thought variant rut and only ventured out of it when something out of the ordinary that was too good to let by came along. Tremaine most certainly had literary taste, as witness his publishing Don A. Stuart, Stanley G. Weinbaum, C. L. Moore, and other stylists, but the idea was still of overriding importance, as Tremaine as much as admitted in his editorial for April:

"Also, I am pleased to note the response to idea stories by writers (to 'Brass Tacks') whose thoughts explore new byways. It proves our audience is a thinking audience. Style, while desirable, is not all important to us."

This continuing emphasis on greater and greater thought variant ideas led to a monotonous similarity to much of the material in this and the following year. Ideas, of course, are essential to good science fiction; science fiction by definition is a form of literature based solidly on ideas. But form, mood, characterization, and style are not to be totally disregarded. However, in spite of the emphasis on thought variants there were a number of memorable events during the year and, unquestionably, Astounding was still head and shoulders above its competitors.

Trimmed edges, which had long been begged for by Astounding readers, were given them with the February issue. This enhanced the physical appearance of the magazine tremendously and made Astounding the most elegant science fiction magazine on the newsstands.

The most notable occurrence of 1936 was the publication of two im-

portant short novels by H. P. Lovecraft, the great writer of weird fiction who has been described in some circles as the modern equal of Edgar Allan Poe. The first of these, "At the Mountains of Madness," was presented as a three-part serial beginning in February. One of Lovecraft's longest stories, it told of an Antarctic expedition sponsored by Miskatonic University of Arkham which unearths and releases from eons-long imprisonment remnants of the "Elder Ones"—beings of awesome might who had inhabited the Earth millennia ago. Although objected to as being weird and not science fiction by a few purists, the majority of readers writing in to "Brass Tacks" raved over it and asked for more Lovecraft.

In "The Shadow Out of Time," a complete short novel in June—which rated one of Brown's best covers of the year—Lovecraft painted a weird and wonderful word picture of ancient horrors that involved time, archaeology, and mind exchange.

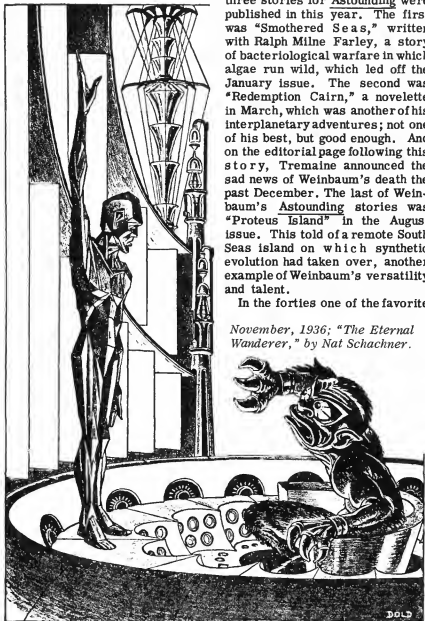
Jack Williamson's "The Legion of Space" had been one of the most popular novels published so far in the new Astounding, and demands for a sequel had been pretty constant since its appearance in 1934. In May, Williamson brought back Jay Kalam, Commander of the Legion, the giant but gentle Hal Samdu, and the chronically complaining but resourceful old Giles Habibula in another great adventure involving the fate of the Solar system as it is menaced by the invasion of "The Cometeers." This was a four-part serial in Williamson's best space opera form with a blending of high adventure, colorful characters, super science, and descriptive passages of rich imagery reminiscent of A. Merritt, an author greatly admired by Williamson.

Murray Leinster, the incomparable craftsman who almost never failed to turn out a superior story, added to his seemingly endless string of fine science fiction a five-part serial, beginning in August, "The Incredible Invasion." This was a story of invasion-with-a-purpose from the fourth dimension, of treachery and love and suspense, built on a solid foundation of speculative science. This novel was later extensively rewritten by Leinster (and updated as well to bring in the Soviet Union as an auxiliary menace) and published in paperback as The Other Side of Here (Ace, 1955).

Don A. Stuart had two stories in 1936, "Elimination," a short story in May in which science and madness are linked and a feature novelette in July, "Frictional Losses," which was another treatment of one of Stuart's favorite themes, the invasion and conquest of Man by extra-terrestrials in which humankind is ground down, scattered, reduced to impotency, scorned and ignored by the invaders, only to bounce back and drive them away. In "Frictional Losses" the Earth is attacked and civilization nearly destroyed by the invading Granthee with their atomic power before they, the Granthee, are finally defeated. The Earth waits—powerless and exposed—for the second wave of Granthee. But in the nick of time an old tinkerer comes up with a saving gadget that spells doom for the invaders—a gadget that destroys friction.

The "Old Faithful" trilogy was completed in 1936 with the appearance

Illustration by Dold.



of "Child of the Stars" in April, and Stanley G. Weinbaum's final three stories for Astounding were published in this year. The first was "Smothered Seas," written with Ralph Milne Farley, a story of bacteriological warfare in which algae run wild, which led off the January issue. The second was "Redemption Cairn," a novelette in March, which was another of his interplanetary adventures; not one of his best, but good enough. And on the editorial page following this story, Tremaine announced the sad news of Weinbaum's death the past December. The last of Weinbaum's Astounding stories was "Proteus Island" in the August issue. This told of a remote South Seas island on which synthetic evolution had taken over, another example of Weinbaum's versatility and talent.

In the forties one of the favorite

November, 1936; "The Eternal Wanderer," by Nat Schachner.

areas of speculation by science fiction writers was religion; religion exploited for power to maintain theocratic control over the masses, usually in alliance with perverted science, or in the conversion of science into a religion. Among the earliest examples of this fascinating theme were the "Durna Rangué" stories of Neil R. Jones, the first of which, "Little Hercules," appeared in the September, 1936 Astounding. The Durna Rangué was a religious cult that had existed in exile for a number of centuries in Oberon, a satellite of Uranus, which finally combines forces with space pirates and with superior science and weapons invades and conquers Earth, establishing a harsh theocratic government over the entire planet. The fusion of science and religion in the cult of the Durna Rangué was skillfully and convincingly worked out, and undoubtedly served as a model for future similar theocracies.

Nat Schachner, always a prolific writer, outdid himself in 1936 with ten stories, two of them under the pseudonym of Chan Corbett. Six of these were novelettes and one a two-part novel, "Infra-Universe" (December, 1936-January, 1937), and virtually all were thought variants. Schachner has been dismissed as a hack—largely on the basis of his phenomenal output—and exploiter of the thought variant. But regardless of his critics he continued to please a large number of fans with stories combining action and ideas; ideas that frequently had considerably more depth to them than the usual thought variant. A prime example of this was "Pacifica," which gave the July issue one of the three best covers of the year. "Pacifica" had as its underlying idea the extreme problem of over-population at the turn of the twenty-first century, and the effort to provide increased living space for crowded humanity by raising a new continent from the floor of the Pacific.

In June, John W. Campbell, Jr. began a series of articles under the general title of "A Study of the Solar System" which ran for eighteen consecutive installments, and were popularized yet scholarly treatises on the main features of the Solar system narrated with great style. This was one of the highlights of the 1936-1937 Astounding, was very popular with the fans, and the beginning of the magazine's policy of featuring an article in each issue.

In spite of individual high spots the year as a whole was disappointingly erratic. It was obvious by the end of the year, if not earlier, that the thought variant was rapidly becoming a dead end; that the idea, or gadget story was actually contributing to a sterility of ideas. In 1934 and 1935 there was direction in the course Astounding was following, but by the end of 1936 the magazine seemed to be floundering in a dead sea of dead ideas. The art department also showed a drop in quality over the earlier years: Brown's covers lacked the sparkle and Sense of Wonder that made his earlier covers so memorable. Of his twelve covers only three stand out: the April painting of a silver space ship against a solid background of blue, illustrating Eando Binder's two-part novel "Spawn of Eternal Thought," was perhaps his best of the year; the June cover for Lovecraft's "The Shadow Out of Time" showed his skill at rendering BEMs, and the July cover, illustrating

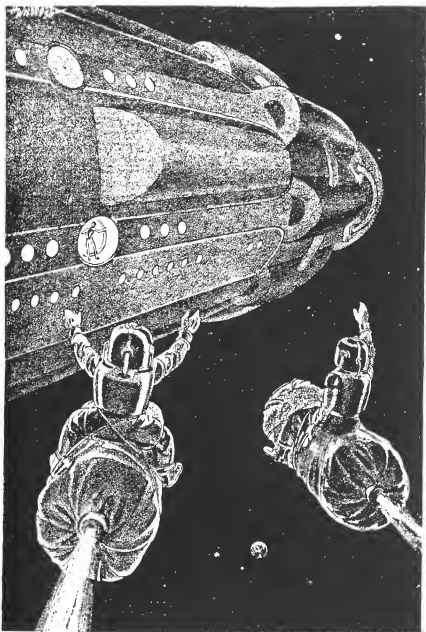
Schachner's "Pacifica" with a swarm of golden space ships streaming from a cloudbank, was tremendously effective. The interior art was saved from disaster by the all too infrequent appearances of Dold, Schneeman, and the returned Wesso.

One could only hope for better things in the coming year.

The new year continued more-or-less on the course set in 1936 with a continuing emphasis on the thought variant, whether so labeled or not. Nat Schachner continued to appear with reliable regularity both under his own name and his pseudonym of Chan Corbett, and started his popular "Past, Present, and Future" series in September with the novelette of that name. Wesso returned to the covers of Astounding with three which were vastly improved in concept and technique over his Clayton Astounding covers. The first was in June for Nat Schachner's "Earthspin," the second was in September for "Galactic Patrol" by Edward E. Smith, Ph.D., and the third for Arthur J. Burks' "The Golden Horseshoe" in November. Don A. Stuart gave us two of his greatest stories, E. E. Smith started a monumental new series, some new names made their initial appearances, and a change in editorship took place which had momentous significance for the future of Astounding and the entire field of science fiction.

Two authors who were to cast long shadows over the next two decades or so made their bows in 1937: L. Sprague de Camp and Eric Frank Russell. De Camp's "Isolinguals" told of a strange resurgence of ancestral memory and appeared in the September issue; in February, Eric Frank Russell, an Englishman, led off the issue with a novelette in the Weinbaum vein, "The Saga of Pelican West." In July, Russell, in collaboration with Leslie T. Johnson, rated the best cover of the year with a very fine time travel story, "Seeker of Tomorrow." Also appearing for the first time in Astounding was Willy Ley, the self-exiled German rocket scientist, as a superlative article writer with "The Dawn of the Conquest of Space," in March, and as an infrequent but fine writer of fiction (under the name of Robert Willey) with the cover story for February, "At the Perihelion." Another who made his debut this year was Norman L. Knight with a two-part novel beginning in July, "Frontiers of the Unknown." The frontier referred to was the ocean depths with its limitless marine life—both swimming and growing from the ocean floor—being exploited by the "Submarine Products Corporation" for the use of man. The July issue nearly gave a lot of fans heart failure when it appeared with untrimmed edges, but happily trimmed edges returned in August and this was the only time since the adoption of trimmed edges in February, 1936 to this date that the magazine came out untrimmed. (Actually, the printers only let a few thousand copies go through before the error was caught, and untrimmed copies of this issue are quite rare.)

Many fans have always had a particular fondness for the two Stuart novelettes of 1937, rating them as two of their all time favorite science fiction stories and two of Campbell's best. The first, "Forgetfulness,"



April, 1937; "Water for Mars," by Ross Rocklynne.
Illustration by Wesso.

published in June, was a measured, poetic tale of haunting beauty telling of the first starship of Pareeth launched into interstellar space to find a habitable planet for colonization. The story of the Pareethian's arrival on the arcadian planet, Rhth, and the saddening discovery that Rhth was peopled by a childlike race of gentle savages who had but a dim racial memory of past achievements and greatness, and the ironic but tender climax were all fairly standard science fiction ingredients magically transformed by Campbell's genius into a beautifully memorable story.

The second, "Out of Night," in the October issue was an entirely different type of story, a harking back to the basic theme of the "Machine" series and "Frictional Losses." This was the story of the ageless Sarn—and above all the Sarn Mother—who came to Earth from out of space, and after conquering it had ruled for four thousand years. It told of the growth of a powerful underground movement of man and his fight to finally resist the Sarn and their attempted imposition of a human matriarchy on human society. This fight is spearheaded by "Aesir" which is—as Grayth, the Human Administrator informed the Sarn Mother—"The essence of the will and thought, the power and wisdom of fifteen hundred billions of men who have lived on Earth." This Aesir takes the form of man, huge and amorphous, black as space. In actual fact it is the product of an electronic gadget developed by electro-technicians in the underground who hope to have the Aesir fully perfected in time for the impending showdown with the Sarn. Throughout the story the Sarn Mother remains alien, inscrutable—but at the same time, almost human.

Tremaine's emphasis on the thought variant, or gadget story eventually had its corollary in the letter section of the magazine. Traditionally, the letter sections of the science fiction magazines were and are used by the readers to air their opinions of the stories, artwork, editor, the magazine, or each other in a free and familiar manner. Serious discussion of science formed only a small portion of the total wordage published in the letter columns. And "Brass Tacks," Astounding's letter section, was no exception. In 1935 a "war" erupted in "Brass Tacks" between two well-known fans, Donald Wollheim and Bob Tucker (Wollheim is presently the editor of Ace Books, and Tucker is well known as Wilson Tucker, science fiction and mystery author). This was the so-called Staples War waged over the issue of the use of wire staples to bind science fiction magazines. Taking its inspiration from the numerous alphabet agencies of the New Deal, the Staples War spawned a proliferating number of alphabet societies denoting the individual's stand on this great issue—the SPWSSTFM (Society for the Prevention of Wire Staples in Science Fiction Magazines), the IAOPUMUMFSTFPUSA (International and Allied Organizations for the Purpose of Upholding and Maintaining the Use of Metallic Fasteners in Science Fiction Publications in the United States of America), etc. The whole thing got out of hand when Tremaine received the following, accepted it in good faith, and printed it as the lead letter in the January,

1936 "Brass Tacks" (Printed in its entirety, including editorial comments.):

"I Will Answer Them All"—Bob.

Note: I want every serious science fiction reader to receive this message just as I received it. I want you to receive the same impression I received as I read these two letters. Please read them carefully.

Dear Editor:

Inclosed is a letter I was instructed to mail to you the 15th of October, but in the sudden turn of events that followed, I overlooked it until today.

Perhaps you may already know it by this time, but our friend Bob has passed on. Strangely enough, the last words I ever heard him say concerned your magazine. As I left the hospital, he gave me the inclosed letter to mail, and requested that when I returned the next day I bring a new copy of Astounding Stories with me. I did, but unfortunately, I was too late. He was operated upon that morning and never regained consciousness.
—Anne Smidley.

Dear Editor:

Tomorrow will be the third Wednesday and Astounding will help fill in a lot of empty hours. I never knew before how much I liked Astounding until I found myself in a spot with nothing to do but count the days.

What I want to talk about is all these fly-by-night societies popping up in "Brass Tacks." In my opinion, the majority of those are for one reason only—publicity. Perhaps they got jealous of all the space SPWSSTFM was hogging, and decided to cash in on some of the free advertising. Dozens have already appeared, tomorrow's issue will doubtless announce a half dozen new ones. And I bet that you get plenty of letters announcing others that you don't print. In fact, there are so many clubs, the whole thing is becoming a bore.

I have thought a lot about it, and have come to only one conclusion: all of these societies must be banded into one or two. The combined rosters of the—two, shall we say—will amount to hundreds.

The two clubs with the largest membership should be the leaders, all the smaller ones merging into the larger ones. For instance: all the societies for staples join the SPWSSTFM (?): all societies against them join whoever has the largest roster on that side—which is not the IAOPUSA (?) by any means.

I intend to work toward this goal when I get back on my feet again. In the meantime, I wish some of the gang would start

the ball rolling. You have favored such a move, editor. I would suggest one person take it upon his shoulders until I can get back into the fight.

You know, the SPWSSTFM will be one year old this November. I intend to put out a birthday issue of D'Journal (Bob Tucker's fanzine), but the pill rollers and sawbones have taken all my cash—so it must wait.

Am going to close as the eats are coming—and you ought to see the swell nurse that feeds me. You fellows that haven't got any letter from me, please excuse it. I will answer 'em all as soon as I get out of here.

—Bob Tucker.

Note: We have lost a staunch supporter, and he leaves a challenge to you to carry on. Think carefully over his message concerning science fiction organizations. There could be no finer tribute to his memory than the accomplishment of the goal toward which he bent his thoughts. Will you accept his challenge and work for unity?

Tremaine had no sooner published this than he found out it was all a hoax, and that he had been made to look foolish in his own magazine. He was, understandably, quite annoyed. Alphabet societies disappeared immediately from the pages of "Brass Tacks."

Even during this period of frivolity, though, there were serious and thoughtful letters printed in "Brass Tacks." In January, 1937 Tremaine announced that with the next issue, "Brass Tacks" would be discontinued to be replaced by "Science Discussions," which would contain letters concerning science only, preferably inspired by the science content of Astounding's stories. While this change pleased many of the readers, many others vociferously clamored for the return of "Brass Tacks" and the following November a compromise was attempted with a combined letter section: "Science Discussion," followed by a shorter, separate "Brass Tacks."

The rumors that Dr. E. E. Smith had been working on a new novel over the years following the classic "Skylark of Valeron" were confirmed in the July issue with the announcement that his latest and greatest novel would begin in September. This was exciting news, indeed. According to Tremaine "Galactic Patrol," the new novel, was Smith's fifth and undoubtedly his greatest effort. It was a slight error to call this Smith's fifth novel; an error that was quietly corrected in the August issue: "Galactic Patrol" was his sixth novel, but his seventh story. In the early thirties, from 1932 to 1935, the leading fan magazine of the day, Fantasy Magazine, featured a round robin novel that ran for eighteen installments, each installment written by a different well-known writer: A. Merritt, Eando Binder, Edmond Hamilton, P. Schuyler Miller, John W. Campbell, Jr., E. E. Smith, etc. The name of the novel was Cosmos, and each installment, although it advanced the plot of Cosmos,

was usually a complete story in itself. Several of the *Cosmos* chapters were later reprinted as short stories in *Wonder Stories*—Edmond Hamilton's "Cosmos End" as "The Eternal Cycle," (March, 1935), "The Last Poet and the Robot," by A. Merritt appeared as "Rhythm of the Spheres" (October, 1936), and E. E. Smith's "What A Course!" was featured in the tenth anniversary issue of June, 1939, as "Robot Nemesis." In every respect "What A Course!" was a professional story, even though it appeared in a fanzine, and should have been counted by Tremaine as a published work of Doc Smith's.

"Galactic Patrol" was, Tremaine said, "...one hundred thousand words of a stupendous effort—the greatest science fiction serial Dr. E. E. 'Skylark' Smith has ever written."

Wesso's red, yellow, and green cover for September heralded the beginning of this great novel which was to run for six installments. "Galactic Patrol" introduced to science fiction the incomparable Gray Lensman, Kimball Kinnison, one of the greatest science fictional characters of all time. From the first scene in Wentworth Hall, at the Patrol Academy, where Kinnison is graduated first in his class, gets his Lens and his first assignment, to the final climactic face to face battle with Helmuth, "He who speaks for Boskone," the pace never slackens and Smith fills his novel with a galaxy of memorable characters and incidents.

Crime throughout the galaxy is showing an alarming increase and is apparently well organized and under the direction of someone, or some group known only to the Patrol as Boskone. The Galactic Patrol is Civilization's universal police force, its personnel made up of the highest types of the galaxy's many races. The greatest weapon possessed by the Patrol in combating the forces of Boskone is the Lens given to each being when he is graduated from his academy. The Lens is a lenticular jewel worn on the wrist having a pseudo-life of its own which is attuned to its wearer and is instant death to anyone else attempting to use it. It acts not only as a non-counterfeitable identifying symbol, but serves also as a transmitter and amplifier of thought, enabling Lensmen to communicate instantly with each other across the entire galaxy if need be. The Lens has been given to the Patrol by the insular mentalities of Arisia, the mystery-shrouded planet, who have, for reasons of their own, taken sides with Civilization against Boskone.

Kimball Kinnison's mission is to get a line on Boskone, track him down and destroy him. Kinnison ranges the galaxy in pursuit of Boskone aided by Worsel of Velantia, the first of that fearsome winged dragon race to wear the Lens of the Patrol, and Tregonsee, the chunky Rigelian with the sense of perception rather than sight. In a battle with the Wheelmen of Aldebaran, Kinnison is severely wounded and on his return to Prime Base, more dead than alive, he is nursed back to health by Clarrissa MacDougall, the red-headed fireball of a nurse who at first hates, and then learns to love, the Lensman. Shortly before his bout with the Wheelmen, Kinnison is given Unattached Status which makes him a free agent anywhere in the galaxy and answerable to no

authority but his own conscience and, as an Unattached Lensman, he is entitled to wear the gray leather uniform of that rank, becoming a "Gray Lensman." Kinnison eventually returns to Arisia for advanced training in the use of the Lens and the mind (the first Lensman to dare do so), and there learns the full potential of the power of his mind. With this advanced training he finally gets a direct line on Helmuth "who speaks for Boskone," and convinced that Helmuth is Boskone, insinuates himself into Helmuth's Grand Base and kills him.

This novel was rich red meat for Doc Smith's fans, lean and muscular compared to the fairy tales which in essence were the "Skylark" stories. This was cops and robbers on a grand, heroic scale laid in a universe much more logical and believable than that of the "Skylarks," and with a much more reasonable science base.

With "Galactic Patrol," the year ended gloriously. On the balance it was one of improvement over the previous year with enough great stories to satisfy almost anyone. The presence of E. E. Smith and "Galactic Patrol" caused many fans to compare the year favorably with the halcyon period of 1934 and 1935, but none of us realized that the next five years would eclipse anything that had gone before.

The September, 1937 issue of Astounding was to be Tremaine's last as editor. Tremaine had served Astounding and science fiction nobly in the four years of his editorship, giving the one new life and guiding it to leadership of the field, giving to the other new meaning and vitality. Tremaine had become editorial director of a number of Street & Smith magazines, and in September, 1937 he hired a new editor to replace himself at Astounding. The new editor, although young (he was twenty-seven), was considered one of the greatest science fiction writers of the day, but as an editor he was an unknown quantity and there were some who questioned the wisdom of the appointment.

Thus, quietly began the reign of John W. Campbell, Jr., one of the greatest (if not the greatest) and, at times, most controversial editors in the history of science fiction.

THE INTERREGNUM: 1937-1939

The appointment of John W. Campbell, Jr. as editor of Astounding Stories brought to an end the second, or "Tremaine" era of the magazine and marked the beginning of the third and greatest era—the legendary "Golden Age" of Astounding. But before the Golden Age began there was an interregnum during which Campbell served his editorial apprenticeship and gradually replaced the Tremaine influence on the magazine with his own. At first there was nothing to intimate to the average reader that a change in editors had taken place: the magazine in those days did not list the name of the editor on the contents page as it was to do later. The "flavor" of the magazine in the last three issues of 1937 was still that of Tremaine, and remained so, substantially, until Tremaine left Street & Smith in May of 1938 and his backlog of stories was used up.

Campbell wasted little time in impressing his own ideas on the magazine despite the overriding influence of Tremaine. In January, 1938 there appeared for the first time the column "In Times to Come" in which the coming issue is discussed and previewed, a column which is still an integral feature in today's Analog. In this column and on the editor's page, Campbell announced the first of a series of Mutant issues with the February issue. He didn't explain what the Mutant feature in February would be, but did explain the idea of Mutant issues in this way:

"In each of the Mutant issues that are to come during 1938, the change may seem small in itself, but it will be fundamental. It will help to determine the direction that the evolution of Astounding Stories and science fiction must take. Like nature's mutations, Mutant issues will not be frequent; only when a genuine, fundamentally different and original thing is to be tried, will I announce a true Mutant issue."

The first Astounding mutation in February, 1938 was the cover. It was an astronomically accurate painting by Brown of the Sun as seen

from the surface of Mercury. This was the first in a series of astronomical covers, and was presented with no printed matter on the picture itself.

In March, Campbell made the first major non-literary change in the magazine since the adoption of trimmed edges in 1936—he changed the name. The change was small but significant. Astounding was still Astounding, but now instead of being Astounding Stories it was Astounding Science-Fiction, complete with the hyphen. Campbell later admitted that he was never over-fond of the name Astounding, feeling that it lacked dignity, was too pulpishly sensational, and failed to accurately identify the contents between the covers. In changing the name at this time it was his intention to gradually de-emphasize the Astounding portion of the name and at the right time drop it completely leaving the magazine simply Science Fiction. Unfortunately for his plans, Charles Hornig, the former editor of Wonder Stories, brought out a new magazine in March, 1939 called...you guessed it, Science Fiction. One of the increments of this name change was the ready adoption of ASF by most fans—and the editor—as the shorthand name for the magazine; an abbreviation still in frequent use today.

The first Mutant story to appear in Campbell's Astounding was announced as "The Legion of Probability," by Jack Williamson, a three-part serial to begin in May. The novel was published, however, as "The Legion of Time," with a cover and illustrations by Charles Schneeman. This was Schneeman's first cover and a disappointing one, but it was made up for by his excellent interior illustrations. "The Legion of Time" dealt with parallel time streams of the future, and particularly of two antithetical probable future worlds. Which of these futures will solidify into actuality and which will cease to exist or to ever have been depends upon the casual act of a twelve-year-old boy in the Ozarks in the summer of 1921. There are two beautiful and highly desirable women from these two probable futures, one good and one evil, each mirroring their separate cultures, and contesting each other for the love and loyalty of the hero, Dennis Lanning, who holds the key to their future in his hand. There is lusty, brawling adventure up and down time and across parallel futures, and an ingenious resolution of the conflict. This was Jack Williamson at his best.

In April, Thomas Calvert McClary began a three part serial, "Three Thousand Years," which was an enjoyable tale but an obvious variation of the theme of his classic "Rebirth" of 1934. Of greater moment, however, was the appearance this month of "The Faithful," the first story of one of the more consistently good writers of the Golden Age, Lester del Rey (Ramon F. Alvarez del Rey). This was a story of man's self-annihilation through senseless war, of the last man left on Earth, and of the faithful continuation of man's genuine achievements and ideals by the dogs and anthropoid apes who had been taught to speak and to think deductively by controlled genetics. Although the story hovered on the thin edge of maudlin sentimentality it was saved from this dire fate by del Rey's deft skill at blending sentiment with reality.



March, 1938; the first Astounding Science-Fiction logo.
Painting by Wesso.

There were other new writers making their debuts this year, most of them making not much of an impression, but a few going on to much greater things in the years to follow; most notably, L. Ron Hubbard, Malcolm Jameson, and H. L. Gold.

L. Ron Hubbard, a name not unknown to readers of *Argosy*, and other general fiction pulps, entered the science fiction field via a slight, but entertaining short story in July, "The Dangerous Dimension." This was followed in September by the beginning of a three-part novel, "The Tramp." Both these stories dealt with exceptional powers of the mind—the first with teleportation, the second with the power to heal or kill by projected thought—and could, along with "Galactic Patrol," quite possibly be considered the forerunners of the psi stories that enjoyed such a vogue in *Astounding* during the fifties.

Malcolm Jameson's first science fiction story was a short story dealing with the application of meteorology to warfare, and to the elimination of that intense nationalism which, according to Jameson, inevitably leads to war. "Eviction by Isotherm" appeared in August and was followed by "Seaward," another short story in November, which was also a war story, this time concerning chemical warfare, organic chemistry versus inorganic chemistry.

In December, Campbell featured a story by "a name new to science fiction," H. L. Gold. Technically this was true. Although Gold had had several stories published in *Astounding* in 1934-35, they had been under the byline of Clyde Crane Campbell—so this was the first appearance of the name H. L. Gold. The story was "A Matter of Form" and told of a man who suddenly found his mind switched with that of a collie, and of his desperate efforts to communicate his plight to non-comprehending humans. An excellent story excellently illustrated by Charles Schneeman.

Two of Robert Moore Williams' stories this year were considerably above the general level of quality of his output and were two of the better short stories of the year. The first, "The Flight of the Dawn Star," was published in March and told of two men in a space ship who are caught in a space-time warp when they venture too close to the Sun. When they come out of the warp they find themselves lost in a completely unfamiliar sector of the galaxy and confronted with the problem of finding their way back to the Solar system without familiar referents to guide them. The problem and its solution is fairly obvious early in the story, but it's not so much the story as the telling of it which made this such a memorable little tale. The second story, "Robot's Return," appeared in September and tells of the endless search throughout space for the legendary home of their creators by a ship "manned" by robots, their brief landing on a devastated and lifeless planet, and the discovery there that their creator had been not a machine as they had believed, but "Man the weakling, eater of grass and flesh"—but, nevertheless, godlike in his vision and power. Both these stories were well illustrated by Schneeman, with his illustration for "Flight of the Dawn Star" being one of his best drawings of the year.



July, 1938; "The Legion of Time," by Jack Williamson.
Illustration by Charles Schneeman.

L. Sprague de Camp was back this year with three short stories and an article to follow up his successful debut with "The Isolinguals" in 1937. The first was "Hyperpilosity," in April, a satirical tale wherein man suddenly starts growing his own luxurious coat of hair. In October he introduced his educated black bear, Johnny Black, whose favorite reading matter was *The Encyclopedia Britannica*, in "The Command." And in December his short story, "The Merman" was featured on the cover with a fine painting by Charles Schneeman, that artist's second for *Astounding*.

The first of de Camp's many fine articles appeared in July. "Language for Time Travelers" was a fascinating and scholarly examination of the changes in language one might be expected to find in the future and was one of the most highly acclaimed features published during the year.

Another article that merits notice was "Catastrophe," by E. E. Smith—if for no other reason than that it is the only article ever written by him for professional magazines. The article expounded the galactic collision theory of the formation of planetary systems and was in the order of a justification for his use of so many planetary systems in his novels which had come in for some criticism by some of his readers.

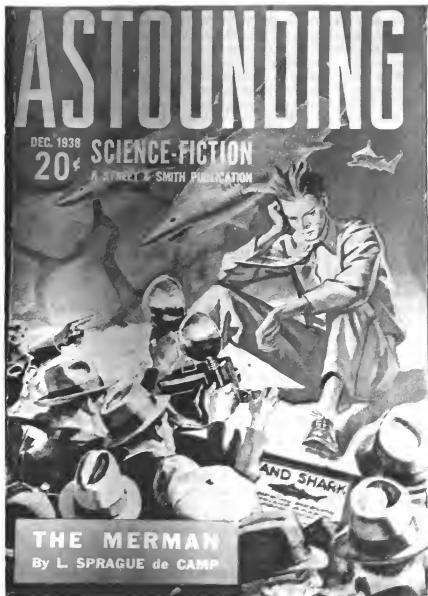
Arthur J. Burks introduced a new character, Josh McNab, and started a new series with "Hell Ship" in August, which merited what is possibly one of Wesso's finest covers for Astounding. "Hell Ship," and the subsequent stories in the series, concerned the adventures of a space-going counterpart of every Scottish engineer that in popular Saturday Evening Post type fiction sailed the earthly oceans in battered tramp steamers.

Clifford D. Simak—today a name to be conjured with—was virtually unknown to the bulk of Astounding's readers in 1938. In 1931 and 1932, Simak wrote five short stories, three for Wonder Stories, one for Wonder Stories Quarterly, and one for Astounding Stories. The story for Astounding was "Hellhounds of the Cosmos" in the June, 1932 issue. This was a typical Astounding story of the Clayton era, of the Earth menaced by invaders from the fourth dimension, but competently written and with some believable newspaper office scenes—not unsurprising since Simak is a newspaperman. He returned to the science fiction field because, he says, he had confidence in John W. Campbell, Jr. as an editor and felt he was one man he could write for.

Although the average Astounding reader was probably unfamiliar with Simak, he was known (at least by reputation) to the ardent fan as the author of the almost legendary story, "The Creator," which was published in the March-April, 1935 issue of William Crawford's semi-professional "literary" science fiction magazine, Marvel Tales. This story, which was reputed to be a taboo breaker of the day (it dared to utilize, supposedly, God as a science-fictional plot gimmick), remained a part of the legend of the past to most fans until it was reprinted (in July, 1961) in Fantastic magazine.

Simak's first story for Campbell's Astounding, in July, was a far cry from "Hellhounds of the Cosmos," or "The Creator." "Rule 18" was a football story. It was about the annual "big game" between Mars and Earth which for sixty-seven consecutive years had been won by Mars, to the great humiliation of Earth. The coach of the Earth team uses a time machine to go back in the past to recruit football greats of ages past, and with this team clobbers the Martians on their home grounds the following year. Although not a great story, it was a good one, and had an element of naturalness about it that was to become almost a trademark of Simak. The story was also enlivened by some very good newspaper color with a hot-shot reporter as its protagonist.

Simak had two more stories in 1938, "Hunger Death," in October, and "Reunion on Ganymede" in November, the latter the subject of a strikingly colorful cover by Brown. The first was about a reunion of



December, 1938: first new style logo. Painting by Schneeman.

veterans of an Earth-Mars war, the second about Iowa farmers on Venus; both were characterized by that element of simplicity and naturalness mentioned earlier, the extraction of drama from simple—even mundane—themes which distinguished his modern stories from his earlier ones.

A short story in June, "Seeds of the Dusk," by Raymond Z. Gallun, has long been a great favorite of mine. (In 1945, when Raymond J. Healy and J. Francis McComas were working on their monumental science fiction anthology, Adventures in Time and Space, published by Random House in 1946, I was consulted by them for suggestions of stories for possible inclusion. One of the stories I suggested was "Seeds of the Dusk," and I like to think that its eventual presence in that anthology was due to my enthusiasm for the story—a story which neither editor had read prior to my suggesting it.) A short story, it tells of the end of the Children of Men, the Itorloo, in the inconceivably distant future as they are invaded and ultimately destroyed by sentient spores that have floated across space from Mars, a la Arrhenius. This story epitomizes the best of the remote future, dead-or-dying-Earth theme that was so popular in the thirties. Its impact is heightened by the mood established by Gallun's rich imagery, his human compassion and genuine feeling for the characters involved in this final tragedy.

One of the highlights of the year—surely, of the first half—was Don A. Stuart's excellent novelette in January, "Dead Knowledge." This story of a highly civilized planet whose people to the last man, woman, and child had committed suicide, and the search by three men from Earth for the reason, again confirmed Stuart's reputation as one of the greatest science fiction writers of this, or any other, time.

Without question, the outstanding story of the year was a long novelette featured in August, "Who Goes There?" by Don A. Stuart. This brilliantly conceived and written tale of Antarctic horror is probably the greatest thing Campbell ever wrote. It was later "adapted" for filming as The Thing. An Antarctic expedition, winter-locked on the continent, discovers the body of a monstrous alien from beyond the stars which had lain quick-frozen in the Antarctic ice for twenty million years after the crash of its ship. The scientists of the expedition take it to their winter camp and begin thawing it in order to more closely examine it. The being revives under the thawing, escapes, and then proceeds to fight for survival. The monster's means of survival is to completely adapt itself to any living creature, becoming not just a simulacrum of the creature taken over, but being that creature down to its last cell and its most subtle thought. Only an infinitesimal portion of the monster is used to take over an animal or man if need be, so it is theoretically possible for this one alien entity to become every living creature on Earth in time.

The scientists of the expedition are aware of this threat, of course, and take measures to seal themselves off from the outside world until the monster can be destroyed. But of most immediate and horrifying

moment is the need for determining who, or how many of the sixty-five or so men at the base have already been taken over by the monster and are no longer the friends they knew but something alien and incomprehensible.

Campbell builds his tale of suspense and horror gradually with short, matter-of-fact sentences, establishment of character through dialogue, and descriptions of the monotonous routine and close quarters of an Antarctic camp. Against this background he introduces his monster and the problem it poses, and the suspense mounts without letup to the climax.

By the end of 1938 it became more than obvious that Campbell was wasting little time in implementing his ideas concerning the direction he felt science fiction should take, the direction he had intuitively anticipated with his "Twilight" of four years earlier, the direction he had continued pointing in with the rest of his Don A. Stuart stories. Although the Campbell influence became increasingly more pronounced as the year progressed, one year obviously wasn't long enough to bring about a complete revolution in science fiction. There were still holdovers from the past. That was to be expected. Campbell's Mutant policy was only slightly different from Tremaine's thought variant, and after his initial enthusiasm, Campbell seemed to have lost interest in it, feeling, perhaps, that it too gave too much emphasis to gadgetry and plot gimmicks and not enough to story. The Mutant idea, in and of itself, was not the vehicle to carry science fiction into new literary territories. It did give us one classic of the era, "The Legion of Time," but this was a story Williamson wrote without inspiration by the Mutant policy.

The immediate changes in approach and style were discernible not so much in the works of the old standbys, Burks, Schachner, Cummings, etc., as it was in the new writers who came in under the direct influence of Campbell: de Camp, Simak, Hubbard, Jameson, Ley, Russell, Norman L. Knight, del Rey, Gold. These men—and a handful of the more flexible old timers, Williamson, Gallun, Rocklyne, and, of course, Don A. Stuart—seem to have immediately caught the spark from Campbell and began writing what can only be called "modern" science fiction.

Paralleling the editorial changes—and more immediately noticeable—were the physical changes that began taking place within months of the Campbell take-over. The first was the astronomical cover on the February issue. This was the first such on the covers of Astounding. This was followed in June with a painting by Wesso of Mars as seen from Deimos, and in November by Brown again with Jupiter seen from Ganymede. The Jupiter painting had a glaring error incorporated in it which was admitted to by Campbell, but was printed as was because Campbell was interested in seeing how many readers could detect it. The error was an optical one and in no way detracted from the effectiveness of the cover. The first major editorial change was in the

adoption of the column "In Times To Come" mentioned earlier. Following this was the first really significant change, the change of name. As far as the covers were concerned there was no one artist doing the majority of covers during the year, and this departure from the earlier practice of having one cover artist was a noticeable change from the past. For the record, this is how the covers were assigned: Wesso did the January, March, June, and August covers, with June and August being two of the best of the year. Schneeman handled the May and December covers, and Thompson, a very poor September cover. The rest were by Brown, who was listed on the contents pages of the July, October, and November issues as H. "W." Brown, rather than H. V. Brown.

Campbell ended the year in an extremely dramatic fashion with the most radical change to date...a complete face-lifting of the magazine. Gone forever were the massive block letters that spread across the top of the magazine in diminishing size spelling out Astounding that had identified the magazine since the first issue. In its place was a more modern, streamlined logo with all the letters of the name Astounding of uniform height across the top of the magazine, with Science-Fiction, A Street & Smith Publication, the date, and the price closely grouped beneath. The price remained at twenty cents and the page count at 162, counting the front cover as page one. This change had been forecast in the November issue which appeared with a completely revamped contents page, neater, cleaner and less cluttered, and with what was to be the new cover lettering at the top of the page.

Actually, Campbell had little if anything to do with the changes in the makeup of the cover, contents page, and interior. Major changes of this sort, of course, originate in the art department. As with all major chains of pulp magazines, Street & Smith had a more or less uniform makeup on all their magazines with minor variations. Thus, during any given period, the twenties, the thirties, the forties, all Street & Smith magazines, whether western, detective, general fiction, character, or science fiction, bore a familial resemblance and were easily identified as Street & Smith magazines.

The cover change was the last of the Mutants. With the December issue, Campbell announced a new policy; the Nova story. The first Nova was H. L. Gold's "A Matter of Form." The Nova designation would be used sparingly, said Campbell in his December editorial, and only to identify a story that "deserves some special mark, some brief term of description that can tell you beforehand that a story unusual in manner of presentation rather than in basic theme is coming."

And thus the "old" Astounding was laid to rest with the first glimmerings of the Golden Age appearing over the horizon of the new year.

THE DAWN OF THE GOLDEN AGE: 1939-1940

We now come to the beginning of what is generally known as the Golden Age of science fiction as a genre, but more specifically of Astounding as a magazine. These next few years are the high-water mark of Astounding and of magazine science fiction. It is true that today we have men and women of considerable talent writing for the field, people who write sophisticated, mature—"slick" if you will—science fiction. The general level of ability is undoubtedly higher in most instances today than yesterday. However, the magic, that hard to define Sense of Wonder, the excitement that surrounded Astounding in the years of the Golden Age (and, in fact, the entire field) seems to be sadly lacking these days, and has for some years past. No longer is there that unbearable and interminable wait between issues; the thrill of a beautiful Rogers cover standing out like a diamond surrounded by paste as you approach the newsstand; the rush home and the hungry devouring of the entire contents at one sitting; the promise to yourself not to start the latest Heinlein or van Vogt or Smith serial until all the parts are at hand, and then the immediate breaking of that promise, and once again the interminable wait...

The January, 1939 issue is notable for one fact, if for no other; it contained the last, and without doubt the worst Warner van Lorne story to be published in Astounding. It was called "The Blue-Men of Yrano," and Campbell apologized for months afterward for publishing it. Warner van Lorne is somewhat of a mystery. Except for one story, "The Upper Level Road" in the August, 1935 Astounding, admittedly written by F. Orlin Tremaine, the true authorship of the remainder of the van Lorne stories is in doubt. Some time ago the brother of F. Orlin Tremaine claimed to have been Warner van Lorne, but this claim has never been corroborated and there seem to be valid reasons

for doubting it. Recently the question of van Lorne's identity has been the subject of debate amongst knowledgeable fans with nothing resolved. Robert A. W. Lowndes, old-time fan and respected editor, suggested the possibility that all the van Lorne stories were written by F. Orlin Tremaine. In 1942, said Lowndes, when he was editor of the magazine Future Combined with Science Fiction he received from an agent a manuscript signed by F. Orlin Tremaine which was written in the exact style of van Lorne, right down to his method of paragraphing. Lowndes didn't offer this as proof that Tremaine was van Lorne, but as an interesting point for speculation. To this day van Lorne remains an intriguing mystery: the mystery is not only the "who" of van Lorne, but the "why" of van Lorne. Why two such capable editors as Tremaine and Campbell felt compelled to publish the hackwork of Warner van Lorne is a continuing puzzle to older fans. If, as Lowndes suggests, Tremaine was van Lorne this would, of course, explain the regular appearances of van Lorne in the pages of Astounding more readily than anything else. At any rate, "The Blue Men of Yrano" marked the end of Warner van Lorne in Astounding and no one was sorry to see him go.

The rest of the issue was rather lacklustre. Manly Wade Wellman brought his two-part serial, "Nuisance Value" to a conclusion, de Camp continued the adventures of the popular Johnny Black in "The Incurable," and Norman L. Knight had the best story in the issue, "Saurian Valedictory," which told of a large slab of tourmaline found in the Ozarks which acted as a mirror reflecting the past of fifty million years ago into the present. Josh McNab was back in "The First Shall Be Last," Vic Phillips had the cover story, "Maiden Voyage," and Malcolm Jameson was back with his third story, "Mill of the Gods." The cover was by John Frew, his only one.

February had three outstanding features: an eye-catching cover by a new artist, Hubert Rogers, illustrating the second feature, Jack Williamson's novelette, "Crucible of Power," and the beginning of a magnificent new serial by Clifford D. Simak, "Cosmic Engineers," his first of many fine novels.

Rogers was new only to Astounding; he had been around since the late twenties on such magazines as Adventure (February 1st, 1928, etc.), but this was his first known attempt at science fiction. As Wesso was the cover artist identified with the Clayton era, and Brown with the Tremaine, so will Rogers always be identified with the Golden Age. And Rogers will always remain a significant Astounding cover artist. Wesso was fine, sometimes great; Brown was generally excellent; but Rogers was nearly always superb. This cover was predominantly red, the red of a Martian desert, with the silver hulk of a crashed space ship cutting diagonally across the cover and a man staggering away from it appearing in the foreground. A beautiful cover!

Williamson's story, "Crucible of Power," told of one man's ruthless drive for power on Mars; a drive for cheap power for the industries of Earth, and the accompanying drive for personal power. This was



February, 1939; first cover painting by Hubert Rogers.

Williamson writing in the modern vein, and quite successfully, too.

"Cosmic Engineers," which ran for three installments, very nearly outdid E. E. Smith's works in the scope of its power and action. The story starts modestly in the Solar system where two newspapermen discover an unpowered space-shell floating in the orbit of Pluto. On investigation they find the space-shell contains a beautiful young lady who has lain there in suspended animation for one thousand years. They revive her and find that she was once a brilliant scientist who had put herself into suspended animation to avoid revealing important military information to Jupiter during a war between that planet and Earth and Mars. While her physiological functions had been suspended her brain had been unaffected and she had spent the thousand years thinking and developing her mind to a fantastic degree. The boys take her to Pluto and while there she is able to understand the messages that have been coming from the Cosmic Engineers, beings who live on the rim of the exploding universe, warning of an impending collision between our universe and another universe. From here the action moves to the very edge of the universe, to the next universe, into inter-space, gets involved with parallel time and probable worlds, and—as if all this wasn't enough to plague the protagonists—Simak throws in the additional menace of a race of creatures called the Hellhounds who have been warring with the Cosmic Engineers for a million years, and who are trying to prevent them from solving their problem, hoping that when the two universes are destroyed they can step in and pick up the pieces.

Pure, unadulterated space opera. But Simak handled his vast canvas with its ultra-cosmic concepts so deftly that it couldn't help being a tremendous story in the great Smith-Campbell tradition.

March saw the last appearance of the Don A. Stuart byline in Astounding. This was the classic "Cloak of Aesir," sequel to the equally classic "Out of Night" of 1937. Man's revolt, with the aid of the chilling Aesir, against the benevolent but firm rule of the Sarn-Mother and her sisters who had ruled Earth unopposed for four thousand years, is finally brought to a triumphant conclusion. The final scene, where the immortal Sarn-Mother relinquishes her ages-old control over man and departs for her home world, is as moving a bit of writing as has ever appeared in science fiction.

Other stories in this issue were Burks' "Follow the Bouncing Ball," the third Josh McNab yarn; "Children of the Betsy B," by Malcolm Jameson, the story of the little steam launch that grew up and went to sea; "A Problem in Murder," by H. L. Gold, which brought back the reporter-detective hero of "A Matter of Form," and the second installment of "Cosmic Engineers."

The cover was by another artist new to Astounding, but not to the pulp field: Graves Gladney, a rather disappointing artist who didn't last too long here. The interior illustrations were handled competently by Binder, Orban, and Wesso, and superbly by Schneeman for "Cloak of Aesir."

It might be well to pause here and examine briefly the science fiction field, which was on the threshold of its first great boom, in order to better relate Astounding to it, and emphasize that Astounding didn't exist in a vacuum.

Prior to August, 1938 the field in America consisted of three legitimate science fiction magazines; Astounding, Wonder, and Amazing. (There were three or four quasi-science fiction and fantasy magazines on the fringe of the field, but they were hardly classifiable as legitimate.) In 1936 Wonder was taken over from Gernsback by Better Publications and its name changed to Thrilling Wonder Stories. This change gave the magazine a much needed shot in the arm and it soon rapidly approached Astounding in popularity with stories by such authors as Weinbaum, Williamson, John W. Campbell, Jr., Dr. David H. Keller, and others. Its pre-war peak was reached with the Tenth Anniversary Issue in June, 1939. This issue featured the short novel, "Dawn of Flame," by Weinbaum, "Robot Nemesis," by Edward Elmer Smith, Ph.D., "The Ultimate Catalyst," by John Taine, and "The Man Without a World," by John Coleman Burroughs and Hulbert Burroughs, the sons of Edgar Rice Burroughs. In addition to the short novel and the novelettes there were short stories by Jack Williamson, Otis Adelbert Kline, Eando Binder, and Dr. David H. Keller. The cover was by Howard V. Brown, and the illustrations were by Virgil Finlay, Jack Binder (brother of Eando), Marchioni, and Wesso.

Amazing Stories, which just barely managed to keep alive during the mid-thirties, was taken over in 1938 by Ziff-Davis of Chicago, who installed old time fan and sometime-writer, Raymond A. Palmer, as editor. Palmer made a completely new magazine of Amazing by abandoning the cerebral, and rather stuffy policy of the past, and establishing a policy aimed deliberately at the non-critical young teenager. Although the magazine was scorned by older (and presumably more sophisticated) fans, Palmer occasionally confounded them by publishing such items as Stanley G. Weinbaum's superman novel, "The New Adam," and a number of Edgar Rice Burroughs' novelettes, all of which are collectors' items today.

In August, 1938, Marvel Science Stories, the first new science fiction magazine to be published since the short-lived Miracle Science and Fantasy in 1931 (not counting William Crawford's semi-professional Marvel Tales, published briefly in 1935 with an infinitesimal circulation), appeared on the newsstands. This magazine showed great promise at first with such full length novels as Arthur J. Burks' "Exodus" and "Survival," John Taine's "Tomorrow," and Jack Williamson's "After World's End." This promise was not kept, and the magazine soon turned into a purveyor of a sex-and-sadism form of science fiction that revolted all lovers of true science fiction.

The second of the new magazines was Startling Stories, a companion to Thrilling Wonder Stories. The first issue, dated January, 1939, featured the great posthumous short novel "The Black Flame," by Stanley Weinbaum. The third was Dynamic Stories, which lasted for only two

issues. In February, two new magazines dated March, 1939 appeared. The first of these was the previously mentioned Science Fiction, edited by Charles Hornig, the second was the incomparable Unknown, the new fantasy companion to Astounding edited by John W. Campbell, Jr.

Sometime during 1938, Campbell received a manuscript from Eric Frank Russell which, he said, impressed him tremendously. However, great as the novel was, it didn't seem to fit into the policy he'd set for Astounding; however, it seemed perfect for launching a new magazine he'd been planning for several months, a magazine which would serve up a new, offbeat form of fantasy... not weird and not science fiction, borrowing the best from both, with the addition of a good helping of humor. The new magazine, Unknown, got off to a sensational start with Russell's fifty-thousand word novel, "Sinister Barrier," which was based on Charles Fort's thesis that "we are property."

In the remaining thirty-eight issues the novels and stories ranged all the way from the blood-curdling "It," by Theodore Sturgeon, to the ribald, Thorne Smithish "The Mislaid Charm," by A. M. Phillips. It is hard not to go on and on, mentioning the great and well remembered stories from this remarkable magazine: "None But Lucifer," by H. L. Gold and L. Sprague de Camp; "Fear," by L. Ron Hubbard; "Hell Hath Fury," by Cleve Cartmill; "But Without Horns," by Norvell W. Page; "Lest Darkness Fall," by de Camp; "Darker Than You Think," by Jack Williamson; "The Devil Makes the Law!" by Robert Heinlein; "Hell is Forever," by Alfred Bester. Never to be forgotten, also, were the marvelously appropriate covers and illustrations of the one perfect artist for Unknown: Edd Cartier.

Unknown, by the way, was not the first magazine to be brought out as a companion to Astounding. In September, 1931 the Clayton chain introduced Strange Tales, also edited by Harry Bates, as a bi-monthly companion to Astounding Stories, and as a competitor to Weird Tales, the magazine which had ruled supreme in that specialized field since 1923. Strange Tales never dethroned Weird Tales, but in its total of seven issues it did publish many fine tales of the weird and occult by such masters as Dr. Henry S. Whitehead, Clark Ashton Smith, Robert E. Howard, Ray Cummings, and others.

But to get back to science fiction. In May of 1939, Ziff-Davis brought out Fantastic Adventures in a large-size format to provide a fantasy companion to Amazing Stories and competition to Unknown, but it was never in a class with Unknown. From this point on and for the next couple of years new magazines continued to appear with remarkable frequency. The first issue of Planet Stories was dated Winter, 1939. Astonishing Stories and Super Science Stories were two fine magazines edited in the beginning by Frederik Pohl and which in many ways were second only to Astounding in quality during the early forties. And then there were those two unique magazines, Famous Fantastic Mysteries and Fantastic Novels (the latter lasting for only five issues before being combined with the former) which, until 1943, were composed almost entirely of reprints of the great fantasy classics from the old

Munsey magazines. And Future Fiction, later to merge with Science Fiction to become Future Combined With Science Fiction, and still later to change its name back to Science Fiction. A companion to this multi-titled magazine was Science Fiction Quarterly, which featured reprints of earlier novels, particularly those of Ray Cummings. Three short-lived magazines were Comet Stories, edited by none other than F. Orlin Tremaine, which lasted five issues, Cosmic Stories, which lasted three, and Stirring Science Stories, which saw four issues.

And finally there was that most remarkable magazine, Captain Future. A companion magazine to Thrilling Wonder Stories and Startling Stories, Captain Future featured in each issue a complete space opera concerning the adventures of Curt Newton, known throughout the Solar system as Captain Future, and his band of dedicated Futuremen, Grag the robot, Otho the android, Simon Wright the disembodied brain occupying a metal box which moves about on beams of force, and others. Although the "Captain Future" novels were never great in a literary sense, they were great fun to read. The majority—and the best—of the "Captain Future" novels were written by one of the real old pros, Edmond Hamilton who, although writing formula tales, couldn't help but give them a little something extra from his years of writing experience. Hamilton, in company with his equally talented wife, Leigh Brackett, finally received the recognition from the fans he long deserved by being chosen Guest of Honor at the (1964) 22nd World Science Fiction Convention in Oakland.

These then were the science fiction magazines (not counting the British magazines) which made up the field during the Golden Age of the forties. Some of these magazines at times gave Astounding a real challenge for leadership of the field, but never quite managed to overtake it. The duo of Astounding and Unknown was an unbeatable combination that has never before, or since, been equaled.

The April Astounding was distinguished by one of the finest of the many astronomical covers presented over the years. A dramatic view of Saturn and its rings as seen from Japetus, it was painted by Charles Schneeman and illustrated Nat Schachner's featured novelette, "Worlds Don't Care." This story was in a more mature style for Schachner, dealing as it did primarily with problems in human relations, rather than with startling scientific concepts. "Cosmic Engineers" concluded and Campbell was prompted to ask, in "Analytical Laboratory" (the department in which ratings of the stories—based on reader response—are published), for comments from the general reader as to their opinions respecting this type of super science yarn for the future. The response was mixed, but my own reaction to the story was enthusiastic approval.

The big news this issue was the beginning of "One Against the Legion," Jack Williamson's concluding novel in the "Legion of Space" trilogy, my favorite of the three novels, although generally regarded as the least of the trio. Williamson had a most intriguing villain in

the Basilisk, and the problems confronting the Legion in this adventure were a little more human and believable than in the previous novels. Another aspect of the novel that increased its enjoyment for me was the fuller disclosure of the shadowy past of Giles Habibula that had only been hinted at before. And to top it off, the illustrations by Orban were perfect for this story. Orban, incidentally, is an artist who has done yeoman work over the years and has been consistently underrated.

P. Schuyler Miller's "Coils of Time" was the subject of an uninspired cover by Graves Gladney for the May issue. "Coils of Time" was a sequel to the classic "Sands of Time" which appeared in the April, 1937 issue but, while an excellent story in its own right, it wasn't the equal of the earlier story. L. Sprague de Camp contributed another superlative article to this issue. In this case, the first installment of a two-part article entitled "Design for Life" which was a closely reasoned analysis of Earth's life forms and a detailed speculation on probable extra-terrestrial intelligent life forms. De Camp also had an interesting short story under the byline of Lyman R. Lyon, "Employment," about the reconstruction and resurrection of a woolly mammoth by reconstituting its atom structure.

Lester del Rey's "Day is Done" was a nicely told, emotion laden story of the passing of the last Neanderthal man and the emergence of Cro-Magnon. John Berryman, a new author, in his novelette "Special Flight," presented one of the more realistic and detailed pictures of the routines of space flight yet to appear in science fiction; an exciting and interesting story. "One Against the Legion" continued to develop the menace of the Basilisk, and the remarkable talents of Giles Habibula were reluctantly revealed by the old tosspot.

June brought the year to its halfway point with still no real sign of the Golden Age as yet.

Another of Graves Gladney's depressing covers graced this issue, purportedly illustrating Simak's "Hermit of Mars," which was a return to a more realistic and simple theme after the excesses of "Cosmic Engineers." Josh McNab, the good ship Arachne, and Arthur J. Burks all made their final appearances in Astounding with the novelette "Done in Oil." "Design for Life" concluded in this issue with de Camp proving to nearly everyone's satisfaction that if intelligent life does develop on other planets it will look not so much like a chrysanthemum or starfish, but will probably look somewhat like a man.

Chan Derron, the disgraced and hunted Legion officer who was the hero of "One Against the Legion," and wily old Giles Habibula solved the mystery of the Basilisk, upheld the honor of the Legion, saved the world from possible destruction, and brought the "Legion of Space" saga to a satisfying conclusion. This trilogy of "The Legion of Space," "The Cometeers," and "One Against the Legion" remains one of the enduring classic adventures of early science fiction, and should have a place alongside the epics of E. E. Smith and John W. Campbell, Jr. on any true fan's library shelf as examples of early space opera.



April, 1939; the famous "Saturn" painting by Charles Schneeman.

July, 1939; "Greater than Gods,"
by Moore. Illustration by
Charles Schneeman.

The July issue was unquestionably the first real harbinger of Astounding's

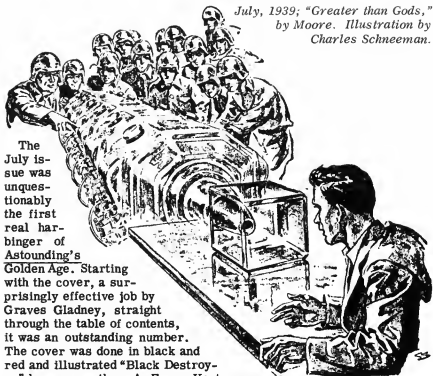
Golden Age. Starting with the cover, a surprisingly effective job by Graves Gladney, straight through the table of contents, it was an outstanding number. The cover was done in black and red and illustrated "Black Destroyer" by a new author, A. E. van Vogt.

Van Vogt's introductory effort in the science fiction field was an auspicious one.

The death struggle between Coeurl, the cunning and powerful catlike survivor of a once mighty race, and the scientists aboard the space ship Beagle who discover Coeurl prowling the wastes of his dead planet, was told with great sympathy for the foredoomed Coeurl. Van Vogt's prose was crisp and believable and the story moved along at an almost breathless pace. This one story rocketed van Vogt to the top level of Astounding writers; a position he was to hold for many years to come.

C. L. Moore made one of her infrequent contributions with her excellent novelette, "Greater than Gods," a suspenseful and sensitive story of alternate futures. This story was illustrated by Schneeman with some of the finest drawings of his career. "Past, Present, and Future" were back again, this time in "The City of Cosmic Rays." Good old Schachner had just about milked this series dry, but still managed to provide a bit of light divertissement in this formula tale.

A fan, and frequent letter writer to "Brass Tacks," made his debut in Astounding with his second published story, "Trends." With this story, Isaac Asimov really began a writing career that is still going strong. "Trends" was a sociological story of mass hysteria and religious fanaticism in conflict with man's first attempts at space flight.



Although time has nullified Asimov's basic premise, this remains a singularly perceptive and powerful story and is in every sense a classic. The remaining stories, "Lightship, Ho!" by Nelson S. Bond, "The Moth," by Ross Rocklynne, and "When the Half Gods Go," by Amelia R. Long were entertaining but not particularly notable. But as a bonus Willy Ley gave us another of his informative articles, this one a sort of companion to L. Sprague de Camp's "Language for Time Travelers," called "Geography for Time Travelers."

Robert Heinlein, who more than any other writer was responsible for making the Golden Age of the early forties a reality, appeared for the first time in the August issue with a short story, "Life-Line." The story of Dr. Pinero and his chronovitameter, the gadget Pinero used for predicting individual life-lines, told with Heinlein's deft touches that enhanced its believability, was an excellent story, but the great stories that were soon to come were certainly not intimidated by this first effort.

"Life-Line," and van Vogt's "Black Destroyer" the preceding month, combined to introduce to a receptive audience an altogether new type of science fiction. Perhaps we weren't really aware that a milestone had been reached, but even so, most of the readers recognized the quality of both stories, placing "Black Destroyer" in first place for July, and "Life-Line" second for August. One of the elements that set



these stories apart, that helped contribute to their greatness, was that of approach. Van Vogt's classic was essentially a BEM horror tale; in the hands of a less talented writer, that is exactly all it would have been. But van Vogt endowed Coeurl with intelligence, an intrinsic code of values, and motivation that made him, in spite of his alienness and ferocity, a believable and sympathetic creature; a far cry from the typical BEM of the recent past. And Heinlein took what was after all only a gadget story, albeit an intriguing one, and through skillful characterization and an eye for subtle detail, transformed it into a rather biting bit of social commentary.

"The Luck of Ignatz," by Lester del Rey was the featured novelette this issue and rated a disappointing and unrecognizable cover by Virgil Finlay—the only cover Finlay ever painted for Astounding. Ignatz was an armadillo-like creature from the swamps of Venus with a high level of intelligence and the ability to understand languages, but not to speak them. Ignatz was the inseparable mascot of the unfortunate spaceman who was his "master"; unfortunate because Venusian Zloahs are universally known to be Jonahs.

L. Sprague de Camp had an interesting and slightly cock-eyed story of uncontrolled animal mutations on an African game preserve called "The Blue Giraffe," and P. Schuyler Miller was moderately successful with "Pleasure Trove" which dealt with the search on another system for a narcotic pleasure dust. The best feature of this story was the loving care Miller lavished on his picaresque characters. "General Swamp, C. I. C.," a two-part serial beginning this month authored by Frederick Engelhardt was a forgettable tale concerning the rebellion of the Venusian colonies against mother Earth.

And finally, it should be noted that this issue marked the passing from the pages of Astounding of the old master, Ray Cummings, with a very poor short story, "An Ultimatum from Mars."

For the third consecutive month, Astounding presented the first story of one of the modern giants of science fiction: in July it was A. E. van Vogt with "Black Destroyer," in August it was Robert A. Heinlein with "Life-Line," and now, in September, it was Theodore Sturgeon with "Ether Breather." This was a very funny yarn about creatures inhabiting the ether who play havoc with normal commercial television broadcasts. Incidentally, this story written in 1939 presents a remarkably accurate picture of commercial television as we know it today. This story took first place in the "Analytical Lab" with no trouble whatsoever. Except for the Sturgeon story, the issue was not particularly noteworthy, with the possible further exception of Rogers' second Astounding cover, illustrating Manly Wade Wellman's "Forces Must Balance!" and Schneeman's forceful interiors for the same story.

The October issue brought back the mighty Kimball Kinnison and the Galactic Patrol in "Gray Lensman." To begin with, the Rogers cover is perhaps one of the most memorable paintings of the era. It shows Kinnison, arms akimbo, his Lens gleaming on his right wrist, clad entirely in gray leather, standing with legs apart before the open port



October, 1939; the "Gray Lensman" cover by Hubert Rogers.

of a space ship. The background was done in steel blue, green, and black; tremendously impressive. Oddly enough, whoever had to do with setting up the type for the cover became confused over the spelling of gray and used the British "grey" in the title on the cover, whereas the correct "gray" is used throughout the story.

This issue began the seventh year of Street & Smith's Astounding and Campbell's third year as editor. Campbell was justifiably boastful about celebrating this double event with the beginning of E. E. Smith's greatest novel. This was a long novel—100,000 words, or maybe a little more—and would run for four long installments. According to Campbell, if "Gray Lensman" were to be published in installments of the usual length it would run not for six months, but for eight.

"Gray Lensman" was illustrated by Schneeman who was much more effective than Wesso had been with his illustrations for "Galactic Patrol."

After his destruction of Helmuth and his Grand Base, Kinnison discovers that Helmuth was not the top of the Boskonian hierarchy and the Boskonian menace to Civilization was not ended by his death. Kinnison gets a partial line on what he believes to be the true base of the forces of Boskone, somewhere in Lundmark's Nebula, and embarks on his implacable and circuitous pursuit of the being he believes Boskone to be by ferreting out the underling zwilniks (drug peddlers) operating in our galaxy as agents of Boskone. During a scouting expedition into the Second Galaxy in his superdreadnaught, the Dauntless, he comes across for the first time a member of the Eich—"speaking for Boskone"—and the problem of the true identity of Boskone is intensified and further complicated.

The effect that Smith had on the average fan during these years is hard to explain today. However, an interesting attempt at this was made by Alfred Bester in his book review column in the December, 1960 issue of The Magazine of Fantasy and Science Fiction. In his review of Smith's The Vortex Blaster (Gnome Press, 1960), a novel based on short stories from Comet and Astonishing, and related to the Lensman saga, he said: "For years this department has wondered why the space operas of E. E. Smith have never failed to enchant us and we read his latest, The Vortex Blaster, with great attention... we know now the secret of Mr. Smith's hypnotic effect on us. We found the clue in a passage describing the hero on his way to a posh reception...." He goes on to quote the passage and then concludes, "By God! It's none other than the legendary John Carter of Mars,' we exclaimed, looking around for Thuvia, Maid of Mars, and good old Tars Tarkas. Dr. Smith never fails to transport us back into our childhood, and we're properly grateful."

This is, of course, a latter day assessment of the good Dr. Smith. At the time of the appearance of "Gray Lensman," Dr. Smith was still regarded by most fans as the biggest name in the field. This regard, and affection, was emphasized in Chicago in September of 1940 when "Doc" Smith reigned as Guest of Honor at the Second World Science



October, 1939; "Gray Lensman" illustration by Charles Schneeman.

Fiction Convention.

The affection and esteem that old time fans hold for Doc Smith continues to this day, a feeling not only for the stories he has given to science fiction, but for Doc himself as a wonderful person. At the (1963) 21st World Science Fiction Convention, in Washington, D.C., Doc Smith was presented the First Fandom Hall of Fame trophy for his contributions to the field of science fiction. And all in the field of science fiction, fans and professionals alike, sorrowed at the news of Doc Smith's death at the age of 75, of a heart attack, on August 8, 1965.

"Gray Lensman" was again featured on the cover of the November issue with a superb painting by Hubert Rogers. In this installment of what Campbell claimed was one of the longest science fiction novels ever written, Kinnison settles down to the job of laboriously digging for a new line on Boskone by infiltrating himself into the confidences of lower echelon zwilniks. And the action continues breathlessly apace.

Heinlein made his second appearance with a short story in this issue, "Misfit." In this story Heinlein took the New Deal CCC (Civilian Conservation Corps), which was at the peak of its activity at the time, and extrapolated it to the future as the "Cosmic Construction Corps" which was organized "...for the purpose of conserving and improving our interplanetary resources, and providing useful, healthful occupations for the youth of this planet." The hero of this tale was "Slipstick" Libby, the human calculator, who would reappear in a secondary role in a later novel. Although this was not one of Heinlein's better stories it was the first to demonstrate his skill in making space believable through his use of small details of action or description introduced almost casually into the narrative. It was also an interesting example of extrapolation on contemporary socio-political themes which was to be his major source of inspiration in most of his later works.

With the December issue the dawn year of the Golden Age ended. It had been a good year with several outstanding single issues and December was surely one of them. A. E. van Vogt was back with his second novelette, and for the second time given the cover, a miserable thing by Gilmore. "Discord in Scarlet" was another monster story, this time involving the scientists aboard the Beagle with Xtl, a frightening creature with awesome powers. Again, as in "Black Destroyer," the pooled brains and teamwork of the Beagle crew ultimately prevailed over the great intellect and superhuman powers of the alien entity. Despite the basic similarity between this and his first story, van Vogt infused it with imagination and detail enough to make of it a work of classic calibre. Campbell also used this story as the vehicle for a short-lived printing experiment that was carried on simultaneously in a number of Street & Smith magazines—accenting the black-and-white illustrations with red.

Kimball Kinnison continued his pursuit of Boskone in the third installment of "Gray Lensman," and Nat Schachner finally concluded the adventures of the three men from different eras, "Past, Present, and Future," with "City of the Corporate Mind." Schachner henceforth, in the handful of stories yet to appear, would concern himself with stories of more sociological themes than he had in the past. Wallace West's "Sculptures of Life" presented a future wherein life could be indefinitely prolonged through the agency of new bodies "sculpted" by artists skilled in the art of life sculptoring. It was a better than average story and interesting in that it is one of the few stories in the field that used one of the arts as a springboard for its science-fictional idea.

THE GOLDEN AGE BEGINS: 1940

Although the last half of the year just concluded contained many of the stories generally associated with the Golden Age, i.e., "Black Destroyer," "Life-Line," "Trends," "Gray Lensman," "Discord in Scarlet," etc., it wasn't until 1940 that the Golden Age came into full being and set the pace that was to be maintained over the next four or five years...

At first glance the January cover by Schneeman, for Harl Vincent's "Neutral Vessel," was disappointing, but closer examination led one to the inescapable conclusion that Charles Schneeman was unquestionably one of the finest artists illustrating for science fiction magazines, if not technically the best. However, the majority of Schneeman's covers were always vaguely disappointing as science fiction covers, his artistic ability notwithstanding.

Doc Smith really cut loose with everything in the book in the last installment of "Gray Lensman." Kimball Kinnison, after many adventures, had finally found the locus of the Boskonian evil on the planet Jarnevon in the Second Galaxy, "Lundmark's Nebula," the home world of the cold blooded race of the Eich. Boskone, he discovered, was not a single entity as he had always believed, but a council of nine composed of the Eich with one Eichmil as its head. In the final pages of the novel the massed military might of Civilization, under the direction of the Galactic Patrol and Kimball Kinnison converge on Jarnevon, and after stupendous battles in which a sphere of negative force chews up an entire planet, and the Patrol throws inertialess planets around like billiard balls, Jarnevon is destroyed and with it the council of the Eich and Boskone. As a reward for his efforts Kinnison is appointed Galactic Coordinator of the Second Galaxy. And, convinced that now the Boskonian menace is truly eliminated, Kim feels justified in finally planning to marry Clarrissa MacDougall and to settle down to a life

of relative peace and tranquility.

Discounting this installment of "Gray Lensman" which, like all of Smith's novels, was considered in a class by itself, the best story in the issue was Heinlein's "Requiem," a true gem of a short story. I doubt if there's a person worthy of the name of science fiction fan who on first reading this story didn't completely identify with Harriman, feel with him the yearning to just once—even at the risk of death—experience the ecstasy of space flight and to set foot on the moon.

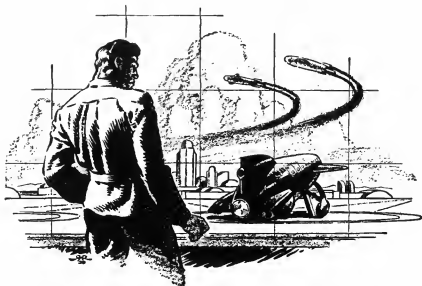
Lester del Rey contributed a delightful story to this issue, "The Smallest God." The hero of this story is a small rubber doll in the form of the god Hermes owned by a scientist experimenting with radioactive elements. The scientist makes a paperweight of the doll by stuffing it with a tarry waste product of an abortive experiment. Hermes eventually comes to life, falls in love with the daughter of his creator's enemy, loses her, and ultimately achieves a full sized body and settles down to work in the university lab with Dr. Hodges, the scientist who accidentally brought him to life. Although it sounds like fantasy it was science fiction told with insight and humor, and another in del Rey's increasing string of excellent stories that were establishing him as one of the consistently good writers of Astounding stories.

With the February issue Heinlein, after only three short stories, presented us with the first of his powerful novels that contributed so much to the legendary status of the early forties. Hubert Rogers' magnificent cover painting of a huge tank with three rocket ships arcing above it served to announce the first of two installments of "If This Goes On..." Heinlein's short novel was a startlingly realistic picture of a total dictatorship in America wrapped in the robes of a religious cult. Heinlein displayed considerable authority concerning mob psychology, propaganda, and the details of underground rebellion in this taut account of the Cabal's overthrow of the harsh and repressive dictatorship of the Prophet Incarnate. The skill with which Heinlein wove all these elements into his story, making them integral to the development of the plot but never letting them take over or slow the pace of the story, helped to make "If This Goes On..." an original and distinctive contribution to the maturing science fiction of the day.

"If This Goes On..." was the second Astounding story to win the NOVA designation; it was given because of its exceptional presentation, its power, its logic, and was much more deserving of it than H. L. Gold's "A Matter of Form" a year earlier, the first of the NOVA stories.

February saw L. Ron Hubbard, who had been since its inception a year ago almost a monthly fixture in Unknown, return to Astounding after better than a year's absence with a novelette, "The Professor Was a Thief." This was a nutty tale of a screwball professor who stole such things as the Empire State Building and Grant's Tomb for his model railroad.

March had another in the series of astronomical covers, "Uranus Eclipsing the Sun," by Gilmore, which illustrated Nat Schachner's



March, 1940; "If This Goes On...", by Robert A. Heinlein.
Illustration by Rogers.

featured novelette, "Cold." This was another of Schachner's stories dealing with the interrelationships of men under stress, as was his excellent novelette for April, 1939, "Worlds Don't Care," which, interestingly enough, was also the last story to be illustrated with an astronomical cover: Schneeman's beautiful Saturn painting.

"If This Goes On..." concluded in this issue with breathtaking swiftness as Heinlein related the details of the Cabal's minutely planned and flawlessly executed overthrow of the dictatorship of the Prophet Incarnate. If there was any criticism leveled at this story it was because it was too short, that all of the elements introduced into the plot were not fully realized. Perhaps. But on the other hand, this was only Heinlein's fourth story, and his first effort at anything longer than a short story, and if the story's shortness was indeed a flaw it was more than compensated for by its immediacy and its flashes of brilliance.

"Final Blackout" by L. Ron Hubbard, a novel in three parts, began with the April issue. This novel precipitated a very bitter name-calling controversy in the pages of "Brass Tacks," and elsewhere. The story was essentially a simple one of survival in a Europe almost totally devastated after several generations of war. The hero (identified only as "the Lieutenant") was a man born during a bombardment who grows to manhood in the environment of total war. Leading a brigade of "unkillables" the Lieutenant fights his way to military dictatorship of England and ensures his great triumph, the preservation of English independence from the United States, by arranging his own death.

Hubbard assumed two key premises on which he based the develop-

ment of events in his story: that the war in Europe would grind on to the point where governments and national boundaries disintegrated, communications broke down, and the war devolved into localized skirmishes between roving bands of armed and uniformed brigands and that the United States would remain neutral and completely uninvolved in the conflict.

To more fully understand the controversy this novel aroused it might be well to examine briefly the picture of things as they were at the time this story was written and published. Hubbard (always an incredibly fast and sure writer) wrote this during the first weeks of the war, as Poland was being destroyed by the German blitzkrieg, its army with its outmoded cavalry and inept strategy ground into the mud by Nazi panzer divisions, its cities pulverized by Stukas. It was a horrifying nightmare of total war. And to add to the madness, on November 30th, mighty Russia invaded tiny Finland. It seemed certain now, with the four great powers of Europe involved in war, that the Armageddon for European civilization that had, since World War I, been predicted as the end result of any future European war was a predictable certainty.

At the time the story was published most American radicals and liberals were actively urging more positive action by the government in opposing fascist aggression, and giving greater aid to the Allies; the anti-war, neutralist movement was at its peak, particularly amongst students.

The point at issue with "Final Blackout" narrowed down to this: was it communist propaganda, or was it fascist propaganda? Was it pro-war, or was it anti-war? It was none of these, basically, but depending upon one's political leanings, which in those days, and in certain circles tended to the extremes, the battle lines were drawn and charges of "communist" and "fascist" flew back and forth for months. Despite the political significance read into "Final Blackout" by partisans of the Left or Right, Hubbard maintains that it was apolitical in intent, and merely an attempt on his part to anticipate a future—grim as it could be—based on the most pessimistic interpretation of the evidence at hand and the best experts of the day. The fact that his future failed, in the main, to materialize doesn't at all lessen the merit of "Final Blackout" as an outstanding work of science fiction. And who knows? The future he erroneously predicted for World War II looks like a fair bet for a possible future to World War III.

There were three novelettes this month. "Admiral's Inspection" by Malcolm Jameson, "Reincarnate" by Lester del Rey, and "Repetition" by A. E. van Vogt. The Jameson story was the first of the popular "Bullard of the Space Patrol" series and introduces Bullard as a young lieutenant, newly arrived on the star class cruiser Pollux, confronted with the problems of an Admiral's Inspection which would result in him being upranked to commander by the end of the story. "Reincarnate" was an excellent tale about the victim of an atomic pile explosion who is saved by having his brain and spinal cord incorporated into a

metal contraption which turns him into a human-robot. Perhaps it wasn't an entirely original plot, but del Rey's detailed accounting of the problems involved in what amounted to learning to live all over again elevated it above the average. Van Vogt's third story was a disappointment compared to his first two, but still managed to be a better than average thriller of two men stranded on Europa, one of Jupiter's moons, with one of them bent on murdering the other.

May brought back for a brief moment one of the truly legendary names in science fiction, Philip Francis Nowlan. Phil Nowlan, as most fans know, was the creator of Buck Rogers who, as Anthony Rogers, first appeared in two novelettes in Amazing Stories in 1928 and 1929: "Armageddon 2419" (August, 1928), and "The Air-Lords of Han" (March, 1929). For ten years (except for two stories, "The Onslaught From Venus" Science Wonder Stories, September, 1929, written under the pseudonym of Frank Phillips, and "The Time Jumpers" Amazing Stories, February, 1934) Nowlan had been devoting his time to writing the Buck Rogers cartoon strip and had at last returned to the legitimate science fiction field with a two-part short novel in Fantastic Adventures, "The Prince of Mars Returns" (February-March, 1940). His 20,000 word novelette for May, "Space Guard," had been planned as the first story in a series, but Nowlan died suddenly of a heart attack shortly before the first story appeared and the series died aborning. Unfortunately, the story didn't rise to its advance notices, being a less than inspired bit of space opera and quite disappointing to one who remembered his first two stories for the fine, imaginative works they were.

The best complete story of the issue was Jack Williamson's "Hindsight." A study in character, it told of the redemption of a renegade Earth scientist who had renounced his allegiance to Earth and joined forces with its enemies, achieving a degree of fame and fortune in the process, only to realize at the moment of truth that he could not forget his Earth heritage. Pushing Williamson for top honors was Simak with his "Rim of the Deep," a suspenseful story taking place almost entirely beneath the surface of the Venusian sea.

"The Roads Must Roll," Heinlein's fifth story and his first novelette, was the subject of a fine Rogers cover and marked the midpoint of the year. Heinlein's picture of rolling roadways in the last quarter of this century seemed so real one almost expected them to appear within a few short years. With a high degree of realism, Heinlein related the attempted seizure of control over the roadways by the Functionalists, a party based on the theory that power should belong to those whose job, or function, was the most indispensable in the scheme of things. Because of the importance of the rolling roads, which handled virtually all surface movement of people and goods in the country, the Functionalists, working through the technicians and operating engineers who worked directly on the roads, attempted to take over the roads and thereby obtain political control of California, if not the entire country.

"The Testament of Akubii" by Norman L. Knight was a short story

of considerable merit. It told of the suicide of Akubii, a Martian, in order to extend a dwindling oxygen supply and thus save the life of his friend Greenbough, an Earthling and his sole companion on the space cruiser *Peregrine*, during an exploring expedition to one of the remote outposts of our star swarm.

And with this, the June issue, "Final Blackout" concluded and took its place in the Science Fiction Hall of Fame.

As someone pointed out years ago, July seems to be particularly favorable to Astounding because it is almost always a better than average month. July, 1940 stands as pretty good evidence of this. This issue contained the first installment of Norman L. Knight's two-part serial "Crisis in Utopia," illustrated by a striking Rogers cover; Heinlein's "Coventry," the sequel to "If This Goes On..."; "Dark Mission" by Lester del Rey, and the first of the Kilkenny cat series, "The Idealist" by Kurt von Rachen (a pseudonym of L. Ron Hubbard).

"Crisis in Utopia" was laid in the same milieu as Knight's earlier novel, "Frontiers of the Unknown" in 1937, his first science fiction story. For some reason, "Crisis in Utopia" was a vastly underrated story and never really achieved the recognition it so rightly deserves. For that matter, Norman L. Knight himself is one of the most undeservedly forgotten writers of the late thirties and early forties. Although his output was small, ten stories in six years, they were almost all of a uniformly respectable quality, well plotted, excellently written. "Crisis in Utopia" was a carefully worked out picture of the future development of the undersea resources of the Earth, with a lovely problem involved in the artificial, controlled development of a mutated type of man capable of breathing either air or water, and the impact of this mutation on normal man.

"If This Goes On..." ended at the point where the Prophet Incarnate was defeated by the rebellion of the Cabal and the long years of oppression under the dictatorship of the religious cult of the Prophets finally ended. "Coventry" takes up the story about twenty-five years later when civil liberties, the right of privacy, and respect for the individual have become facts of life. However, it is recognized that selfish, anti-social tendencies and behavior can't be completely eliminated as long as man is a free agent; so, rather than executing or imprisoning the anti-social he is sent beyond the barrier (an impenetrable force field) into Coventry where he can work out his own individual destiny as best he can.

In "The Idealist," Hubbard set up an explosive situation by confining two mutually antagonistic groups of revolutionaries, condemned by the provisional revolutionary government of Earth as counter-revolutionaries, to a space ship en route to the system of Sirius. Detached from the two groups, but also exiled for his revolutionary activities, is former Air Force Colonel Steve Gailbraith, the "Idealist" of the title.

Lester del Rey's "Dark Mission" was a grim little tale about a man from Mars who makes the first journey to Earth in an effort to obtain medical aid for his dying race. In the end he commits suicide after

destroying Earth's first rocket ship when he realizes that Earth's medical knowledge is not advanced enough to save Mars, and that contact between the inhabitants of the two planets would lead to the death of man on Earth as well as on the already dying Mars.

One of Rogers' most beautiful rocket ship covers set off the August issue and illustrated "The Stars Look Down," by Lester del Rey. This was another of del Rey's quietly competent probings of characters in conflict and the problems besetting the pioneers of space flight.

The most memorable story in the issue, however, was another monster story by A. E. van Vogt, "The Vault of the Beast." Although a monster story, it was not part of the "Beagle" series and the monster was not in the truest sense of the word a monster, but a robot. The robot had been designed by its creators, supremely evil beings inhabiting another universe and time from ours, to assume the shape and character of anything, organic or inorganic, it came in contact with or proximate to. Its mission was to make its way to Earth and there seek out the greatest mathematician in the Solar system. Upon finding this individual, it was to get him somehow, somehow, to Mars where it was to force him to solve the time lock set in the vault of ultimate metal which the Martians eons before had devised to imprison the "Beast" which had inadvertently dropped in on the Martians from his own universe. This "Beast" was, of course, one of the race of beings who had designed the robot. The Tower of the Beast, as the vault was called, was fifteen hundred feet in diameter and one mile high. The entire top was a door geared to a time lock which was integrated along a line of "ieis" to the ultimate prime number. This was a tremendous story despite the issue taken by a number of fans with van Vogt's math.

September, 1940 was one of the best single issues in the history of Astounding. Witness: The first installment of that superb classic, "Slan," by A. E. van Vogt; "Blowups Happen," by Robert A. Heinlein; Isaac Asimov's second story for Astounding, "Homo Sol"; "The Killenny Cats," by Kurt von Rachen, and "Quietus," by Ross Rocklynne. In addition to all this, there was a striking cover by Rogers, an astronomical painting depicting an Einstein Eclipse, and some very fine interior illustrations by Charles Schneeman.

"Slan" is a superman story...but with a difference. The superman story is one of the hardest to write convincingly and the number of really good superman stories can be counted on the fingers of one hand. One of the first to come readily to mind is The Hampdenshire Wonder, by J. D. Beresford, the novel that inspired Olaf Stapledon to write his great superman novel, Odd John. Another early entry in the field was Philip Wylie's Gladiator. The other outstanding superman novels all come from the pulp magazine field: Stanley G. Weinbaum's "The New Adam," from Amazing Stories, "But Without Horns," by Norvell W. Page, from Unknown, Frank M. Robinson's "The Power," from Bluebook (appearing almost simultaneously with the hard cover version from Lippincott), and, of course, "Slan."

The biggest hurdle to writing a successful superman story, and the

one that almost invariably trips up even the best writers, is for the human author to tell the story of the superman. He can't. It's a contradiction in terms, as Campbell pointed out in the July Astounding. Campbell further said: "To give the philosophy and motivation of a being completely superior is by basic definition impossible. A point on which supermen stories fail, leaving the reader with a vague sense of unreality and dissatisfaction."

Van Vogt, however, very neatly sidestepped this contradiction. He told his story of his race of supermen, the Slans, from the viewpoint of a young Slan isolated from the age of nine from his fellows who is forced to survive in a hostile world where his superhuman powers, undeveloped and not fully realized, serve at first as a handicap, for they mark him as a Slan—fair game for any human who discovers his true identity. Among other things that distinguish Slans from their homo sapiens brothers is their most unique feature, the tiny golden tendrils intertwined with their hair which serve primarily as a telepathic agent.

The story of Jommy Cross, the nine-year-old Slan who escapes from a blood-lusting mob which murders his mother before his eyes, is rescued by the old crone, Granny, who exploits his Slan powers to help her in shoplifting, his development as a Slan, his search for other Slans and the enigmatic tendrillless Slans, and his eventual triumph, was a sensation from the very first page. So sensational was it in the handling of the superman theme that it rated the rare NOVA designation. Campbell got so carried away with the story that he declared in the blurb for the first installment that "Slan" was the first serial to rate the NOVA symbol—unless Campbell doesn't consider a two-part novel a serial this honor rightly belongs to Heinlein's "If This Goes On...," which appeared in the February and March issues of this year. First NOVA serial or not, this was unquestionably the outstanding story of 1940.

"Blowups Happen" was another demonstration of Heinlein's skill in presenting beautifully realistic and, on the whole, remarkably accurate forecasts of the fairly immediate future. This one concerned the adverse psychological effects on the men tending the most dangerous machine in the world; an atomic power plant. "The Kilkenny Cats" was the second in the series which took its name from this story ("The Idealist" was the first), and told of Colonel Steve Gailbraith's maneuverings of his two antagonistic groups of revolutionaries into a wary truce for their mutual good after they reach their planet of exile circling the sun Sirius.

Ross Rocklynne's "Quietus" is another story I like to believe I was instrumental in getting included in Adventures in Time and Space. At any rate I championed it vigorously enough. It is a near perfect story, one that never fails to move me even after numerous rereadings. The story opens quietly and then moves inexorably with mounting tension to its logically tragic ending. Briefly, it relates how two gentle birdlike creatures from another planet bring their ship to a nearly

dead Earth, and there discover the last remaining bits of life still existing there. After a series of observations of the seemingly dead planet they come upon two creatures involved in what appears to them to be a death struggle. One of the creatures is a slightly repellent, hairless, bifurcated beast; the other they identify as a fellow bird-being. The agonizing dilemma confronting the two observers is which one of the two antagonists to aid. Which is the intelligent being deserving of their lethal assistance, which the animal? Needless to say, the one is a man, the last of his race; the other his pet, but foul-tempered talking crow. And this evidence of apparent intelligence on the part of the crow, as well as the marked resemblance to themselves, determines their tragic decision.

Asimov's "Homo Sol" concerned the problem confronting the Galactic Federation relating to the admission thereto of the planet Earth of Sol which had just developed interstellar travel. The problem was that Homo Sol would have nothing to do with the federation and gave disturbing evidence of such inventiveness that they would in all likelihood be the dominant species in the galaxy in a couple of hundred years. How to outwit the Earthmen and maneuver them into the federation as peaceful and cooperative members of galactic civilization?

The October issue featured the second installment of "Slan" on the cover by Rogers, which story was also the lead feature in the issue. In every respect this was another outstanding number, with all the stories much better than average, and two of them outstanding, with one of the two a recognized classic.

The classic story was, of course, Harry Bates' "Farewell to the Master." This was the story that served as the inspiration for one of the better science fiction movies to come out of Hollywood, The Day the Earth Stood Still. This story of the huge unmoving robot, Gnut, and his godlike "master" Klaatu was another masterpiece from the former editor of Astounding, and by all odds the best of his sparse output.

The second outstanding story was Theodore Sturgeon's "Butyl and the Breather," the hilarious sequel to Sturgeon's first science fiction story, "The Ether Breather." In "Butyl and the Breather" the harassed television network, in an effort to combat the disastrous effect the Ether Breather has had on normal transmission, enlists the aid of an inventor who has developed a means whereby he is able to translate odors into radio frequencies and thus transmit them through the ether. The assortment of noxious smells directed at the Breather will, they hope, have a salutary effect in driving the Breather from their particular segment of the ether. A very funny story perfectly illustrated by Edd Cartier.

The balance of the issue was made up of short stories. Malcolm Jameson was back with the second story in the "Bullard of the Space Patrol" series begun with "Admiral's Inspection" in April, "White Mutiny." Nat Schachner was present with "Runaway Cargo," and L. Sprague de Camp with "The Warrior Race."

November seemed to be somewhat of a letdown after the high level

maintained over the last few months. Of course, "Slan" continued without letup in tension and excitement, but other than that the rest of the contents were merely good; not a real classic in the lot.

Johnny Black, de Camp's educated black bear, made his final appearance in "The Exalted," a moderately funny story wherein Professor Ira Methuen, Johnny Black's mentor, develops a peculiar form of insanity which led to some most unexpected happenings. L. Ron Hubbard, writing under the name of Rene La Fayette, gave us "One Was Stubborn," which dealt with the deceptive nature of the universe; cogito, ergo sum. And Vic Phillips had the cover story, "Salvage," a fairly routine yarn about salvaging wrecked space ships on various planets.

On page 160 of this issue there appeared an announcement that to this day when I see it or think about it almost makes me want to weep. Campbell announced that for the first time in Astounding's history, the magazine was offering the original oil paintings used on its covers for sale. The covers offered were from the October, 1933 issue to the February, 1935 issue—seventeen of some of the best of Howard Brown's paintings! The price, ten dollars, limit one to a customer—first come first served.

"Slan" came to its smashing climax in the December issue, and with one of the first examples of what was to almost become a trademark of future van Vogt epics—the one sentence, or at the most one paragraph ending of a completely unexpected nature that usually required the reader to completely revise his concept of the meaning of the story.

Robert Willey (a pseudonym of Willy Ley), in his novelette "Fog" painted a picture of a Communist revolution in the United States of the fifties, a United States that had ridden out the war as a neutral and then suffered a major depression at the end of the fighting in the fifties. His thesis was that the average innocent bystander during a revolution observes the events transpiring as though through a fog, inadequately informed as to what's going on and that, in order for the revolution to succeed, tight communication must be maintained between all points of revolt. As a story, it wasn't bad; as prophecy, well...

P. Schuyler Miller won the cover with his "Old Man Mulligan," one of his best and most enjoyable stories.

And so the tenth anniversary year of Astounding ends in a most satisfactory fashion. By any standards this had been a notable year. "If This Goes On...", "Final Blackout," "Crisis in Utopia," and above all, "Slan," would have made it so. But the year was memorable not alone for its serials, but for the many excellent novelettes and the abundance of fine short stories that backed them up.

There were naturally some doubts as to whether or not Campbell and Astounding could maintain the pace set during the year just concluded. But more immediately, what sort of serial would follow the fabulous "Slan," how would it compare? Well, the novel scheduled to begin in the January, 1941 issue looked promising...something by a new author, Anson MacDonald, and called "Sixth Column."

THE GOLDEN AGE: 1941

By the time 1940 drew to a close the Golden Age of science fiction was already upon us. This memorable, and to some almost legendary period would last for several years before the inevitable decline would gradually set in. Most fans, for purely personal reasons, have their own "Golden Years" (for me, it is the 1934-35 period), but for the science fiction genre the forties (particularly the war years) will always be the "Golden Age." And Astounding was undoubtedly the most significant element of the Golden Age, providing leadership to the field and giving it the lustre that made it truly golden.

John W. Campbell, Jr. is, of course, the man responsible for the magazine's preeminence during this era. He early had definite ideas as to the direction he felt science fiction should take, but it wasn't until he became editor of Astounding that he was in a position to put some of those ideas into motion. He diverted Astounding from the course it had been pursuing and guided it into relatively new and unexplored channels; discovered and developed new and exciting writers and encouraged the better older writers to update their viewpoints. Generally he aimed his magazine at a more adult audience than in the past. Because of Astounding's position in the field most of the other magazines were perforce compelled to follow, although at a considerable distance for most of them. Campbell extended the horizons of science fiction, gave it a status in literature it had never enjoyed before, and raised it to a new level of maturity. At the same time he never lost sight of the importance of the story. The primary purpose of a science fiction magazine, after all, is to provide entertainment—not sugar coated science lessons nor exercises in literary brilliance. Although reasonably sound science and writing skill are essential to a good science fiction story, these elements standing alone do not make a memorable or classic science fiction story—the story is what re-

mains in one's memory long after everything else about it has been forgotten. During the forties, Astounding, with Campbell at the helm, was a golden argosy overflowing with great, classic stories; stories that will endure in one's memory as long as one retains any shred of a Sense of Wonder. And because of this deluge of great stories from the pages of Campbell's Astounding during this era, he deserves to go down in the history of science fiction as one of its greatest single contributors—and perhaps its greatest.

The Golden Age was, from a fan's viewpoint, a time of great and memorable stories, but of more general significance, it was the period of science fiction's greatest growth, its reaching toward a fuller maturity (still not yet achieved), and its growing interest in, and more serious examination of, man's relationship to man and to an increasingly more complex, inhumanly technological and hostile universe.

"Sixth Column," a three-part novel by a new author, Anson MacDonald, started the new year and laid to rest any fears there may have been as to the quality of the serial that would follow the incomparable "Slan." This was an exciting and realistic account of the overthrow of a conquering PanAsian Horde by a small band of dedicated American scientists, led by Major Whitey Ardmore of the regular U.S. Army, and using a phony religious cult as a cover for their "sixth column." The similarity to Robert Heinlein's "If This Goes On...", both as to plot and style, was marked and no one was particularly surprised when it became general knowledge that MacDonald was in fact Heinlein. However, there seemed no apparent reason for using a pseudonym on this story, but just why he did was not to be known until May.

"The Mechanical Mice," by Maurice G. Hugl (a real person, but in this case a pseudonym of Eric Frank Russell), was an intriguing tale of time paradoxes, an invention that had no apparent function, and tiny metal robots that scurried around pilfering watches.

Kurt Von Rachen was back with another of his "Kilkenny Cats" stories, "The Traitor." In this one, ex-colonel Steve Gailbraith in his continuing struggle to maintain a reasonable degree of cooperation between his two antagonistic groups (and to save the entire colony from certain death from the green fever) seemingly turns traitor and arranges with the Dictator of Earth, Fagar, to destroy the colony on Sereon, the planet of Sirius they had been exiled to. In the end his "traitorous" act brings the two groups closer together, and in addition he single-handedly captures a warship of the Earth's space fleet and the Kilkenny cats are on their roundabout way back to Earth.

Nelson S. Bond, E. A. Grosser, and Harry Walton rounded out the issue with short stories of no great significance and Rogers had a beautiful cover illustrating "Sixth Column."

Nelson S. Bond's "Magic City," the cover story for February, related how, in 3485 A.D., a primitive, matriarchal American society took the first hesitant steps on the long climb back to civilization. The magic city of the title was Loalnyawk, the feared city known as the City of

Death to which the Priestess Meg, Mother of the Clan of Jinnia, and her mate, Daiv, journey in an effort to placate the God Death but where they find instead the knowledge which will eventually enable man to regain the greatness he once had, many long centuries before.

"—And He Built A Crooked House—" by Robert A. Heinlein was a satirically amusing tale of an eager beaver architect in Los Angeles who designs and builds a house in the form of an unfolded tesseract. The whole thing becomes quite confusing and demoralizing when the architect, Quintus Teal, and his clients discover the house has been jarred by an earthquake into its normal four dimensional folded-up form. Although the story was told for laughs, still Heinlein's logical arguments defending the feasibility of his tesseract house were quite formidable.

The second installment of "Sixth Column" unfolded the details of the new religion of the god Mota and its use as a cover for the organization of a military underground. The tempo of the story increased considerably; a most satisfying novel, so far.

De Camp contributed a slight, and mildly amusing tale of time paradoxes in "The Best Laid Schemes"; P. Schuyler Miller had a disappointing novelette of thud and blunder and monsters in "Trouble on Tantalus," and Theodore Sturgeon examined the anomaly of crewmen on completely automated space ships in a short story, "Completely Automatic."

This was a mildly disappointing issue except for the pieces by Heinlein and the quietly colorful cover by Rogers.

Heinlein was back again in March with a powerful novelette which inspired one of Hubert Rogers' most stunning covers of the period. Rogers' painting of two steel blue space ships hovering over the Moon's



February, 1941; "Sixth Column," by Anson MacDonald. Illustration by Charles Schneeman.

surface with the Earth and the Milky Way in the background served as a marvelous illustrative complement to Heinlein's grim picture of exploitation and development of Venus, "Logic of Empire." In many ways this is one of Heinlein's better stories. Although not as spectacular as some of his others, it still had the requisite amount of action, suspense, and color. But this was more than a simple action story. As the title implied, this was an examination of the brutal measures which are supposedly justified by the logic governing the expansion of an empire. Colonial slavery, in the form of contract, or indentured labor, and the exploitation of the native inhabitants is almost invariably the result of imperial expansion; just as invariable is the ultimate rebellion of the "enslaved" against their distant colonial governors.

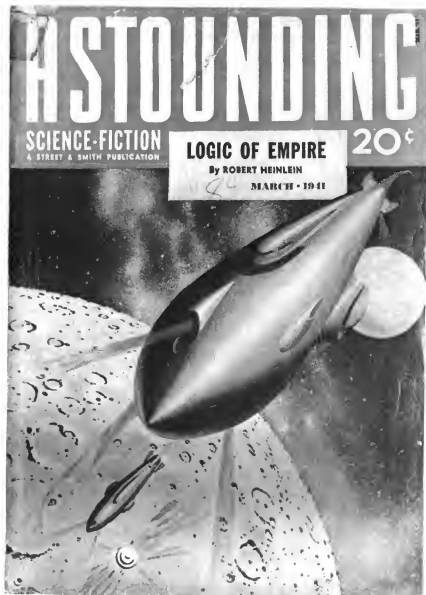
At the end of the story Campbell appended a footnote drawing the reader's attention to the fact that all of Heinlein's stories so far published were based on a common proposed future history of the world with emphasis on the history of America. "Logic of Empire" takes place shortly after 2000 A.D. and fifty or so years before "If This Goes On..." In the latter story mention was frequently made of the First Prophet, the man who set up the harsh theocratic dictatorship that governed America at the time of that story. On the last page of "Logic of Empire" a reference was made casually to "a rabble-rousing political preacher like this fellow Nehemiah Scudder." Nehemiah Scudder was to become the First Prophet.

Except for the concluding installment of "Sixth Column" which brought this excellent serial to a satisfying end, the only other story of any note was Theodore Sturgeon's "Poker Face." A member of a poker party demonstrates some remarkable and alarming abilities in his handling of the cards, and then proceeds to explain his talents by announcing that he is from thirty-five thousand years in the future and explains why he is here and now working as an obscure accountant. It ends with a neat, if maybe a little too pat, O. Henry twist, and was in every respect an excellent story.

Rogers' cover for the April issue was a beauty, a wonderfully composed and colorfully depicted scene of two men fighting with dueling sticks and illustrated L. Sprague de Camp's two-part serial, "The Stolen Dormouse."

De Camp had more or less slighted Astounding during the past several months, devoting his best efforts to Unknown. His contributions to Astounding in the recent past had all been short stories obviously composed off the top of his head, but "The Stolen Dormouse" was a more serious and well thought out piece, even if it was generously spiced with de Camp's own brand of logical insanity, and it was also his longest Astounding story as yet and for several years to come.

America a few hundred years from now, according to de Camp, has developed a rigid feudal system based on the great industrial houses and with an immutably stratified society of a pseudo-nobility with titles drawn from the business world. Dueling between rival houses is the order of the day with individuals wielding their "dueling sticks" in



March, 1941; "Logic of Empire" cover painting by Hubert Rogers.

defense of the honor of their house. The Dormice of the title are people who are tired of it all and subject themselves to suspended animation for a couple of centuries or so. When one of them becomes a kidnap victim in the course of a feud between the rival houses of Crosley and Stromberg, well...

This issue contained one of the great short classics of science fiction, "Microcosmic God" by Theodore Sturgeon. Since "Ether Breather" was first published in 1939, Sturgeon had become an author of the first rank in both Astounding and Unknown: "Ether Breather" and "Butyl and the Breather," "Poker Face," "Completely Automatic," and "Microcosmic God," all in Astounding. And for Unknown he had authored that classic of horror, "It." In addition there was also the delightful "Shottle Bop," "Cargo," "He Shuttles," "Derm Fool," and "A God in a Garden." Each and every one a fine story, with "It" and "Microcosmic God" undoubtedly classics. "Microcosmic God," with its believable and human scientist, Kidder, and his artificially created race of microscopic Neoterics, was Sturgeon's most ambitious work to this date; mature, with good characterization, superb plot, and a fine picture of the effect of intolerable outside pressures on a closely integrated society, where the society (the Neoterics) is forced to meet impending racial annihilation with inventiveness and ingenuity.

Asimov's positronic robots debuted in this issue with "Reason," a satirical short story showing how a rigid adherence to the laws of logic can, against all logic, still bring about a desired end.

Malcolm Jameson, in "Slacker's Paradise," (another in the "Bullard" series), took a true incident in U.S. Naval annals from World War I and transferred it to space. A very junior officer commanding a small space patrol boat, disgusted because his command is not in the war zone, is suddenly jolted with the problem of a gigantic enemy battleship approaching his tiny craft and offering voluntary surrender without a shot being fired by either side.

A. E. van Vogt was back, marking time with a short story, "Not the First." This concerned the first interstellar space flight at greater than light speeds and showed the consequences of violating the Lorenz-Fitzgerald contraction theory. As the title indicates, this was not the first trip this ship had taken, nor was it to be the last, apparently, as the story ends by segueing into the opening paragraph.

Harry Walton had a space tale featuring a van-Vogtian type alien in "The Scrambler," and P. Schuyler Miller was present with "Bird Walk," neither of which quite came off.

When all the controversies concerning Heinlein's social and political philosophies have been finally exhausted, when all the probings into the hidden significances of his stories have been made, one inescapable fact will emerge from all this and remain constant: Heinlein is a master storyteller almost without peer in the science fiction world. This May issue is one of the prime witnesses to that fact.

"Universe" is one of the great milestones along the road science fiction has traveled since its modern beginnings; as significant to the

field as was "The Skylark of Space" or "Twilight."

Heinlein's story of the giant starship, the first to be launched from Earth and bound for Centaurus, which is racked by mutiny and continues unguided for generation after generation through space, becoming in time a total and complete universe to its inhabitants, was a breathtaking concept when it first saw print. The character (or characters?) of Joe-Jim Gregory, the two-headed Mutie who opens the way to the discovery and understanding of the greater universe surrounding the ship, is one of the most unforgettable in all science fiction, a truly inspired creation. And the teleology supporting the concept the ship's inhabitants had of their universe is beautifully and logically presented. This was in every respect a magnificent story, and one that has grown in stature over the years.

(Heinlein had been anticipated somewhat a few months earlier by Don Wilcox with "The Voyage That Lasted 600 Years" in the October, 1940 Amazing Stories, but it's doubtful that Heinlein read the story prior to writing "Universe"; in any case, the Wilcox yarn is hardly remembered by anyone, whereas Heinlein's, once read, is never forgotten.)

Heinlein (in the guise of Anson MacDonald) appeared in a more immediately prophetic vein with his second novelette in this issue, the highly publicized "Solution Unsatisfactory." This story of the use of a poisonous dust, a byproduct of atomic energy (with a remarkable similarity to modern fallout) in a future war, against which there is no satisfactory defense, was a chillingly accurate forecast of Things to Come. In addition to which, it was an excellent story, although not to be compared to "Universe" for sheer story value.

Again Heinlein: One of the notable features of the year was the publication in this issue of Heinlein's outline of his Future History. The reason for Heinlein's use of the MacDonald pseudonym was finally disclosed. All the stories tied into the Future History were by Robert A. Heinlein, those outside the framework of the History were bylined with one or another of his pseudonyms. The idea of a working outline of background events to be used from story to story was not, of course, entirely new (Neil R. Jones, several years earlier, had a plan of the future into which he fitted most of his stories; Manly Wade Wellman and Eando Binder also used connected backgrounds for a number of their stories), but all of these were mere skeletal outlines compared to Heinlein's comprehensive future.

Eric Frank Russell had been a very infrequent contributor to Astounding since his first story, "The Saga of Pelican West" was printed in February, 1937. His next important story had been "Seeker of Tomorrow," a time travel story written in collaboration with Leslie T. Johnson which was good enough to rate one of Brown's most impressive covers of 1937; this was in July. Except for three short stories in 1937 and 1938, his next story printed in America was the previously mentioned, "Sinister Barrier." His last story was a short appearing in Captain Future in 1940. All this is by way of leading up

to the fact that his excellent "Jay Score" was presented in this issue. Who or what is Jay Score? "Jay Score" was a story—also a character, a huge and immensely powerful spaceman, with muscles and nerves of steel, who dramatically stakes his claim to membership in the human race during a searing crisis in space. J.20 is a robot. This was the first in a quite good series of stories which included the better known "Mechanistria" and "Symbiotica," which appeared later.

"Liar!" the second in Asimov's robot series, concerned a robot with the accidental and disturbing ability to read minds. Inasmuch as robots are prohibited from knowingly inflicting harm on a human, this led to an insoluble dilemma; how could the robot answer a direct question when he could see in the questioner's subconscious that a truthful answer would hurt or damage the human's ego or feelings? Dr. Susan Calvin, the robopsychologist who figures in so many of the stories, made her first appearance in this one, as did the fundamental laws of robotics in a passing reference.

In time, Asimov's Three Laws of Robotics came to be accepted by many other writers, either *in toto* or with minor modifications, and used by them in their own stories. It has become almost a dead certainty that if and when robots (as science-fictionists visualize them) become an actuality they will have Asimov's Three Laws programmed into their "brains."

THE THREE LAWS OF ROBOTICS

1. A robot may not injure a human being, or through inaction, allow a human being to come to harm.
2. A robot must obey the orders given it by human beings except where such orders would conflict with the First Law.
3. A robot must protect its own existence as long as such protection does not conflict with the First or Second Law.

Ross Rocklyne led off a rather mediocre June issue with a time travel puzzle involving six people, a skeleton with a gold ring on its finger and a million years of time in "Time Wants a Skeleton."

Nat Schachner was back after a short absence with a novelette, the first of his space lawyer series, "Old Fireball." Suppose two men each own an asteroid rich in minerals and suppose these two asteroids eventually collide and end up as one, which of the two men would be the owner of the new, larger asteroid?

"Artnan Process" by Theodore Sturgeon told of a couple of Earthmen's efforts to learn the secret of the Artnan process of extracting U-235 from U-237. Artna, a planet of Procyon, had established a plant on Mars for extracting U-235 and because of their cheap and secret process of providing power controlled the economies of both Mars and Earth. Also figuring in the story were a bunch of drunken

Martians ; Martians who get beautifully drunk on Coke.

Harry Bates finally ended his association with Astounding in this issue with his novellette, "A Matter of Speed," a great disappointment. It would be nice to be able to say that his last story for Astounding was also his best. But that, unfortunately, is just not possible. This story of dictatorship, invisibility and rebellion was a pale shadow of its three illustrious predecessors "A Matter of Size," "Alas, All Thinking," and "Farewell to the Master."



June, 1941; "Artnan Process" illustration by Schneeman.

July, that magic month for Astounding, again presented us with a memorable issue. The history of the Howard Families as recorded in "Methuselah's Children" by that eminent historian of the future, Robert Heinlein, would probably be on any list of all time favorites, and would more than likely be in the first ten. In this superb novel we meet Zack Barstow, the nominal leader of the beleaguered Families, the remarkable Lazarus Long who figures so decisively in their ultimate survival, Andrew Jackson "Slipstick" Libby who was labeled a "misfit" by his contemporaries in the CCC of an earlier generation,

and all the other members of the all but immortal Families who are forced by the fear, jealousy, and hatred of short-lived man to flee Earth for an uncertain future in the unexplored vastness of interstellar space.

The Families had their beginning with the setting up of the Howard Foundation in 1874 with the avowed purpose of encouraging births among persons of sound American stock. The unavowed purpose of the Foundation was to bring about an extension of the normal life span by judicious selection of couples with histories of long lived ancestors, and thus to gradually encourage, with each succeeding generation, longer and longer life spans. By the time of "Methuselah's Children" (2125 A.D.) the average life span of a member of the Howard Families was well over one hundred years, and increasing with each generation. The Families had maintained a masquerade of normal short life as a matter of policy and protection, but by 2125 this masquerade was pierced and mankind clamored for the secret of immortality; a secret that didn't, in the sense of instant immortality, exist. The apparent refusal of the Howard Families to share their secret, their selfish insistence on keeping the secret within the Howard Families, brought about a violent reaction of jealousy and mass fear for racial survival and in the more intelligent and sensitive, a debilitating inferiority complex.

Not only was this an enthralling story, full of adventure, conflict, romance, and enough casually tossed-off ideas to serve as the basis for a half-dozen other stories, but on another level it was a story that probed the problem of man's frailty and insecurity when confronted with the inexplicable and the different in his fellow man.

This is still a great classic science fiction novel, for the like of which one would have searched in vain through the pages of science fiction magazines a mere handful of years preceding it.

Alfred Bester's first story for *Astounding*, "The Probable Man," appeared in this issue. This also was one of the rash of stories dealing with the more paradoxical problems inherent in time travel that were popular during this period. It was quite good, though, particularly in the brief glimpse Bester gave us of a future America where Naziism reigned as Swasts and were opposed by an underground (literally) of the descendents of native Americans known as Readers, so-called because of their devotion to books.

"The Right to Buy Weapons is the Right to be Free." This imperishable slogan of The Weapon Shops first saw print in van Vogt's short story "The Seesaw" in this issue. The first glimpse of the war between the Weapon Shops and the Isher Empire was briefly given us in this story. The seesaw referred to the pendulum swings through time made by the energy charged hero who eventually built up such a charge of energy that in the inconceivably distant past his body reached the critical stage and thus was instrumental in the formation of the universe. Nothing picayune about van Vogt!

The remaining story of note was Anson MacDonald's "We Also Walk

Dogs," a delightful title referring to the General Services Company which would do anything, short of murder, for a price.

August was distinguished by one of Rogers' finest covers, a beautiful painting of steel blue space ships nestling in their launching pads, which illustrated "Jurisdiction" by Nat Schachner. This was another of the Space Lawyer series, and as in "Old Fireball," was concerned with legal flummery involving mining claims in the Asteroid Belt.

In the second installment of "Methuselah's Children" we find the Howard Families launched on their hegira into space in the New Frontiers, the sister ship to the vessel that figured so prominently in the earlier "Universe," the Vanguard. Lazarus Long, with the assistance of Slayton Ford, the head of the government who throws in his lot with the Families, commandeers the New Frontiers. And in a scene reminiscent of When Worlds Collide, the Families embark on the ship and depart this Solar system.

Theodore Sturgeon's "Biddiver" was about an automobile that was also a space ship; a harmless drunk gets into it by mistake and ends up in space, and after passing unprotected through the Heaviside layer becomes strangely transformed; a space pirate called The Fang; and two of the most unsavory and unloving brothers in science fiction. Sturgeon was rapidly building himself an enviable reputation of almost never turning out a bad story.

"Backlash," a short story by Jack Williamson, told of the efforts of an expatriated Russian scientist and his American assistant to alter the present Eurasian dominated world by effecting the death of Levin, the mustachioed dictator at a crucial point in the past.

September was one of the best all around issues of the year, with almost every item in it a gem. A single issue is usually notable for one story or serial installment, or at best two or three stories—the issue wherein every story rates high is a rarity. September was one of those rarities.

To begin with, Rogers' cover is one of the best of the year. One of the strongest characteristics of Rogers was his ability to compose a highly dramatic and colorful picture soundly without being crudely sensational. The cover illustrated beautifully Isaac Asimov's memorable classic, "Nightfall." This story, which was inspired by Emerson's lines: "If the stars should appear one night in a thousand years, how would men believe and adore, and preserve for many generations the remembrance of the city of God!", was one of the most thoughtful and meaningful stories in science fiction up to that time. Lagash circles the sun Alpha, one of a complex of six suns shining on the planet. Every two thousand and fifty years the suns are so positioned that only the weakest, Beta, remains in the heavens. At this time Lagash's hitherto invisible planetary companion eclipses Beta and total darkness descends on Lagash for a period of four hours. How would man, conditioned since the beginning of time to continual and intense light, react to sudden total darkness—and the accompanying appearance of myriads of stars, never before seen or ever known to exist?

Alfred Bester was back with his second story, the justly famous "Adam and No Eve," the story of Stephen Crane who destroys all life on Earth in a tragic accident, and then discovers, as he lies dying on the edge of the sea, the last man on Earth, that he will be the First Cause of a new cycle of life on Earth. Bester did a beautiful job on this story, developing it mostly through the ravings and hallucinations of a dying man.

Raymond F. Jones, who was to write many fine stories during the Golden Age, made his debut in this issue with one of his best short stories, "The Test of the Gods." Three men crash-land in the Venusian swamps where they are rescued by Igoroes, a race of intelligent but primitive reptiles. As insurance for good treatment they pass themselves off as gods, which seems like a good idea for a while until the Igoroes, not unreasonably, ask them to prove their godhood by passing The Test of the Gods. This seems fair enough...until the nature of the Test is disclosed.

One of the best articles during this period was "The Sea King's Armored Division," a two-part article beginning this month. This article examined a subject and a period of history that de Camp has always had an abiding interest in; the science of the Hellenistic Age.

Heinlein, in the guise of Caleb Saunders, contributed a time travel story of better than average quality called "Elsewhere"—not too original, but well-written at any rate. Norman L. Knight examined another facet of time in "Short Circuited Probability." M. Krulfeld had an excellent short succinctly titled "Mission" which told of an Eurasian invasion of the western hemisphere and the immediate need to sabotage the latest development in computers made by the Eurasians, which computer gave them a split second advantage over the Americans. It's interesting to note, in passing, the number of times "Eurasian"-American wars form the basis for stories at a time when the principal enemy of western civilization was supposed to be Nazi barbarism. Campbell gave us an article under his byline called "We're Not All Human!" which examined the possibility of mutated humans already existing amongst us, and made a good brief for the development of a Slan type superman here and now.

And finally, "Methuselah's Children" came home.

October was another great issue. "By His Bootstraps" by Anson MacDonald; "Common Sense" by Robert Heinlein; "Not Final!" by Isaac Asimov; "Two Percent Inspiration" by Theodore Sturgeon, and the concluding installment of L. Sprague de Camp's article "The Sea King's Armored Division," plus another fine cover by Hubert Rogers made this an outstanding month.

Time travel has been one of the standards of science fiction from the time of Wells' great classic, The Time Machine, which introduced most of the basic elements of the theme. There have been a number of great (if not classic) time travel stories written in the intervening years—and countless potboilers. MacDonald, with his story in this issue, wrote what many consider to be the ultimate in paradoxical

time travel stories. "By His Bootstraps" is one big outrageous paradox so logically presented by Heinlein that the reader is left bedazzled, bewildered, and almost convinced, but nevertheless delighted.

"Common Sense," the sequel to "Universe," remained unprinted for twenty-two years. Why it was not picked up by one of the editors of the countless science fiction anthologies that appeared in the late forties and all through the fifties in both hard covers and paperback, I know not; unless they felt it depended too much on "Universe" for full impact. At any rate, this has now been remedied. In 1963, Victor Gollancz, Ltd., of London, published a slim volume of 160 pages entitled Orphans of the Sky combining these two great novelettes into a short novel in two parts. In April, 1964, G. P. Putnam's Sons, of New York reissued the same book. After much too long a time, these two great stories have achieved the form they deserved from the beginning; the novel. And as a novel the whole becomes a fine modern parable of man's emergence from the dark ages and his unquenchable thirst for knowledge.

In "Common Sense" the events leading up to, and the results of, the mutiny are given greater scrutiny, and the characters rounded out more fully. And Joe-Jim Gregory has his moment of glory, going down fighting for something he believes in, but really doesn't quite understand—and endures as one of the great characters of science fiction.

"Two Percent Inspiration" was about a brilliant Earth scientist who wasn't all he appeared to be; an eccentric millionaire inventor-scientist who read the pulp adventures of Satan Strong, the evil scourge of the spaceways (for a particular reason!), and the problem confronting Martians on the planet Mercury; Martians don't sweat, you know.

"Not Final!" by Asimov was about a Jovian-Earth war, the effect of Jupiter's gravity on steel hulled space ships and the development of a force field substitute for steel. Winston K. Marks took a look at the unexpected results obtained from artificially induced immortality given to man with the added mental block against self-destruction, in "Manic Perverse." And de Camp concluded his examination of the almost-Age of Science during the Hellenistic Age to make October a very satisfying issue.

In the next issue, the penultimate chapter of the Lensman saga commenced with the first of four installments of "Second Stage Lensmen." Kinnison, convinced that the Boskonian War has been successfully concluded with his destruction of the home planet of the Eich, Jarnevon, in the Second Galaxy, which is believed to be the center of the Boskonian culture (as related in the concluding chapters of "Gray Lensman"), doffs his Lensman's Burden and makes plans for marrying Ciarrissa MacDougall but he is suddenly forced to re-examine his thinking by a direct intercession on the part of Mentor, his Arisian sponsor. And so off we go again in the seemingly endless search for the true nature of Boskone.

Because of the total length of "Second Stage Lensmen" (118,000

words), nearly half of the November issue was taken up by the first installment which, of course, dominated the whole issue. The only other story in the magazine worth mentioning was Nat Schachner's swan song in Astounding, "Beyond All Weapons." Schachner told of a ruthless world dictatorship and its eventual overthrow by a strange being called the Master who had arrived—messiah-like—purportedly from Saturn to help mankind regain its lost freedoms. Schachner was subsequently missed; he had, for years, been such an integral part of Astounding that his presence was almost taken for granted. One of the amazing things about Schachner is that during all the time he was turning out science fiction with one hand (and being derided as a hack by many fans), with the other he was producing his highly acclaimed biography of Aaron Burr—and later of Jefferson and Hamilton. A most remarkable man, Nathan Schachner; one the field can be proud of.

Rogers' cover illustrating "Second Stage Lensmen" was a disappointment after the superb cover for "Gray Lensman." Again, it was a portrait of Kimball Kinnison, clad in gray and stepping forth from a space ship. But the face looked like a cross between Jack Dempsey and de Camp's "Gnarly Man" (Unknown, June, 1939) or, as one fan said in sorrow, it brought to mind the title of a classic fantasy by Max Brand, "That Receding Brow" (All-Story Weekly, February 15, 1919; Fantastic Novels, March, 1950). Except for the face, however, it was a fine composition with drama and tension in every line.

The December issue was not only the last of the year, it was the last (apparently) of the standard pulp size, and the last with a cover price of twenty cents. Campbell announced on the Editor's Page that with the January, 1942 issue the magazine was going large size with a drop in page count to 128, and a price increase to twenty-five cents. This would still, Campbell assured us, allow for half again as many words as currently appeared in the 160 page issues. This was supposed to be an improvement, give added dignity to the magazine, and force its removal from the despised pulp sections of the newsstands to the hallowed area of the slicks. The change was also supposed to be in response to the plea of many fans over the years for Astounding to go large size. The large size format had almost traditionally come to be considered the ne plus ultra for science fiction magazines—since the days, of course, of the early Amazings and Wonders.

In the second installment of "Second Stage Lensmen" Clarrissa MacDougall gets special training which enables her to bypass the usual training necessary to becoming a Lensman and emerges a full-fledged Second Stage Lensman; Kinnison masquerades as Cartiff, the jeweler and fence, in a campaign to infiltrate the Boskonians and get a line on their prime base; Clarrissa—the "Red Lensman"—embarks upon her first assignment as a Lensman to the matriarchy dominated planet of Lyrane II, and discovers a pocket of the feared Delgonian Overlords operating in a hidden cavern, and we meet for the first time the dread Tyrant of Thrale and the Onlonians, the superiors of the late and unlamented Eich.



December, 1941; "Second Stage Lensman" illustration by Rogers.

1941 was the year that set the standards against which all the following years of the Golden Age were measured. Never again would Astounding run such a high concentration of classical or memorable stories in one twelve-month period. Just a quick reprise of 1941 will show what I mean, and also help to bring the year into sharper focus.

First, let's take the serials published during the year: "Sixth Column," "The Stolen Dormouse," "Methuselah's Children," and the first two installments of "Second Stage Lensmen." Two by Robert Heinlein, one by L. Sprague de Camp, and half of E. E. Smith's latest and greatest novel.

Secondly, the better novelettes: "The Mechanical Mice," "Magic City," "Logic of Empire," "Microcosmic God," "The Mutineers,"

"Universe," "Solution Unsatisfactory," "Artnan Process," "The Probable Man," "Biddiver," "Nightfall," "By His Bootstraps," "Common Sense," "Beyond All Weapons," by such authors as Heinlein, Asimov, Russell, Schachner, Sturgeon, Bester, Bond, and Hubbard.

Finally, just a few of the many short stories: "And He Built a Crooked House," "Poker Face," "The Seesaw," "Reason," "Liar!," "Not the First," "Slacker's Paradise," "Jay Score," "Adam and No Eve," "Backlash," "The Test of the Gods," "Not Final!," "Elsewhere," "Mission," "Two Percent Inspiration," and "We Also Walk Dogs."

If ever there was a roll call of fabulous stories, this is it—and all from one year. In addition to the stories we also had twelve of the best covers painted by Hubert Rogers. It was also the last year in which Rogers' covers appeared on every issue. The weakest feature of Astounding during the year was in the department of interior illustrations. There was not enough Schneeman and Rogers, and far too much Kramer; the most abysmal artist (and I use the title advisedly) ever to appear in a science fiction magazine.

Two things are very evident in this summary: Robert A. Heinlein dominated the year completely, and van Vogt was startlingly conspicuous by his absence—"The Seesaw" and "Not the First" notwithstanding. Never before or since has the field seen such a phenomenon as Heinlein who, in two short years, and with a relatively small number of stories, changed the face of science fiction for all time. Other authors have exerted profound influences on science fiction in the past in one way or another: E. E. Smith freed us from the confining limitations of the solar system and gave us the entire universe to play around in; Campbell expanded on Smith with stories dealing with vast concepts and inconceivable power, and (as Don A. Stuart) combined science-fictional ideas with elements of mood, poetry, and imagery found more often in the sister field of fantasy. And finally, Stanley G. Weinbaum endowed us with alien entities that were truly alien. These were all significant contributions to the genre, and certainly contributed to the development of science fiction by their influence on succeeding writers. But Heinlein's influence was manifold and revolutionary. He has been called a "Renaissance Man" in the narrow sense of the talents and diversified knowledge he brought to bear on his chosen field of science fiction. Heinlein combined a firm grasp of practical politics, sociology, psychology (both individual and mob), the military, semantics, the various physical and applied sciences (and used all of them as themes or key ideas in his stories) with a generally liberal humanitarian outlook and the skill and discipline of a fine writer. Seldom did he let any of the structural elements in his stories obscure his main purpose, the telling of a story in the best manner possible. Heinlein had his faults, naturally, but they were so niggling compared to his virtues as a writer that they aren't germane to this discussion.

On the July Fourth weekend of 1941, the 3rd World Science Fiction Convention convened in Denver, Colorado. The Guest of Honor was Robert Anson Heinlein; honored after only two years as a writer of

science fiction, a testimonial to the tremendous impression he had made on the field.

The failure of van Vogt to follow up his sensational "Slan" with something a little more powerful than "Not the First" and "The Seesaw" was one of the mysteries of the year. There have, of course, been instances of authors who have shown great promise with a few stories and then ceased to exist as far as science fiction is concerned, but van Vogt, from his first published story, "Black Destroyer," which was so enthusiastically received by the readers, to the tremendously sensational "Slan" barely a year later, not only showed great promise, he had already arrived. It could only be hoped that something better would come from him in the next year.

By the time the January, 1942 issue of the new large Astounding would appear the United States would be at war, and things would never appear quite the same again.

THE "BEDSHEET" ASTOUNDING: 1942-1943

The brief era of the "bedsheet" Astounding began with the January, 1942 issue, to the joy of many and the despair of others. The—roughly—7 x 10 inch pulp size was the ideal dimension for science fiction magazines. The large size magazine broke up that wonderful rank of yellow and black spines that made one's collection of Street & Smith Astoundings so distinctive on the shelf.

To be honest, the new format was impressive. The cover painting (a fine Rogers) was the same size as on earlier issues with the addition of a gray border surrounding it on all four sides with the logo superimposed on the upper portion of this border.

The feature story for January was Jack Williamson's "Breakdown" which dealt with the disintegration of a static society and had as its leading character a strong-arm labor boss. This was an entirely different Williamson from the author of "Legion of Space" or "The Legion of Time." Without denigrating his earlier classics in any way, this still was a much more mature and sophisticated story than his space and time epics.

That indomitable champion of civilization, The Gray Lensman, one of the entities collectively known as Star-A-Star, the nemesis of Boskone, Kimball Kinnison, becomes a wheel in the Thralian system, eventually becoming the Tyrant of Thrale—the top dog (or so he thought) of Boskone! And thus in the third installment of "Second Stage Lensmen" everything seemed to be coming to a head, and the conclusion of the long drawn-out Boskonian war appeared to be nearly over.

The greatest of all feminine writers in the science fiction field, C. L. Moore, was back in February after a much too long absence with her first cover story for Astounding, "There Shall be Darkness." This novelette, which told of the departure of the Earth legions from Venus was an extremely evocative and moody piece in the great Moore

ASTOUNDING

Science-fiction 25¢



BREAKDOWN

by JACK WILLIAMSON

JANUARY - 1942

A STREET AND SMITH PUBLICATION

January, 1942; first "bedsheet" size issue. Illustration by Hubert Rogers.

tradition. A marvelous story.

"Second Stage Lensmen" came to a climax with a denouement that rocked this writer right out of his chair—as it must have many others at the time. Kinnison, in his masquerade as a Thrallian, had connived and killed his way to what he thought was the top of the Boskone hierarchy, becoming in fact the Tyrant of Thrale—only to discover that his Prime Minister, Fossten, had been his predecessor's superior. In the climactic scene, Kinnison and Fossten, whose true identity is concealed by a zone of hypnosis, wage a motionless and silent battle of minds as the Gray Lensman implacably bores into the zone and through the mind shields in an all or nothing attempt to unmask and kill the true evil genius behind Boskone. At last Fossten's shield gives way to Kinnison's greater mind, and he stands revealed to Kinnison as—an Arisian! Kinnison is understandably shaken by this, but goes on to kill him. Mentor gives Kinnison to understand that the being known as Fossten was a renegade Arisian, really quite demented.

This seems to settle once and for all the Boskonians, and Kinnison settles down on Klovvia in the Second Galaxy, becomes Galactic Coordinator, and marries his Clarrissa. The suggestion that an Arisian was the guiding genius behind Boskone seemed to be a logical and neat gimmick for winding up the Lensman Saga, and I rather imagined at the time that that was the way Doc Smith originally intended it. But more on this subject a few years hence.

Other stories in this issue were "Sorcerer of Rhiannon" by Leigh Brackett, an unimportant but enjoyable story; "Medusa" by Theodore Sturgeon, a story that just missed, about a being of planetary size; "The Rebels" by von Rachen—the Kilkenny Cats were still at each other's throats and Colonel Gailbraith was still pulling them apart, and Raymond F. Jones had some pertinent things to say about transportation in "Starting Point," his second story in *Astounding*.

A. E. van Vogt, who had produced but two short stories in 1941, was back in March with the cover novelette, "Recruiting Station." This story was by a new van Vogt, intricately plotted and somewhat vast in scope, dealing as it did with time and interplanetary war. However, it was still far below the quality of "Slan." It did, however, have an intriguing character in the person of Dr. Lell, a man of superior talents, and one of the more memorable last lines in science fiction, "Poor, unsuspecting superman!"

"Goldfish Bowl" by Anson MacDonald was a near perfect story concerning the mystery of two water spouts in the south Pacific—one rising from the ocean into the stratosphere and the other descending—and the warning tattooed on the body of a dead man that "creation took eight days." And "Runaround" by Asimov was the third in the Robot series; it examined the problem of an aberrated robot and his redemption. All the robot stories so far presented by Asimov followed the same pattern and had predictable outcomes. Take a situation into which a highly specialized or experimental robot is introduced to perform a specific function, then have it develop a malfunction, usually of



April, 1942; "Co-Operate or Else," illustration by Charles Schneeman.

a bizarre nature, and then work desperately to discover the cause and cure before all hell breaks loose. These stories were saved from being formula nothings by Asimov's writing skill, his sense of humor and his truly remarkable concept of the positronic robot and its impact on

human society.

A rather startling cover by Rogers of a rocket ship landing in an open glade in a giant redwood forest served to announce the appearance in April of one of the most important novels of the year, Anson MacDonald's "Beyond This Horizon." In this novel Heinlein probed the ramifications of state imposed, controlled, and manipulated eugenics; the civilizing influence of ritualized handgun dueling; the laws of probability as they apply to games of chance, and the problems of a "mongrel" man transported from the twentieth century to the eugenically stabilized future. A thoroughly readable and thought provoking novel, enhanced by marvelous illustrations by Rogers.

Van Vogt was again present with a novelette, and an excellent one it was, too, "Co-operate—or Else." For the sake of simple survival, Professor Jamieson must convince the fearsome Ezwal of the necessity for cooperation after they crash land on the primitive planet of Eristan II, and of the greater urgency for the Ezwal inhabitants of Carson's Planet to cooperate with Earth in their showdown war with the slug-like Rull. The Ezwal, singly and collectively, are disinclined toward cooperation with the puny Earthman. Ultimately, Jamieson's Ezwal does cooperate, but not because of the professor's philosophical arguments.

For the third month in a row, van Vogt was present with a novelette, with another cover story for May, "Asylum." This is one of van Vogt's finest stories, a taut, well drawn picture of vampirism with interstellar ramifications. Coupled with this was the idea, somewhat akin to the thesis advanced by Eric Frank Russell in "Sinister Barrier" (i.e., that we are property), that we are on a reservation, isolated from the rest of interstellar civilization and guarded by lower grade mentalities known as the Watchers to see that we don't come in contact with the rest of the universe until such time as we—and they—are ready.

Alfred Bester's excellent novelette, "Push of a Finger," demonstrated the inability of a totally static society to change enough variables to avoid complete destruction in the far future, even when such destruction is proven to be certain and final unless radical action is taken. This story, as well as "Asylum," was beautifully illustrated by Schneeman.

With this issue, Isaac Asimov launched his monumental "Foundation" series with the appearance of the initial novelette of the series, "Foundation." After tens of thousands of years the Galactic Empire had spread to millions of worlds throughout the galaxy, its power all but absolute, its influence all pervading. The Empire, however, was on the brink of collapse and, with the impending collapse, the universe could be expected to be plunged into at least thirty thousand years of anarchism and barbarism. Hari Seldon, through the application of psycho-history which enables him to predict the future course of history by the interpretation of statistical laws as derived from the inconceivable mass of humanity, foresees this imminent fate of civilization and takes measures to insure the survival of civilization and knowledge through

the long dark ages ahead and, if possible, shorten the period of barbarism. He does this by establishing two Foundations at opposite ends of the galaxy: the First Foundation of the Encyclopedists at Terminus, a small system on the edge of the galaxy, the Second Foundation—hidden even from the First—at “Star’s End,” at the “other end of the galaxy.” “Foundation” introduced the basic elements of the plot of the series and recounted the successful resolution of the first of the critical crises predicted by Seldon which the Foundation must surmount in order to carry on the Seldon Plan.

There will be more about the “Foundation” stories later. They are some of the greatest science fiction ever written, with a Sense of Wonder in the underlying concept that is truly out of this world.

The cover story for June was “Bridle and Saddle,” by Asimov, the sequel to last month’s “Foundation.” Thirty years after the first crisis met by the Foundation, the second arises and is resolved by the astute and pragmatic Mayor of Terminus, Salvor Hardin. Where the first crisis was met by a shrewd manipulation of balance of power tactics as applied to the menacing powers surrounding the relatively weak Terminus on their particular segment of the rim of the galaxy, the second threat from these powers is met with “spiritual” force opposed to their “temporal” force.

There were nine stories in this issue, none of which (except for “Bridle and Saddle”) made any lasting impression. Not even Hal Clement’s first story, “Proof.”

July sported a rather unusual cover for Astounding. A large American flag was the subject, and the same painting appeared on most magazines for this month, a patriotic gesture by the magazine publishers of America.

A. E. van Vogt led off with “Secret Unattainable” which was about one of Hitler’s secret weapons so boobytrapped by one of its inventors that any application of its powers by Hitler would bring about rather catastrophic results. A gimmicky and disappointing story after his three earlier stories this year.

The best story in the issue was Clifford Simak’s “Tools” which was about a highly intelligent gas found hovering over radium deposits on Venus, and its need for physical tools before it could act on its thinking. Simak presented at the same time a rather grim, if perhaps exaggerated, glimpse of the result of commercial atomic power being under absolute control of private capital.

This issue served to introduce both a new author and a new theme to science fiction. The author was Will Stewart, and the theme was the problems to be encountered with “seetee” (contraterrene matter) and how to control and use it. Will Stewart was, of course, a pseudonym of Jack Williamson, a fact not then known. “Collision Orbit” was an excellent novelette which related the efforts of old Jim Drake, and his partner in spatial engineering, Rob McGee, to harness the incalculable power of the seetee asteroids despite the bureaucratic opposition of the government.

The August issue brought forcefully home to the fan the realities of the war, insofar as it directly affected science fiction and particularly Astounding. In the column "In Times to Come" Campbell intimated just how hard Astounding had been hit by the war. By the middle of 1942, Astounding had lost Robert Heinlein (and, of course, Anson MacDonald) and L. Ron Hubbard to the Navy, Charles Schneeman to the Air Force, and Hubert Rogers to the Canadian Army. L. Sprague de Camp also went into the Navy, and Isaac Asimov was also taken up by the war. In one way or another, either through military service or war work, many other writers were either completely out of writing for the duration or seriously limited in the amount of time they could devote to writing science fiction.

This issue saw the last appearance for several years of two of the men who, in their separate fields, were most closely identified with the early and best years of the Golden Age—Robert Heinlein (as Anson MacDonald) with his short novel "Waldo," and Hubert Rogers with his brilliant cover illustrating it.

Heinlein's novella was about air cars that wouldn't work, and Pennsylvania Dutch hexes that apparently did; an immensely brilliant, physically weak, grossly obese and unpleasant character named Waldo F. Jones, who set out to solve the puzzle of the non-functioning air cars, and a gadget invented by Waldo when he was ten years old which would allow for remote manipulation by mechanical arms and hands of the most delicate nature. Waldo, himself, bore a striking similarity—at least as to physical characteristics, intelligence, and personality—to Rex Stout's famous detective, Nero Wolfe. However, as the novel progressed the resemblance lessened until Waldo emerged as one of the more unique characters in science fiction. Everyone knows, of course, that the term "Waldo" was almost immediately adopted by the scientific community and for some time used to describe similar gadgets that were coming into increasingly greater use as time went on.

"Jackdaw," by Ross Rocklynne told of the discovery of Earth (completely depopulated except for one man in an airplane) by a star-roving race of beings whose culture was incredibly old, and whose major pursuit was to search throughout the galaxy for problems that would occupy their intellects to the limit. The problem posed by Earth proved to be insoluble in the end because the Emonsos were a logical and kindly race, and the recent inhabitants of Earth indisputably were neither. This story was on the same general theme as the author's shorter and much better "Quietus" written in 1940; that is, the obstacles one culture meets in an attempt to understand another which has hitherto not been known to exist, which is completely and totally alien to anything previously encountered, and where a minimum of data is obtainable. Rocklynne did an excellent job in presenting the problem in this story, but he did it better, and with a greater economy of words, in "Quietus."

Hal Clement's second story, "Impediment," was a carefully thought out account of the landing of a space ship near the Arctic Circle and its discovery by one man. The occupants of the ship are large moth-

like creatures possessing the ability of telepathic communication. Their discovery by the man, Kirk, gives them the opportunity of studying his mind patterns and eventually communicating with him and, with his mind as a key, other men as well. This is fine, and everything progresses beautifully until Kirk discovers the true purpose of their visit to Earth, and the moth creatures discover to their dismay that there is an impediment to their plans, that the mind patterns of man are as distinct and various as are his fingerprints. The story was interesting on an intellectual level, as are all of Clement's later works, but cold emotionally.

There appeared with this issue a new author, one who was to be one of the leading masters of the Astounding "style" during the middle years of the Golden Age, Lewis Padgett, the greatest of Henry Kuttner's many alter egos, with a short story, "Deadlock." (Padgett, it was later revealed, was a pseudonym masking the collaborative efforts of Henry Kuttner and his wife—C. L. Moore.) This first Padgett story was a deftly told tale of robots who were indestructible and with brains designed to solve any problem. But, what happens when the indestructible robots eventually approach the problem of how they themselves could be destroyed? They go crazy, of course.

Norman L. Knight in, for him, a surprisingly humorous vein, told of "Kilgallen's Lunar Legacy," which turned out to be an incredible collection in bulk of every known intoxicating potable in the Solar system cached in a hidden cave on the far side of the moon. And Cleve Cartmill, hitherto noted for a couple of fine novels and a brace or so of short stories in Unknown, drew an excellent picture of a young Neanderthaler's first stumbling realization of his differentness from other animals, in a short story called "The Link."

For the first time in better than two years, a cover by an artist other than Hubert Rogers appeared on Astounding. William Timmins was to be Astounding's sole cover artist from the coming December issue until late in 1946, except for one cover in 1944 and one in 1945. Initially, Timmins' covers bore some resemblance to Rogers' without Rogers' exquisite draftsmanship, color sense and compositional talent, and at a first cursory glance they appeared to be rather careless paintings by Rogers. But eventually Timmins broke away from the influence of his illustrious predecessor and became himself, with sometimes pleasing results. Timmins' main fault was a lack of precision in his drawing and a generally muddy palette.

The September cover story was by an author making his first appearance in Astounding, Anthony Boucher. Boucher, whose real name is William Anthony Parker White, was a well known mystery writer and Sherlock Holmes buff who had contributed several pieces to Unknown, the best known being "The Compleat Werewolf." "Barrier," Boucher's novelette, was an excellent story involving time travel and a beautifully developed future civilization based on the science of philology. One of the characters in the story, the man who developed the machine taking the hero to the future, was one Dr. Derringer. In 1942 White had published, under another of his pseudonyms, H. H.

Holmes, a mystery novel called Rocket to the Morgue. This novel concerned the murder, under what amounted to locked-room circumstances, of Hilary St. Johns Foulkes, the executor of the literary estate of the late, great Fowler Foulkes, the phenomenally successful author of a series of science fiction novels featuring the remarkable adventures of the remarkable Dr. Derringer. Fowler Foulkes was, of course, a thinly disguised A. Conan Doyle, and Dr. Derringer was patterned after Professor Challenger, the hero of Doyle's The Lost World and other science-fictional adventures. Most of the suspects and secondary characters in Holmes' novel were easily identifiable science fiction authors, Heinlein, Cartmill, Hamilton, etc., and well known Los Angeles science fiction fans of the day.

Cleve Cartmill's novelette, "With Flaming Swords," was a variation on the theme of theocratic dictatorships told with Cartmill's usual competence. And Lewis Padgett was back with his second story, the well known "Twonky," which concerned, among other things, radios with exceptional qualities. An atrocious adaptation of this story was later filmed as a vehicle for Hans Conreid.

One of the outstanding stories of the year was Lester del Rey's long novelette, "Nerves." This was a mature, and remarkably realistic story of an explosion in an atomic products plant and the tremendous problems confronting the plant physician in his efforts to cope with the aftermath of the explosion. Several years later, del Rey somewhat rewrote the story and expanded it to novel length for book publication (Ballantine, 1956); none of the initial impact or prophetic qualities of the original were lost in the revision.

Lester del Rey returned again in October with another fine story, "Lunar Landing," which explored the possibilities of the first landing on the moon not being the first, by a long shot. The cover, illustrating del Rey's story, was a lovely painting of the Earth and sun viewed from a lunar landscape, and was painted by A. von Munchausen, his one and only cover for Astounding.

Malcolm Jameson abandoned "Bullard" and the Space Patrol for the nonce to tell a tale of intertemporal trading posts in "Anachron, Inc." A. E. van Vogt came up with a "Second Solution" to the problem of the strong minded Ezwal, and Murray Leinster had a fine short story in "The Wobbler," which was a remarkable sort of submarine mine—almost human, in fact.

George O. Smith's first science fiction story was printed in this issue. It was also the first of his very popular "Venus Equilateral" series. "QRM-Interplanetary" it was called, and was concerned, as were most of the stories in the series, with problems relating to interplanetary communications.

L. Ron Hubbard's last story for Astounding until 1947, a short story called "The Beast," rounded out the issue. This was an account of a white hunter's compulsive hunt for a strange, illusive man-killing beast in the forests of Venus. It could just as easily have appeared in a general fiction magazine with an African locale as in Astounding

with its Venus setting, and was really unworthy of the man who wrote "Final Blackout," "Fear," and other fine novels.

Cleve Cartmill's cover story for November, "Overthrow," was a smoothly written, fast moving account of the overthrow of military dictatorships, autonomous city-states (each devoted to a single function: Power Center, Textile Center, etc.), and the power and influence of business executives in an ostensibly military dominated society.

Will Stewart continued, in "Minus Sign," the careers of Drake and McGee, Spatial Engineers, in their development and control of seetee matter and expanded on the growing rift between the miners and pioneers of the asteroids and the Mandate governing the planets.

"Not Only Dead Men," by van Vogt, told of an American whaleship's unexpected involvement in an interstellar war, how the Americans inadvertently helped one side, and how they were subsequently rewarded. A very nice switch, by van Vogt, on his monster theme.

The cover, illustrating Cleve Cartmill's "Overthrow," is of passing interest; a pleasing, but not outstanding watercolor. It was the work of Modest Stein, an artist who did many covers for the Munsey magazines over the years, further back than 1913.

An eye-catching cover, one of Timmins' all time best, beautifully illustrated A. E. van Vogt's sensational "The Weapon Shop," December's featured novelette. The concept of the Weapon Shops, and the conflict between them and the Isher Empire which ranges through all time, was only touched upon with a tantalizing glimpse in last year's short, "The Seesaw."

Seven thousand years from now the Isher Empire is all powerful in the inhabited parts of the Solar system, and the beautiful and ruthless Empress Innelda, the one thousand one hundred eightieth of her line, rules with all power. Four thousand years before this time, Walter S. DeLaney invented the vibration process that made the Weapon Shops possible and established the first principles of the Weapon Shop political philosophy. Essentially the philosophy was to avoid interference with the main current of human existence, but at the same time to act as a brake against excesses of the empire and its ruling family in those periods when its rule ran to excesses. The Weapon Shops, in the main, operated quietly and unobtrusively, appearing overnight where needed and ready to sell for a fraction of their worth the finest energy weapons in the universe to those with a proven need, for self defense only; "The Right to Buy Weapons is the Right to be Free."

Cleve Cartmill was back for the third time in four months with another novelette, "Someday We'll Find You," about Hunt Club, Inc., a sort of interplanetary private eye outfit specializing in commercial and industrial cases. The story was not too good, but Cartmill wrote with an easy and colloquial fluidity that made his stories eminently readable.

Frank Belknap Long's short story, "To Follow Knowledge," was a strangely beautiful story of time travel and plural worlds. "Piggy Bank," by Padgett, was a rather grim and ironic tale of blind greed

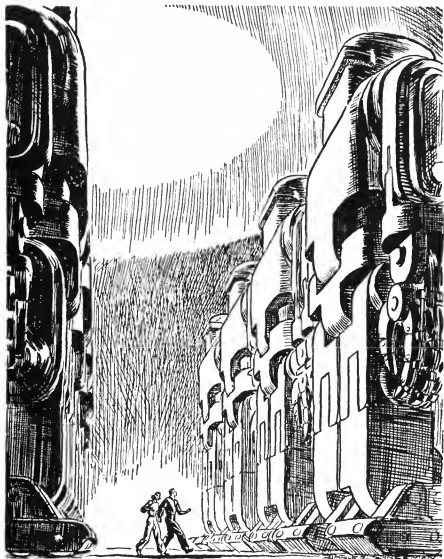
and a diamond studded robot that didn't know its true value.

A new author appeared in this issue with a short story, "The Flight That Failed," another story dealing with probable futures, but laid in the present, i.e., the Second World War, and which showed how a Hitlerian future was aborted during an airplane flight. The author was E. M. Hull, the wife of the year's outstanding author, A. E. van Vogt.

And so the first year of the "bedsheet" size Astounding, and the third year of the Golden Age, ends. This year was van Vogt's year, as 1941 had been Heinlein's: "Asylum," "Co-operate—or Else," "Recruiting Station," "Not Only Dead Men," "Second Solution," "Secret Unattainable," and "The Weapon Shop" were stories that ranged from outstanding to competent, with "Asylum" as perhaps the best story of the year, although MacDonald's "Beyond This Horizon," or del Rey's "Nerves" are also top contenders for that title.

This year was a little more erratic in quality than the preceding year, with fewer classic stories—fewer issues containing more than one or two outstanding stories per issue. The artwork took a turn for the worse with the departure of Schneeman and Rogers, and never again would Astounding really have an outstanding position in terms of the consistent quality of cover and interior artwork. One of the most promising events of the year was the beginning of Asimov's brilliant "Foundation" series, which would continue for several years, and would also produce several outstanding stories related to—but outside the mainstream of—the "Foundation" stories. Another augury for a bright future was the advent of Lewis Padgett who would produce some brilliant stories during the next few years. Yet to be encountered was Lawrence O'Donnell, a pseudonym of C. L. Moore, which was also used once or twice to byline a collaboration, and at least once by Henry Kuttner alone.

Will Stewart led off 1943 with the first installment of a two-part novel, "Opposites—React!," the third in his series about seetee matter. The problems developed in "Collision Orbit" and "Minus Sign" are brought to a head in this short novel with Drake, McGee and Drake, Asterite engineers and discoverers of contraterrene matter in the asteroid belt, attempting to perfect a means of harnessing the incalculable power locked in seetee matter. Forming a counterpoint to the engineering problems involved in the story is a political problem that is as explosive as the finicky matter the trio of engineers are attempting to control. The Solar system is governed by the Space Mandate made up of Earth, the Martian Reich, and the Jovian Soviet; a mutually jealous alliance. Exerting peripheral pressure on the Mandate and in many ways as powerful, is Interplanet, an Earth owned corporation with big ideas. Opposed to both these forces in their desire for independence are the Asterites; settlers on the asteroids who have nationalistic yearnings. Obviously, whichever of this trio of powers achieves workable control of seetee matter has the other two at a distinct disadvantage.



December, 1942; "To Follow Knowledge," illustration
by Charles Schneeman.

This was a very good story, in which Stewart combines the sociological theme with high space adventure and more or less down-to-Earth engineering problems. Although it was good, and modern, and within the realm of fairly immediate probability, science fiction had lost something irreplaceable when Jack Williamson abandoned the space

opera field in which he wrote with such imagination, so colorfully, and with such elan.

There were three novelettes in this issue, "The Search," by van Vogt, which was an involved time travel story—good, but not tremendously memorable; "Barrius, Imp.," by Malcolm Jameson, a sequel to "Anachron, Inc.," which involves the time spanning trading company with, among other things, ancient Roman politics, and finally Anthony Boucher's "Elsewhen," a beautiful title for an excellent time travel-cum-mystery story featuring Fergus O'Brien, an Irish detective who had earlier been involved in the case of "The Compleat Werewolf" (Unknown, April, 1942), who solves the case of the suspect who claims to have been not only elsewhere than at the scene of the crime, but elsewhere. (Fergus O'Brien was also featured in a number of Boucher's classic murder mystery novels of the late thirties and early forties: The Case of the Crumpled Knave, The Case of the Seven Sneezes, etc.)

Of the four short stories in this issue, there were two which were excellent: "Nothing But Gingerbread Left," by Henry Kuttner and "Time Locker," by Lewis Padgett. The first story is dated now, but at the time it was written it had considerable impact. It concerned a brainstorm an American professor of semantics had which could possibly shorten (or end) the war. Devise a perfect semantic formula—one with a catchy rhythm, which, when once heard can never be forgotten—and beam it to the Germans where, in theory, it would so obtrude on the consciousness of key men as to cause chaos in the Third Reich. It worked, too. In the second story, the Kuttners introduce that unpredictable, wacky and almost always drunken genius of an inventor, Galloway. He was infinitely inventive, but unfortunately he did most of his inventing while completely stoned and usually had difficulty recalling the purpose of his invention once he sobered up. In "Time Locker" Galloway invents a safe in which anything, of any size, could be placed and it would shrink into invisibility; including, even, a human body.

The other two short stories were authored by Ross Rocklynne and P. Schuyler Miller and were not particularly notable.

Timmins' cover, a murky and busy painting illustrating "Opposites—React!," was not too bad, but made one wish longingly for the clean, precise paintings of Rogers.

In any discussion of the Golden Age there is always one story that will figure prominently, "The Weapon Makers," a three-part serial beginning in February, by A. E. van Vogt. Not as universally praised as "Slan," it is still regarded by many as one of his very best stories.

This was the third in the "Weapon Shop" series which began with "The Seesaw," and unquestionably the best. The world of the Isher Empire with all its color and contrasts, its medieval court ritual and its scientific sophistication is brought out in much greater detail than in the preceding novelette, "The Weapon Shop." The two central characters, the Empress Innelda and Robert Hedrock, are two of van Vogt's best drawn characters. Innelda, proud and beautiful, intelligent and capable, but fatally doomed as a result of generations of inbreeding within the Isher strain. And Robert Hedrock, the immortal man,

with a long range plan for the human race, who thousands of years earlier had been the founder and first emperor of the Isher Empire, and who had also conceived of and founded the Weapon Shops as a permanent opposition and counterbalance to the absolute power of the empire. The philosophy of the Weapon Shops and their role in the scheme of things is also presented with greater detail than before, and also the possibility of the power residing in the Weapon Shops being misused. To add verisimilitude to the basic story of the Isher-Weapon Shop conflict there was introduced briefly in the third installment an incomprehensibly alien race of beings who, after a close and dispassionate observation of man, reached the profound conclusion that: "This much we have learned; here is the race that shall rule the Sevagram." A great and memorable last line in the great van Vogt tradition. Never mind what it means, it was still a hell of a great last line.

This issue also contained another enduring memento of the Golden Age. I doubt if anyone having once read it will ever quite forget the cumulative horror of Lewis Padgett's "Mimsy Were the Borogoves." This story of two boxes of toys sent back in time from the remote future to land in nineteenth century England and twentieth century America, and their remarkable effect on three children, was a true tour de force on the part of the Kuttners. For they took the meaningless gibberish of Lewis Carroll's "Jabberwocky" and transformed it into most meaningful and startling logic. Meaningful and logical, that is, to a three-year-old girl and a seven-year-old boy, but tragically incomprehensible and illogical to their parents. Many parents were then tempted to listen more closely to their children's chatter and observe more carefully their childish play, at least until the spell cast by the Kuttners wore off.

"Opposites—React!" concluded this month; a very fine story, and with the way left open for an obvious sequel.

The Kuttner-Moore team was back again with the March cover story and a short story. "Clash by Night," by Lawrence O'Donnell (this time, Henry Kuttner alone) was a tremendous story that told of the Keeps—underseas cities on Venus peopled by refugees from a devastated and uninhabitable Earth—and above all, of the Free Companions. The Companions were mercenaries with a proud tradition, organized into companies of a few thousand, each with its colorful and devotedly followed leader. At the time of the story the Free Companions are entering the twilight of their existence, as is the whole concept of warfare, but are still a significant factor in the world of the Keeps.

The second Kuttner yarn was "Shock," by Lewis Padgett; a grim little tale of a man from the future who comes looking for someone in the present, and the man from the present who goes to the future expecting to find a race of supermen only to find that even a race of supermen can't all be perfect.

"Shadow of Life," by Clifford Simak, the second novelette in this issue, failed to impress too much although it was readable and well written. The story revolved around the proposition of a lurking evil

existing among the stars which eventually would engulf Earth if man didn't (as the Martians had ages earlier) run and hide. The Martians had taken refuge in the fourth dimension and reduced themselves to subatomic size. At the same time they left behind a ghost, one "Elmer" who contained the racial memories of the departed Martians; Elmer was to guard their hiding place and at the same time try to convince the Earthmen of the desirability of emulating the Martians. Needless to say, the doughty Earthmen refuse to take such a cowardly course, preferring to stand and fight. One drawback to the story was the strong similarity between Elmer, the Martian ghost, and Archie, the sentient creature of Venus, in the same author's fine story, "Tools" (Astounding, July, 1942).

What would science fiction be without robots? This is a rhetorical question prompted by the next story under discussion. There have been many fine robot stories written in the past, and there will undoubtedly be many more written in the future. This story is one that seems to be frequently overlooked whenever the subject of the better robot stories arises. I speak of H. H. Holmes' "Q.U.R.," which marked a radical departure from the usual concept of robots. "Q.U.R." stood for Quinby's Usuform Robots. White claims to have coined the word usuform to describe robots designed for optimum use regardless of final form in contrast to robots built in an impracticable human form. This is the first story that I know of in which the classical science-fictional concept of "robot," i.e., a thinking, independently-willed entity created by man, is conceived of in a form other than one in some way miming the human. The idea was beginning to gain acceptance by this time that the science-fictionist was largely overlooking the fact that robots existed in the world around him in many forms, and had for some time. But writers continued to follow the pattern established by the legend of the Golem, Mary Shelley's Frankenstein, and Capek's R.U.R. that robots or manufactured creatures with the capacity for thinking and independent action must have a humanoid shape. This long standing and revered cliché was given quite a jolt by "Holmes'" fine tale which had the added advantage of containing some fine sophisticated humor which enhanced its re-readability.

The second installment of "The Weapon Makers," of course, completely dominated everything in this generally fine issue.

Again, in the April issue, "The Weapon Makers" dominated with its tremendous climax and its bewildering last line. This was one of the first of van Vogt's novels to be subsequently brought out in hard covers. It was printed in a small edition (Hadley, 1947), went out of print very rapidly, and almost immediately started commanding fantastic prices on the fan market comparable, almost, to the prices being asked for the collection of H. P. Lovecraft stories, The Outsider, and Others (Arkham, 1939).

"Swimming Lesson," by Raymond F. Jones, the cover story, concerned an incipient war between Earth and Venus and the desperate urgency for Earth to find an effective defense against the seemingly

ultimate weapon devised by the Venusians. The method used to force the key scientists to find a solution to the problem was a pragmatic one; the simplest way to teach a child to swim is to throw him in the water and let him swim back to shore. In this case the military started a phony war, isolated the scientists and threatened them with almost certain destruction with a stolen model of the Venusian weapon and thereby ultimately got their defense which restored the balance of power with Venus and averted immediate war. The story was weakened by a too melodramatic ending in which the humanism and one hundred per cent idealism of science—as personified by the hero-scientist—is contrasted to the innately war-seeking militarist.

Lewis Padgett was back with another short problem yarn, this one about robots who controlled and manipulated the lives of men for their (man's) ultimate good...it was claimed. There is no attempt on the part of the robots to hide or disguise what they are doing, yet mankind as a whole is oblivious to their existence and the occasional person who stumbles onto them is frustrated in any attempt to alert his fellows by a gimmick the robots have concealed (a la "The Purloined Letter") which effectively hamstringing the would-be alarmist. It was called, appropriately enough, "Open Secret."

E. Mayne Hull started her "Artur Blord" series in this issue with "Abdication," a story which left no impression at all.

On the "Editor's Page" of the April issue, Campbell announced that starting next month, the magazine would return to its former size. The reasons given for the change back to the old size were, of course, the war-caused shortages of essential metals used in type, and the request by the government for magazine publishers to reduce their paper use by ten per cent. Initially attractive and impressive, the "bedsheet" Astounding lasted for one year (all of 1942) and four months, and was a noble, but misguided experiment.

The "bedsheet" was a little better than 8-1/2 x 11-1/4 inches in size with 128 pages; the December, 1941 issue—the last book size before the change to the "bedsheet"—was 6-1/2 x 9-1/8 inches with 160 pages. According to Campbell, the small size averaged 70,000 words an issue, the "bedsheet" came out at 100,000, or so. This increased wordage was the only real edge the large size had over the smaller; in all other respects it came out a poor second. Probably the biggest disappointment with the large size was from the editor's, or the publisher's end. It was optimistically assumed that the large size format would remove Astounding from the lowbrow pulp section of the newsstands to the prestigious highbrow slick section, but the newsdealers continued to display it as always, with the pulps.

From a collector's standpoint, the biggest drawback to the large size was and is its insubstantial qualities, its tendency to fall apart even with the most tender handling. The magazine was made up of four signatures of thirty-four pages, precariously held together—hopefully—by one wire staple.

With the February, 1943 issue, Astounding discontinued the practice of printing the titles of the stories at the top of the right hand page and the name of the magazine on the left, and instead printed the name of the magazine at the lower corner of each page, an irksome thing if one laid the magazine down and then attempted to find one's place again in the story one was reading.

Of course, all complaints about the "bedsheet" size Astounding have to do solely with the physical characteristics of the magazine and not with the contents. That's a different matter entirely, for the "bedsheet" Astounding gave us many memorable stories: "Breakdown," by Williamson; "There Shall be Darkness," by C. L. Moore; "Recruiting Station," "The Weapon Shop," "The Weapon Makers," "Asylum," "Co-operate—or Else," by van Vogt; "Foundation" and "Bridle and Saddle," by Asimov; "Beyond This Horizon" and "Waldo," by Heinlein; "Nerves," by del Rey; "Clash by Night," by O'Donnell; "Mimsy Were the Borogoves," by Padgett, and many, many others.

The artwork in the "bedsheets" was generally disappointing. Except for the six covers in 1942 by Hubert Rogers, the covers of the large size issues left much to be desired. The best of the non-Rogers covers were probably the Munchausen for October, 1942 for del Rey's "Lunar Landing," Timmins' December, 1942 illustration for "The Weapon Shop," and his painting for February, 1943 for "The Weapon Makers." As mentioned earlier, with the December, 1942 issue, William Timmins became the regular cover artist and remained so, with only a couple of exceptions, until well after the war. The less said about the interior art after the departure of Rogers and Schneeman, the better. The interior illustrations were handled by a variety of artists: the Isip brothers, Kolliker, Kramer, Fax, and Orban; with Orban by far the best of the lot.

In spite of complaints against the physical imperfections and the deplorable artwork of most of the "bedsheets," nothing can obscure the fact that some of the finest stories of the Golden Age appeared in these few issues, and it is this fact that makes the "bedsheet" era memorable, not the size of the magazine. Almost twenty years later (March, 1963), Campbell would return to the large size in a much slicker form for Analog. Only time will tell how successful it will be this second time around. [It proved to be only a little more successful than the first time around. The large size Analog lasted for just over two years, from March, 1963 to March, 1965.]

SMALLER...AND SMALLER: 1943

The new, smaller magazine retained the logo and general appearance of the "bedsheet," but without the border surrounding the cover painting that distinguished the larger size. The price remained at twenty-five cents a copy and the page count went back to 160, with a reduction in the size of the type and narrower margins to keep the word count at approximately that of the "bedsheet"; 100,000 words.

The lead-off story for May was the first of three installments of one of the greatest of the classics of the Golden Age, a favorite of the year, and one of the top ten, or at least top twenty favorites of all time, "Gather, Darkness!" by Fritz Leiber, Jr.

This was a marvelous tale of action, color, intrigue, and romance, which still managed to convey a subtle and disturbing message which gains increasing immediacy as time goes on. Leiber's story, laid in the year 360 of the Atomic Age; A.D. 2305, told of when science, a greatly advanced and awesome science, is under the complete control of a cynical and debased religion which rules with absolute power over the ignorant and superstitious masses. The Priesthood, most of which is hereditary, uses not only its science to keep the masses in serf-like squalor, but the even more effective weapon of psychology, the skillful use of religious fear and superstition. But unknown to the Priesthood a rising discontent in the masses and in the lower echelons of the Priesthood has culminated in the formation of a rebellious underground that takes on the outward trappings of a Satanic cult with witches, warlocks, and familiars, and having a fearsomely powerful leader, the Black Man, Sathanas.

The Witchcraft, operating underground and with its spies penetrating the Priesthood all the way up to the Hierarchy, has learned and mastered most of the secrets of science so jealously guarded by the Hierarchy and eventually overthrows them, opening the door at last to

knowledge for the masses, and promising a new democratic life for the future.

Although this was purely a science fiction story and one with a grim warning of the hazards of secrecy and monopoly surrounding science and scientific research, it was, at the same time, an exciting adventure tale with many of the elements of "sword and sorcery" fantasy with which Leiber was, and is, so adept.

Cleve Cartmill was back with a long novelette, "Let's Disappear," the best of his Hunt Club stories which involved the club in a search for a vanished man who held a secret so inimical to humanity that its possession by one man constituted a clear and present danger to humanity's survival.

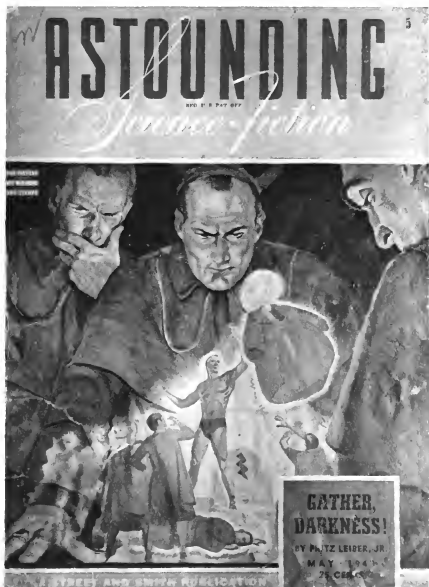
The rest of the issue was made up of short stories. "Ghost," by Henry Kuttner, which was about a calculator haunted by a manic-depressive ghost, was the best of the lot. A short story by a new and never again heard from author was a close second to Kuttner. "Fifth Freedom" by John Alvarez (actually, Lester del Rey) probed the problems besetting a conscientious objector when confronted with an all-out atomic war in which America is the object of nuclear attack. This was a well-written and remarkably prophetic story, and surprisingly accurate in its descriptions of nuclear destruction. And finally, there was "Pacer," by Raymond F. Jones, a disappointing story concerning a space convoy forced to hold its pace down to the speed of the slowest, damaged ship in the convoy, and the dangers this presented to the entire convoy. This could just as well have been written about any of the convoy runs across the Atlantic during the war.

The cover by Timmins, illustrating "Gather, Darkness!," was one of his better covers, but still too busy in composition and painted with too muddy a palette.

That wacky, drink-inspired inventor introduced by Padgett in the January issue in "Time Locker" as Galloway, enlivened the June issue in the cover story, "The World is Mine," as Gallegher, the name by which he would be known in the remaining stories in this delightful series. In this story, Galloway Gallegher wakes up from one of his monumental binges to find the Earth invaded by small rabbit-like creatures from Mars who plaintively bleat, "This world is mine." It seems that Gallegher, while stinking drunk, had invented a time machine; one of the byproducts of the machine being the Lybbblas, the rabbit-like creatures from Mars. A very funny story built on a firm science-fictional foundation.

The second of the "Venus Equilateral" series, "Calling the Empress," by George O. Smith, was a problem yarn. The problem: Send a tight communication beam to a space ship lost somewhere in uncountable millions of cubic miles of space. This novelette, like all the others in this series, suffered from one major flaw, Smith's absorption with the technical details of his problems, with the concomitant lack of attention to characterization.

Anthony Boucher, who had written an article on the prophecies of



May, 1943; the first new small size. Painting by Timmins.

Nostradamus in Unknown ("On A Limb," October, 1941), and had been carrying on a friendly running feud with the great debunker, L. Sprague de Camp on the merits and demerits of the Frenchman's predictions, presented in his short story, "Pelagic Spark," a pretty good argument as to just how any prediction, if obscurely enough worded will, in good time, come to pass. Starting in A.D. 1942 he has Lieutenant L. Sprague de Camp, USNR, resolving to settle Boucher and the rest of the Nostradamians once and for all by making up out of whole cloth a prediction of his own and having it published. This he does in the form of a limerick:

Pelagic young spark of the East
 Shall plot to subvert the Blue Beast,
 But he'll dangle on high
 When the Ram's in the sky,
 And the Cat shall throw dice at the feast!

The de Camp article was published in the December issue of Esquire, comes to the attention of a marine sergeant in the South Pacific, and from there Boucher follows the progression of events until, in A.D. 2045, de Camp's make-believe prophecy actually comes to pass. A lovely, lovely yarn, and one I imagine Boucher got a great kick out of writing. (Note: The de Camp "prophecy" actually appeared; see Esquire, December, 1942.)

White, writing this time as H. H. Holmes, was less successful in his second story in this issue, "Sanctuary." A story of the war, it involves commandos and time travel, and was not up to his usual high standards.

Lester del Rey, on the other hand, created a gem about the war in his short story, "Whom the Gods Love," about a fighter pilot who is shot down by the Japanese with a bullet dead center in his forehead which miraculously enough doesn't kill him, but instead endows him with superhuman powers, which for a brief time creates consternation and wreaks havoc amongst the Japanese flyers.

E. M. Hull brings back Artur Blord in "Competition," another in her stories of high finance and economic skulduggery among the Ridge Stars.

Willy Ley had an interesting article on the Sargasso Sea called "The Sea of Mystery," and the second installment of "Gather, Darkness!" rounded out an exceptionally good issue, considering the number of stories competing for the reader's attention.

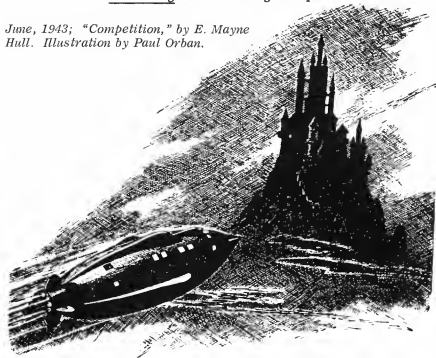
"Hunch," the July cover story by Clifford Simak, was (as was "Tools" and, to a lesser extent, "Shadow of Life") an excellent example of the new Simak who could combine fine characterization, plot, and idea into an exceptionally fine modern story. Sanctuary, Inc., is a haven for man, who is showing an increasing tendency to break down mentally under the stresses of a complex society and the problems of space development. Sanctuary is the product of the Asterites, remnants of the Fifth planet destroyed ages before by the extinct Martians. But the Martians are not totally extinct, to the eventual dismay of the Asterites. At the conclusion of the story we find that man has dis-

covered that the phenomena of hunches under certain conditions can be a reliable guide to action, and is actually the ability to foresee a short way into the future.

"The Great Engine," by van Vogt, was a fine tale of how atomic power, in the form of an engine, was secretly developed during the war, and how the scientists involved in its development, fearing its misuse on Earth, slip away and settle on Venus, there to organize a society on the pattern of the United States and based on atomic power. In the years following this event the Venusians clandestinely recruit additional scientists and their families on Earth and transport them to Venus. One of their atomic powered ships is wrecked by a meteorite as it approaches Earth and falls unnoticed to Earth to be demolished except for its indestructible engine. This engine is subsequently discovered by Pendrake, an inventor who, in his efforts to discover the genesis of the engine, gets wind of the Venusians and naturally assumes that they are inimical to Earth. A typical van Vogt problem, involved and deceptive, but well written and believable.

"Gather, Darkness!" concluded in this issue with the big showdown between the Hierarchy and the Witchcraft, with the Witchcraft winning out over the forces of perverted science. One of the gimmicks Leiber used in this marvelous novel was one that has been occasionally popular with one or two Astounding authors during this period. This is the

June, 1943; "Competition," by E. Mayne Hull. Illustration by Paul Orban.



"Symbol," the "Champion," the "Rallying Point" for oppressed peoples that Campbell pioneered with his "Aesir," and that Heinlein also used in "Sixth Column"; a giant, man-like manifestation designed to throw fear and confusion into the ranks of the enemy. In "Gather, Darkness!" it was a huge, black flying creature called Sathanas who symbolized the Witchcraft and inspired its followers to destroy the Great God and its priest-scientists.

C. L. Moore, always a welcome but infrequent contributor, returned in August with the first installment of a two-part novel, "Judgment Night," her first novel. This fine story was typical of Miss Moore at her best; exotically colorful, rich in characterization, and carefully detailed. The theme of the story was one which she had dealt with before; the imminent fall of empire. The Lyonesse Dynasty which held the world called Ericon, which in turn controlled the galaxy, was threatened with extinction by the approaching hoard of invading barbarians known as the H'vani who were moving inexorably inward toward Ericon, conquering all planets in its way. The story revolves around the personal problems of Juille, the daughter of the Lyonesse emperor, warrior reared and contemptuous of what she believes to be her father's weakness, and Egide, a charming young man who turns out to be the ruler of the H'vani. The fate of empires hangs upon their personal conflicts. The conflicts are romantically resolved, but in the interim Miss Moore fills the pages of her story with action, intrigue, and color. Miss Moore is a master at combining exotic romanticism with slashing action and coming up with a fine fusion of fantasy and science fiction.

Boucher's novelette, "One Way Trip," was another story of revolt—revolt against universal peace. The world, following the disastrous war of the twentieth century, had embraced the philosophy of Devarupa, an obscure Indian leader who preached passive resistance and the sanctity of human life in a very effective manner. Several generations after the world became Devarupian, restlessness and discontent over unending peace began to emerge in certain elements of society, and world peace was in danger. Boucher came up with something new in the way of science-fictional villains in this story; a Hollywood (or Sollywood, as it came to be called after the invention of solid pictures) producer of spectaculars who had delusions of grandeur, and who thought he had found a weapon in a weaponless world which could back him up.

Van Vogt returned with the Space Beagle and its crew of scientists in a short story, "M33 in Andromeda," which presented the scientists with their most fearsome monster and their greatest challenge; a galaxy spanning creature composed of gas that lived and grew on the ebbing life forces of creatures inhabiting jungle worlds who were constantly fighting and dying. This was the least successful of the Space Beagle stories. The monster, the "Anabis," was not nearly so colorful or memorable as the two previous monsters, Couerl and Xtl, and seemed to be much less menacing than those two more anthropomorphic creations of van Vogt's, although it was supposed to be the greatest of

them all.

Lewis Padgett had an inconsequential story in "Endowment Policy," and Malcolm Jameson had another Anachron, Inc. story in "When is When?" In a short story, "The Mutant's Brother," Fritz Leiber, Jr., tells of two brothers, twins, who have telepathic powers which enables them to not only read, but control other minds, either singly or in mass. The only trouble was, one was bent on controlling and manipulating the minds of others with the eventual goal of world power, and the only one who stood a chance of frustrating this ambition was his brother, and in order to do so he would have to kill his "evil" brother who was the only other one of his kind. And, finally, Willy Ley started a two-part article on a fascinating subject: "The End of the Rocket Society"; the Rocket Society, of course, being the German Rocket Society to which Ley belonged in the late twenties and early thirties, and which he elaborated on further in his book Rockets, published by Viking in 1944.

Hal Clement took the September cover with a fine novelette, "Attitude," a fairly long story of the capture of a space ship and its crew and the unorthodox behavior of the captors. And Ray Bradbury appeared for the first and last time in Astounding with a short formula yarn called "Doodad" which was one of Bradbury's least memorable stories. Tony Boucher continued to explore the problems besetting Quinby and his Usuforn Robots in attempting to buck the monopoly of Robots, Inc., in a short story, "Robinc," and A. E. van Vogt's short story, "Concealment" told of the elaborate measures taken by the Dellian system to conceal the location of the Fifty Suns from chance discovery by Earth ships, and also of the importance of constantly watching and mapping galactic storms.

C. L. Moore brought her excellent novel, "Judgment Night," to a satisfyingly romantic conclusion, and Willy Ley wound up his account of the last days of the German Rocket Society, "The End of the Rocket Society," by showing how the Nazis stepped in and took over, at which point Mr. Ley packed up and left for the United States. This was a fascinating article when it was first written, and is doubly so when read at the present time.

October was the last standard size Astounding, starting with the next issue the magazine would initiate the trend to digest size science fiction magazines. Most fans of the day were willing to accept the size change in the sweet name of patriotism; however, when the war was over and Astounding stayed small, many of them felt, in some vague way, betrayed by Campbell.

A. E. van Vogt claimed the cover with "The Storm," a sequel to "Concealment" in the last issue. The Earth ship that had inadvertently come upon a Dellian weather station, but had been unable to find the Fifty Suns that comprised the Dellian complex, finally stumbles on one of the planets inhabited by the descendants of the Dellian robots who had been driven from Earth fifteen thousand years earlier. The head official of this planet enlists the aid of Captain Maltby, a Mixed-Man,

to guide the Earth ship to the central planet of the galaxy; with additional orders to see that the ship is steered into a mammoth nuclear storm that is raging in the Lesser Magellanic Cloud. This was the second of a three-story series about the Dellian Robots, a fine example of van-Vogtian complexity.

Raymond F. Jones' "Fifty Million Monkeys" explored the possibility of accelerating scientific development, and surmounting the Randomness Principle, by pooling human brains into teams to attack a problem with what would be in essence one stupendous brain. This was a beautifully developed story and one of Jones' finest.

Galloway Gallegher, the inebriated inventor, was at his hilarious best in "Proud Robot," by, of course, Lewis Padgett, who wrote, in the first line; "Originally the robot was intended to be a can opener." However, the robot did nothing but stand around narcissistically admiring itself in a mirror while Gallegher, hung over as usual, tried desperately to remember, or find out, what its true function was. A lovely yarn.

"Symbiotica," by Eric Frank Russell, was the third of the Jay Score stories to appear ("Jay Score," May, 1941 and "Mechanistria," January, 1942), which had as their central character, Jay Score, Robot. This adventure takes Jay Score and his companions to a remote planet which on first sight seems to be harmless, but turns out to be peculiarly dangerous as the unique nature of their symbiotic system becomes frighteningly clear.

There was a great deal of fruitless speculation among the fans in the weeks preceding the appearance of the new small Astounding on October 8, as to what it would look like. When it finally did appear, the initial reaction was in the main favorable. The magazine was 5-1/2 x 7-3/4 inches in size, had 176 pages, was thickly compact, boasted a sixteen page rotogravure section for articles, and contained none of the type of advertising commonly associated with pulp magazines; in fact it contained no ads, period. The cover by Timmins, illustrating George O. Smith's novelette "Recoil" was pretty poor, but that was to be expected. One touch that I particularly liked was the use of a cut of a rocket ship by Elliot Dold to illustrate the contents page; a nice reminder of the past.

Smith was back with Don Channing and the rest of the personnel of "Venus Equilateral" in the aforementioned "Recoil," which was something about an electron gun, a super development of the kinescope tube, used for destroying meteors and, later, space ships. The only trouble with their use as weapons on space ships was the recoil effect from the discharge of a stream of high-powered electrons.

"The Beast," by van Vogt, was a sequel to "The Great Engine" from the July issue. In this story, Pendrake, the man who had discovered the strange engine on a hillside and subsequently discovered the Venusians, former Allied scientists who had developed atomic power and taken it to Venus, becomes the victim of a torturous plot by neo-Nazis who are hoping to revive Hitlerism with the aid of atomic power.

The best story in the issue was Padgett's "Gallegher Plus," a long novelette in which Galloway Gallegher is again confronted with the consequences of his inability to remember any of the events occurring during one of his periodic drunks. He returns to sobriety to find an inexplicable contraption in his living room in full operation, the product of his subconscious inventive genius. This one was an undistinguished looking box-like affair with thin filaments running from it through the window and into the back yard, which it was diligently reducing to a huge hole in the ground at a steady rate. The "Gallegher" stories of Padgett appealed on two levels, the science-fictional and detectival. The construction of the stories was detectival with the problem clearly presented at the beginning and with the detective (Gallegher) pursuing the truth down the trail of clues left by the author. At the same time they were legitimately science fiction with the problem, as presented, being one that could only be answered science-fictionally.

December rounded out the tenth full year of Astounding under the Street & Smith label and also marked the end of the most notable years of the so-called Golden Age. The issue, as such, contained nothing outstanding with the possible exception of a long novelette by Anthony Boucher which had been originally intended for the recently deceased and universally mourned Unknown Worlds, "We Print the Truth." This concerned a newspaper that printed nothing but the truth because everything it printed came true. Other stories were "The Debt," by E. Mayne Hull, another in the Artur Blord adventures and the cover story; "Lost Art," by George O. Smith, which was about a strange tube and an instruction manual left behind by the vanished race of Martians; the problem was, although the manual was completely detailed as to the operation of the tube, it gave no indication as to its function in an obviously more complex operation; "The Iron Standard," by Padgett, which dealt with the difficulties confronting a group of Earthmen stranded on Venus for a year and forced to make a living for that time by the only means at their disposal, but a means that is not only illegal but culturally taboo, and "Fricassee in Four Dimensions," by P. Schuyler Miller, an amusing tale of a tramp with remarkable culinary skills.

Tradition and nostalgia have ineradicably fixed upon the years currently under discussion the designation of the Golden Age, but if we must chop the time-line of Astounding into eras, or ages, or whatever, for the sake of accuracy this period should rightfully be labeled the Second Golden Age. To mark the demarcation line between a Golden Age and the preceding and following years is an extremely difficult task; actually, almost impossible. A magazine doesn't change radically from one month to the next in the ordinary course of events. One exception to this is where one publisher or editor takes over from another. When Street & Smith took over Astounding from the Clayton chain and installed F. Orlin Tremaine as editor, the policy and appearance of the magazine were completely changed from the Clayton Astounding, and

the ensuing three or four years constitute what is essentially the first Golden Age of Astounding. Where it ended and the interregnum commenced is hard to say. The last couple of years of Tremaine's tenure fell off somewhat from the high level at which he had held the magazine during the first two years of his editorship, and John W. Campbell, Jr. took roughly a year and a half to really get a solid grip on things when he became editor. When he finally did get things going the way he wanted them to, the second Golden Age came into being.

It is easy enough to ascribe the beginning of this second Golden Age to the July, 1939 issue; the hazard sets in when you attempt to pinpoint the ending. I'm going to meet this problem head on, and pinpoint it at December, 1943. This brought the richest years of the Golden Age to a close. But to satisfy those who are unwilling to restrict the Golden Age to these few short years, I will concede that the next two years could be considered a Final Phase of the Golden Age, with the magazine settled on a moderately high plateau of competence, from which the outstanding and classic stories reared like isolated mountain peaks.

The features that distinguished the years 1939-1943 were exciting new ideas, talented new authors, refurbished old authors, and a deluge of exceptional stories from their typewriters. This phenomenon was the unique property of these few short years, but the momentum begun then carried the main aspects of the Golden Age onward for a few more years.

There is another aspect of science fiction, particularly the science fiction found in Astounding from 1934 through the middle forties, that will be briefly discussed here; an aspect that materially contributed to both the Golden Ages and the years between. This is the much misunderstood Sense of Wonder. It is true that most of the stories of this period lack the literary polish and sophistication of the contemporary output, but, oh! the Sense of Wonder, the breathless adventure and the boundless imagination they had instead. This was what made so much of the older science fiction so intensely memorable and classic. Today it is virtually impossible to generate the same enthusiasm for a story that could be generated ten, fifteen, or twenty years ago.

In the final analysis a Sense of Wonder is the priceless possession of the youthful discoverer of science fiction; it may last but for a short fleeting instant, or it may stay with him for a number of years. At any rate, it is sooner or later lost, seldom to be recovered.

THE GOLDEN AGE—FINAL PHASE: 1944-1946

By 1944, Astounding was beginning to show signs of becoming somewhat self-consciously impressed with its own significance in terms of its self-designated vanguard position in the field of scientific thinking: This was evidenced largely by Campbell's occasional mention of the fact that the magazine was read by more and more scientists and engineers and was attracting writing talent from these fields. Whether or not this was actually true, doesn't matter. The story oriented around engineering themes and problems such as Clement and George O. Smith were writing at this time, had a strong following, but they always seemed to be merely the updating of the approach to science fiction that Gernsback and T. O'Connor Sloane had in the Amazing of the twenties; that the ideal science fiction story is one that is related to known scientific facts and extrapolates from there. This was great for those who liked it, but fortunately there was enough of the truly imaginative science fiction to offset this more technical form and keep the Golden Age alive to some extent for a number of years. Campbell, to give him his due, continued to give us as many outstanding and original stories as he was able to get and seemed as delighted as the next fan when a really good story appeared.

The first thing to mention about 1944 is that this was the first year of the digest size Astounding, a size it retained to the end with minor variations in dimensions. (The digest size was continued after the change of name to Analog and was retained until Analog adopted the large size with the March, 1963 issue.) Astounding lost an intangible aura that surrounded the larger sizes when it became digest sized. As noted earlier, the paper used in these first few years of the digest size was a rather coarse and bulky pulp; a far cry from the almost slick paper used in today's Analog.

The biggest disappointment in 1944 was the paucity of good serials to see print. In 1943 we had "The Weapon Makers," "Gather, Darkness!", and "Judgment Night"; each a classic. In 1944 we had only two complete serials: In May, "The Winged Man," by E. Mayne Hull, a two-parter that didn't even merit a cover, and "Renaissance," by Raymond F. Jones, a four-part serial starting in July. ("Nomad," by Wesley Long, a pseudonym of George O. Smith, started in December and will be discussed later.)

"The Winged Man" was a moderately interesting story of a U.S. submarine being whisked through time a million years from 1945. In this far distant future they find that the Earth has been completely covered by a new flood which has forced the survivors to develop two new races of man; the winged man and the submarine man. These two races were fighting a total war of destruction to see who would be top dog in the future when the waters had receded, and the winged men, who had the advantage of a time apparatus, were plucking potential allies from the past. The problem confronting the sub crew was which of two equally brilliant races should they help to destroy the other, and what were the chances of returning to the twentieth century. Miss Hull always gave the impression of being a second-rate writer, and this short novel didn't materially change that impression.

"Renaissance," Raymond F. Jones' great novel, bore out the promise that had been implicit in his first story, "Test of the Gods." "Renaissance" was a marvelously rich and imaginative tale of two planets, Earth and Kronweld, linked together in an unique and vitally important fashion, and the conflicting forces at work to either increase the tenuous contact between the two worlds or sever it completely. Jones peopled his novel with a fine assortment of characters who performed their roles in lovingly detailed scenes set against a colorful and complex background.

If the number of novels was scant this year, not so the number of good, and in some cases, outstanding novelettes. There was A. E. van Vogt's "The Changeling" which appeared in April and which was probably one of his first important stories revolving around a character with remarkable, unexplained powers gradually realized, who is impelled into action for unknown reasons and by forces of which he has no knowledge. It was a taut story told with van Vogt's blend of action and bewildering complexity, but certainly not one of his classics. Fredric Brown's "Arena" in the June issue took up the problem of Earth's space forces facing an impending clash with an invading fleet of extra-galactic "Outsiders" who threaten to destroy man totally and take over this galaxy. At the intercession of a dispassionate and disembodied entity who wishes to prevent either side from enjoying a pyrrhic victory because of the evenly balanced nature of the confronting forces, and who at the same time insists that one side must totally destroy the other to insure the proper development of the remaining culture, a champion is chosen from each side by this entity and placed in an "arena" on a barren planet in another space-time continuum,

there to decide by single mortal combat which side will prevail over the other. The idea of an inter-galactic war being settled by single combat in the old chivalric tradition is an interesting one and Brown handled it quite well, notably in the combat scenes, and his handling of the alien champion was exceptionally well done.

One of the feature attractions of the year was the presence in the August issue of another of Isaac Asimov's "Foundation" stories, "The Big and the Little." This was the third of Hari Seldon's "crises," which found the planet Terminus and the Foundation maintaining a precarious existence on the Rim of the dying Empire, forced to protect itself against the Korellian Republic, a cluster of some half-dozen stellar systems and a republic in name only. The Korellian Republic is aided by the Empire in the form of massive space ships and massive atomic generators, and feels confident in being able to destroy the Foundation planet with its greater might. Against this power the Foundation pits its own atomic technology which is based on miniaturization, and the shrewdness of master trader Hober Mallow of Smyrno, an Outlander who eventually becomes mayor and in the end defeats the Korellian Republic, beginning, as a result, a reign of plutocracy backed by traders and money barons. A fine story in a continuing series that would become a science fiction classic.

Less cosmically scaled than Asimov's novelette was C. L. Moore's superb classic, "No Woman Born." Although the plot was not new (a human being, horribly mangled or disfigured by some catastrophe, is given new life with a metal body), Miss Moore relates the story of the lovely dancer, Deirdre (hopelessly disfigured in a fire, she is given a body of metal and goes on to remount the heights as a dancer) with such insight into character and an understanding of the drives that motivate an artist that any lack of originality of plot was of no importance. The almost poetic prose that one had long ago come to associate with Miss Moore was an important factor in elevating this story to the level of greatness it so rightly deserves.

November was distinguished by two outstanding novelettes. The first of these, "When the Bough Breaks," by Lewis Padgett, could be considered a companion piece to the same author's earlier "Mimsy Were the Borogoves." Alexander is a normal eighteen-month-old son of a normal couple until four gnome-like characters present themselves and announce that they are from five hundred years in the future where it seems this same Alexander is still alive, the first of a new race of homo superior. The gnome-like characters are here at the future Alexander's instructions to give the infant Alexander advanced training so he can get a head start on the future, and the results of this training are tragic and catastrophic.

The second novelette was the classic "Killdozer!" by Theodore Sturgeon. Sturgeon's last story in Astounding had been "Medusa," a less than memorable short in the February, 1942 issue. "Killdozer!" was up to the par of his classic 1941 novelette, "Microcosmic God," and is, perhaps, his greatest story of his early period of science fiction

writing. ("It," from Unknown, was the greatest thing he ever wrote, including More Than Human, Farrar, Straus and Young, 1953, but this little gem was an out-and-out horror story and it isn't fair to compare his science fiction writings with it.)

In its own way, "Killdozer!," the story of a giant bulldozer on a Pacific atoll during World War II that is brought to terrifying life by a malevolent alien intelligence—raising merry hell in the process—is as much a horror story as "It." The picture of an utilitarian piece of machinery such as a bulldozer, without human guidance operating with deadly purpose, was very unsettling, to say the least.

Clifford D. Simak, one of the best craftsmen in the science fiction field and one of the handful of old pro's who had smoothly managed the transition from the thud and blunder of the thirties to Campbellian science fiction of the middle forties, began in May a series that would eventually bring him "The International Fantasy Award" when all the stories in the series were combined into a book. The story, of course, was "City," which told, from the viewpoint of the Webster family, of the breakup of the urban complex and the return to a more pastoral existence brought about by automation, inexpensive and fast transportation, etc. This novelette was quickly followed by "Huddling Place," a short in the July issue and "Census," the cover story for September. "Huddling Place" examined the phenomenon of man, served by robots, surrounded by labor-saving devices and in instant face-to-face communication with any point in the world, being psychologically unable to face the prospect of leaving his home. "Census" was concerned with the need to determine the probable number of non-human mutants who could take over and keep the dreams of man alive when man eventually vanished from the Earth. The dogs, of course, were the ones who would fill the bill. A fine series that deserved every bit of acclaim it received.

Perhaps the most sensational story of the year was "Deadline," a novelette in the March issue by Cleve Cartmill. This story was not sensational literarily, but literally. Briefly, the story dealt with the development, and imminent use of an atomic bomb in a world war with probable catastrophic results, and the efforts of an intelligence agent to get to the bomb before its detonation and pull its teeth. Not a particularly original idea, nor a story that excited much comment from the knowing science fiction reader. However, it did excite certain persons in government circles into action with ludicrous results. Campbell has published his version of the affaire Deadline, and I think it might be interesting to hear Cartmill's. In a personal letter, he had this to say:

"Deadline," that stinker, came about when John Campbell or I suggested to one or the other that I do a yarn about an atomic bomb. I'm not sure we called it that in our correspondence—we were thinking in terms of U-235 and critical mass. Our correspondence took place in early August, 1943. My file shows

that I mailed it to Astounding Sept. 8, received the check Sept. 20. John wasn't too happy with the story, but he knew I was hungry.

He published it early in March, 1944 and a week or two later a Brooks-Brothered young man from Military Intelligence came to see me at my home in Manhattan Beach. We spent about five or six hours together, mostly in my answering questions. I had the file of Cartmill-Campbell correspondence about the story, and he borrowed this for copying. Upshot: I was in the clear, but violated personal security which every American should etc., etc., etc. Just how I violated any kind of security wasn't clear then; all the facts contained in the story were matters of public record.

What they were afraid of was that I—or John—had had access one way or another to information supposedly confined to the Manhattan Project: The similarity of names: Manhattan-Manhattan Beach were purely coincidental and half a continent apart.

They also put John through the question mill. He told me at our first meeting—Westercon, LA—some fifteen years after that they had tried to extract a promise that he would publish nothing more concerning nuclear fission and he told them to go fly their atoms.

Well, the various stories released in later years had everything from the FBI to foreign spies in the act. But I saw of Mata Hari(s) neither hide nor hari, damn it. (November 19, 1961)

Campbell was immensely pleased by the furor the story created in Washington. It was proof positive that science fiction, particularly the Astounding brand, was important enough to warrant serious scrutiny by learned heads in the government, and by inference from this fact, by others in the scientific community. No longer did science fiction deal with childish and improbable Buck Rogers adventures, but dealt instead, in many instances, with serious scientific problems. And most fans felt pretty much the same pride in their favorite form of literature when the facts concerning "Deadline" and Astounding's involvement with atomic bomb security became known. For a while it was a devastating weapon used in refuting any sneering aspersions cast at science fiction by its critics.

At this point, some mention should be made of the department "Probability Zero" which appeared occasionally from April, 1942 until its last appearance in December, 1944. The department was composed of short-shorts (five hundred or seven hundred and fifty words) which were science fiction stories that sounded almost possible, but were impossible by reason of known scientific law or by definition. Many of the professionals contributed to "Probability Zero," as well as a number of fans: Bob Tucker, Harry Warner, Jr., Jack Speer, Roscoe E. Wright, Poul Anderson. It was kind of fun, but many felt that

the space could have been better utilized, and so were not too unhappy when the department quietly folded.

Of all the years commonly considered Golden, 1944 was the least memorable; the outstanding stories that were published only pointed up the disappointing quality of the bulk of what was left. In some respects, 1944 can be regarded as a bridge between two peaks; the peak 1940 to 1943, and the peak 1945 to 1950. At any rate, the slump was short lived and things began to pick up considerably from 1945 on.

This was one of the good years. The wealth of great stories published during 1945 more than made up for the small number in the preceding year. The outstanding attraction of the year was A. E. van Vogt's ambitious novel based on general semantics, "The World of Ā." Pressing it for top honors were such choice items as Fritz Leiber, Jr.'s novel "Destiny Times Three," the first novel in Isaac Asimov's "Foundation" series, "The Mule," Murray Leinster's memorable novellette, "First Contact," and the "Baldy" series of Lewis Padgett.

Also included for discussion in this year is Wesley Long's (George O. Smith) three-part novel, "Nomad," which began in the December issue of 1944. This was a long novel, and although perhaps not a great one, it was fast-moving, fairly complex, and engrossing. Guy Maynard, an up-and-coming junior officer in the Terran Space Patrol gets himself kidnapped by Martians, rescued by Ertinians (inhabitants of an undetected nomadic planet that is approaching the Solar system, human, and possessors of scientific knowledge unknown to Earth or Mars), eventually returns to Earth and from there experiences a succession of adventures that ultimately ends with his assumption of the role of Emperor of the Solar system, the purpose being to provide a focus for the hatred of the three planets (Ertene had by this time become an addition to the Solar system) which would relieve the pressures leading to wars between the three, and eventually lead to greater cooperation and true peace between them. Long handled this story well, peopled it with reasonably believable characters, and enough high adventure and flashing space battles to please almost anyone.

"The Mixed Men" by van Vogt, the cover story for January, was the concluding story in the "Dellian Robot" series which included "Concealment" (October, 1943) and "The Storm" (November, 1943) and concerned the efforts of Captain Maltby, hereditary leader of the Mixed Men, to resolve the differences between the Dellian robots, the non-Dellians, and Earth. This was the best of the series, with a fine blend of van-Vogtian action, color, and wheels-within-wheels intrigue.

"Universe" by Heinlein is undisputably the greatest of the universe within a space ship theme stories, but a story by a relatively new author in the October issue, "Giant Killer" by A. Bertram Chandler, succeeded quite admirably in holding its own with it. Chandler took the essence of the "Universe" idea, i.e., a mutated race growing up within the confines of the ship and unaware of any other world but the world of the ship, gave it a nice twist, embellished it with some ex-



May, 1945; the "First Contact" painting by Timmins.

cellent writing, and came up with a near perfect story. The giant killer was Shrick, the shrewd, fearless leader of the People, and the implacable hunter and destroyer of the Giants, those monstrous creatures who inhabit the Inner World and threatened the very existence of all the People. The giants obviously were the crew of the space ship, and the People, it developed, were highly intelligent mutated rats. Chandler presented the People with such sympathy and understanding that one couldn't help rooting for them as they fought the giants for the right to live and grow. A wonderful story.

The problems confronting a star ship's commander when he meets for the first time an alien ship deep in interstellar space is one that has been dealt with in a dozen different ways by a dozen different authors. One of the best is Murray Leinster's "First Contact," the featured novelette in the May issue and the subject of what was perhaps Timmins' best cover of the year. The space ship Llanvabon was on an exploring mission into the Crab Nebula where it discovered a large black ship also on the same mission, but not from Earth. After the initial palaver was out of the way and it was realized that each side genuinely liked the other as individuals, the doubt remained as to whether either side could trust the other as representatives of their government. If one ship were to leave first, wouldn't the other feel bound by duty and a sense of security to follow it to its home planet? The only solution, it seemed to both captains, was to fight; the winner thereby protecting the secret of the location of his home planet. This really appealed to no one, but there seemed no alternative until Tommy Dort, the navigator of the Llanvabon, came up with the solution, why not swap ships after first removing all star maps and records that might give a clue to the ship's home planet? This met with instant approval, and, after a few additional points were agreed upon, the swap was made and both sides departed for home, each richer than when they started by the possession of the other's ship and its contents, and happy that an unique and sensitive problem had been disposed of in a civilized and intelligent manner.

An interesting feature in this same issue was an article by Willy Ley entitled "V2—Rocket Cargo Ship" in which he told what information was available at that time on the V2, plus his first-hand knowledge of German rocket scientists and experimenters, and came up with some intriguing speculations on the development of Peenemunde, V2 rocket fuel, and the immediate future of the V2 after the war.

The four "Baldy" stories of Lewis Padgett which appeared in 1945 were among the high points of the year. The Baldies were human mutations resulting from radiation exposure during an atomic war, who were able to breed true, and were distinguished from man in general by a total lack of hair and the possession of ESP. The Baldies were faced with two problems, both critical: maintaining a precarious, at the most, acceptance by non-telepathic society; working, creating, and raising families in that society. And secondly, fighting a desperate, hidden battle with the Paranoids, those Baldies who felt they were

homo superior and thereby entitled to dominate and rule over non-telepathic man. The history of the Baldies was told in five smoothly written, sophisticated and action-packed novelettes: "The Piper's Son" (February), "Three Blind Mice" (June), "The Lion and the Unicorn" (July), "Beggars in Velvet" (December), and finally, "Humpty Dumpty" (September, 1953). (Published as Mutant by Gnome Press, 1953.)

Two of the most important contributions to the "Foundation" series were presented by Isaac Asimov this year; a long novelette in April, "Dead Hand," and a two-part serial, "The Mule," in the November and December issues. In the former, the Foundation (in spite of weak and ineffectual leaders) wins out over a still powerful Empire ruled over by a shrewd and ruthless Emperor, and the Empire's most brilliant and dangerous general who leads the attack on the Foundation. It is obvious to the leaders of the Foundation, at the conclusion of hostilities, that the Foundation has built-in safeguards that protect it from any external danger, except possibly (at some far date) from the Second Foundation "at the other end of the galaxy," or from internal enemies.

In "The Mule" Asimov introduces a threat to the Foundation that is neither of these, a threat which was unforeseen by Hari Seldon, and which shows every prospect of walloping the daylights out of the Foundation. This threat was the Mule, a mutant, an unknown who becomes a great leader and military genius with a vision of dominating the galaxy. This novel formed the central part of the "Foundation" saga; up to this point the Foundation was concerned primarily with fighting off threats to its continued existence with not too much thought given to the Second Foundation. But from now on the problem of what to do about the Second Foundation, and efforts to locate it, would be paramount.

Fritz Leiber, Jr., who scored a tremendous triumph with his classic 1943 novel, "Gather, Darkness!," was less successful with his second novel for Astounding, "Destiny Times Three," a two-part serial beginning in March. This was a complex and involved story of three alternate worlds and the intertwined destinies of their inhabitants and the dangers inherent in playing around with time-probability. This was a very fine story, written by a master, but not up to the master's first great classic.

The most momentous event of 1945 was the publication of A. E. van Vogt's one hundred thousand word classic, "World of A" in the August, September, and October issues. From the first few paragraphs in which Gilbert Gosseyn is found participating in the games of the Game Machine, through his death and rejuvenation, to the stunning climax when Gosseyn finds out what the hell it's all about, the magazine was almost impossible to put down. Van Vogt is probably unequaled by any other science fiction writer in the use of the narrative hook, and this novel was a prime example of his skill. Also, his use of general semantics as the underlying theme contributed greatly to the general interest. Many fans around this time were disciples of Korzybski, and a reading acquaintance with and possession of Science and Sanity amounted almost to a status symbol; consequently, some of the discus-

sions stimulated by van Vogt's projection of general semantics into the future tended to get a little heated.

In July a one-page "In Memoriam" announced the sad fact that Malcolm Jameson had died on April 16, at the age of 54, of cancer of the throat. Jameson had been, since the appearance of his first story in 1938, one of the most reliable of Campbell's stable of writers. Although he wasn't in the same class with Heinlein, van Vogt, Leiber, Sturgeon, Simak, Kuttner, et al, he wrote the type of good, readable fiction that forms the backbone of any good magazine. Possibly the best thing he ever wrote, at any rate the most popular, was "Admiral's Inspection," in the April, 1940 issue, the first of the "Bullard of the Space Patrol" series. His most ambitious effort had been a three-part novel in Astonishing (October, December, 1940, February, 1941), "Quicksands of Youthwardness," a forgotten minor classic today. Malcolm Jameson would be missed.

The science fiction nut came into his own with the dropping of the atomic bomb which ended the war in August. As Campbell said in his editorial for November, "The science-fictioneers were suddenly recognized by their neighbors as not quite such wild-eyed dreamers as they had been thought, and in many soul-satisfying cases became the neighborhood experts." In December, Campbell printed a long excerpt from the Smyth Report, "The Making of the Bomb," which dealt with the last stages of the problem of producing the atomic bomb. In the editor's blurb he pointed out that the essential principles employed in the bomb were described as the arming mechanism of the atomic bomb in Cartmill's "Deadline," which was what caused the security flap when the story was published a year and a half earlier.

As was to be expected, the December "Brass Tacks" was devoted almost entirely to letters about the bomb and atomic energy. And, as was also expected, Campbell got a bit carried away in his predictions in answering a couple of letters: To one letter writer who thought, "We'll be on the moon before 1960," he replied: "Personally, I think you are over conservative. I'd say we should reach the moon by 1950." To another, he said: "First sale of Astounding on the moon by 1955, I'm betting!" Also in "Brass Tacks" was a letter from Theodore Sturgeon in the form of a Norman Corwin style dialogue entitled "August Sixth 1945," which asked the questions, "Who buys this crap?," "Who writes this crap?," "Why do you read this crap?," and answers them in heroic measure. It's rather pretentious, but really not bad when you consider the heady excitement the science fiction editor, writer, and fan was experiencing in those first days following the disclosure that man had finally unleashed atomic energy.

1946 got off to a good start with the first installment in January of Lewis Padgett's two-part serial "The Fairy Chessmen," which presented a picture of America, dug into underground cities protected by force shields, in a long-stalemated war with the Falangists, a European nation. The Falangists had at long last developed a bomb that could

penetrate the force-shield, and it was essential that American technicians solve the equation that gave the bombs their special properties. These technicians were all trained along orthodox lines, but the equation they were trying to solve was based on variable truth, and this eventually drove any technician attempting to solve the equation insane. This is just the beginning of a fascinating novel that deals with war, time, psychometrics and fairy chess, told in the smooth, mature style that was the Padgett trademark.

Occasional references have been made to stories that have had memorable last lines; lines that are remembered and repeated for years after their first appearance. The number of memorable opening lines are not so numerous, but there are a few, the most notable being the first line to "The Fairy Chessmen." I doubt if there are many fans who will ever forget that first line: "The doorknob opened a blue eye and looked at him." Beautiful!

Appearing also in the January issue was Philip Latham's (a pseudonym of R. S. Richardson) classic short story, "N Day," which gave a chillingly believable account of the end of the world on January 29, 1949.

A. E. van Vogt was on hand with another serial this year, "The Chronicler," in two parts beginning in October, a story of a man with three eyes in his skull and the strange world this additional eye allows him to enter. This was an improbable, nightmarish story; a story that one felt only van Vogt could pull off. In May, a short story by van Vogt served as the introduction of a new series that was to become one of his most popular. The story was "A Son is Born," the first in the "Clane" series. This was followed by "Child of the Gods," a novelette, in August, and by another novelette, "Home of the Gods," in December. This series told of an age where atomic energy was old, but science forgotten, remembered only in religious ritual. Clane, a son of the ruling house of Linn, was a mutant as a result of his mother's exposure to atomic radiation in the temple, and is hidden away and held in contempt by nearly everyone. The general parallel between Clane's development and rise to power and that of the Roman Emperor, Claudius, was apparent to anyone familiar with Roman history or who had read Robert Graves' "Claudius" novels; but this fact didn't in the least detract from the series' interest.

In July of 1946, the 4th World Science Fiction Convention was held in Los Angeles. The 3rd World Convention had been held in Denver in 1941 and the fourth was scheduled for 1942 in Los Angeles but, with the onset of the war, the convention was cancelled until after the duration. With the return of peace, the convention machinery was reactivated and the 4th World Convention was finally held over the Fourth of July weekend with A. E. van Vogt and E. Mayne Hull (Mrs. van Vogt) as dual Guests of Honor.

There were two other novels published this year, neither of which was particularly memorable. The first was a three-part serial beginning in March, "Pattern for Conquest" by George O. Smith, a fast-moving, action-filled novel of galactic invasion. A competent, readable

novel, but not on the same level as his earlier novel, "Nomad." The second was a two-part potboiler by old-timer Arthur Leo Zagat starting in August called "Slaves of the Lamp," about a future of city states wherein peace is maintained by means of "Hoskins Lamps" which record the emotional content of the various city states and indicate any imbalance in that content which might be a potential threat to peace.

The story of Simak's "Webster Family," which began with "City" in 1944, was taken up again in "Paradise," a short story in June, which told of a strange and wonderful life available to man on the planet Jupiter, if men were willing to relinquish their human identities, and continued with "Hobbies," a novelette in November, which was about the twilight of man's existence on Earth, with all the cities but one deserted, and the dogs and robots about to come into their own as masters of the Earth.

In April, a short story about a short-lived war between Earth and Mars called "Loophole" served as a rather inauspicious introduction of one Arthur C. Clarke to the science fiction field. This was followed the next month by a much better story, a novelette entitled "Rescue Party," a taut account of the efforts of the Galactic Union to rescue the doomed inhabitants of Earth, whose sun is soon to go nova, only to discover after a fruitless search of the planet that the primitive race inhabiting the planet had dared to launch a vast rocket-powered fleet into space on a centuries long migration to the stars. This was a powerful story that remains one of the best of Clarke's many fine contributions to the genre.

One of the most remarkable articles ever printed in Astounding was "Meihem in Ce Klasrum" by Dolton Edwards. This was an amusing and relentlessly logical exposition of how the English language could be improved by a gradual and systematic simplification of its spelling. This fine article appeared in the September issue, the issue that featured Raymond F. Jones' "The Toymaker" on the cover; the story of the Toymaker who made the shapeless toys called Imaginos, wonderful toys that delighted children, but puzzled adults, and proved to be supremely important in the cause of peace. Also in this same issue was one of C. L. Moore's finest stories, "Vintage Season," with the by-line of Lawrence O'Donnell, a powerful tale of an old house that had a strange and compelling attraction for two exotic groups of people who vied with each other to gain possession of it during the vintage season of May.

"Special Knowledge," by A. Bertram Chandler, the cover story for February, was a long (72 pages) novelette about a switch in personalities, and time, between a science fiction writer-merchant marine officer on leave in England after a convoy run from New York during World War II, and the second officer of the space liner Martian Maid, which had blown an engine and was drifting out of control toward unexplored Venus. The special knowledge possessed by George Whitley, the Englishman, came in right handy after the space ship crash-landed on the watery world of Venus. Chandler's first-hand knowledge of ships

and the problems encountered during a disaster was obvious and well told, and added greatly to the interest of the story. Chandler, like Jameson and Heinlein, was adept in translating the atmosphere and routines of modern ships into space ships of the future.

Eric Frank Russell's very fine novelette, "Metamorphosite," which depicted the changes that might be expected in man's physical structure, and also in his attitudes toward empires and non-humans over a span of millennia, was featured on the cover of the December issue.

Theodore Sturgeon, an infrequent contributor of late, claimed the cover of the November issue with "Mewhu's Jet," a novelette about a quaint little character from some far off solar system stranded on present-day Earth, and the childlike trust and faith he had in his new-found friends. And finally, Hal Clement's "Cold Front," a story of the application of advanced meteorology coupled with trade in the opening up of new frontiers in space, was the cover story for July, and with Clement's novelette as a capper this just about covers what was the best of a better than average year. This was Year I of the Atomic Age, and this fact was beginning to be reflected in a few stories which attempted to probe some of the problems confronting man in the near future; one of the dominant themes of the next few years in Astounding.

There were three notable changes this year in the outward appearance of the magazine that marked a departure from the past. The first change occurred in August, and was a relatively slight one, a change in the cover logo in which Astounding was reduced to half its former size, with the familiar Science-Fiction becoming more prominent. Over the next two months the Astounding was reduced even further and then in November the logo took the form it was to retain until January, 1953; a very small Astounding in the upper left corner and SCIENCE FICTION in large block letters beneath it, the full width of the cover.

The third change was a change in cover artists. On the December cover the work of a new artist appeared, the first in four years. His name was Alejandro, an artist who was very popular with many fans, but one who failed to impress many others with his symbolical covers. William Timmins had been the cover artist for every issue (except for July, 1944 and July, 1945) of Astounding from December, 1942 until November, 1946. Wesso, who did all the Clayton covers, plus a few in the late thirties, had a total of 41. Brown, with most of the covers from October, 1933 through 1938, had a total of 53. Hubert Rogers had only 33 from his first of February, 1939 until his last to date, of August, 1942. Timmins had 48 with his November, 1946 cover, and by the time his last appeared in 1950 he had painted 53 covers; exactly the same as Howard Brown and exceeded only by Hubert Rogers in final total. This is remarkable, because of the four artists primarily identified as Astounding cover artists in the sixteen years of its existence, Timmins was most certainly the least distinguished as a science fiction artist. He was a competent artist, but a very mediocre science fiction artist who contributed nothing really outstanding to the memorabilia of Astounding's past.

THE GOLDEN AGE TURNS TO SILVER: 1947

Harry Warner, a prominent fan of many years' standing, has stated with considerable perception that he regards Astounding of 1946 as marking the beginning of the Silver Age, the period that developed out of the Golden Age. Perhaps. I have the feeling, however, that 1947 is the key year marking the beginning of this phase, and my reasons for thinking so will be gone into in greater detail at the end of this chapter.

Lewis Padgett started off the year with the first part of a two-part serial, "Tomorrow and Tomorrow," which presented a rather grim picture of the world in the year 2051, a world controlled by the GPC (Global Peace Commission) which had taken over following the short-lived World War III and still controlled the world's atomic energy, and attempted to maintain world peace by enforcing a strict status quo, limiting original research, etc. The only way to break loose from the strictures of the status quo, it seems to a dedicated underground, is to detonate Uranium Pile No. One which is buried deep in the heart of the great sunken ziggurat under a Pacific island, thus creating the chaos (or even war) that would shatter the power of the GPC and release man from stasis, allowing progress to once more take over. Figuring significantly in this excellent story were mutants, alternate worlds, and a host of other details, including a real punch ending, that added up to one of the better stories in the "what will the world be like after Hiroshima?" school.

The cover was once again by Timmins, the first of the three he would have this year, and also in the art department was the welcome return of Edd Cartier, the inimitable illustrator of so many Unknown stories who had been absent from the field since the demise of that magazine.

For the first time since becoming editor, John W. Campbell, Jr.'s name appeared on the cover as an author. Not as the author of a

story, however, but of an article in the February issue; "Atomic Power Plant," an investigation of how an atomic power plant can efficiently use all its waste products for peaceful purposes. The cover illustrating Campbell's article was by one "Sniffen"; honestly.

The most important item, though, in this issue was "Maturity," Theodore Sturgeon's novelette about Robin English who, through a series of injections, is accelerated toward maturity, becomes a fabulously gifted and productive artist, and in the end discovers what true maturity means. According to Sturgeon, he was dissatisfied with the story as he wrote it for Astounding, and virtually rewrote it completely for its inclusion in his first hardcover collection, Without Sorcery (Prime Press, 1948).

With this issue, the magazine took on a vastly improved appearance. The bulky type pulp that had been used for years gave way to a semi-slick paper that reduced the thickness of the magazine almost exactly by half. This made it much more flexible and durable; the magazine could be opened and folded back without fear of cracking the spine and losing half the pages. It also allowed for a much better quality of illustration reproduction, as evidenced by Orban's woodcut style drawings in this issue.

February 18, 1947 (the day the March issue hit the stands) dawned bright and beautiful in San Diego, California, and later that day, as I almost ran up the street from where I worked to the drug store, it was in excited anticipation. The reason for this excitement was the knowledge (as announced in the last issue) that this month's cover would be by the Master himself; Hubert Rogers. After five years of relatively mediocre covers, Astounding was once more to blaze forth in its old glory from the newsstands with a Rogers cover. And to compound the pleasure, it would illustrate a novelette by another old favorite returning after many years, Jack Williamson with "The Equalizer."

Although the cover was not one of Rogers' best, it was still such a welcome sight, and so far superior to anything by Timmins, that all I could do when I finally laid my hands on a copy was to stand there and admire it. I know my admiration for Hubert Rogers is puzzling to quite a number of people, but I always have, and always will, consider Rogers the best cover artist that ever illustrated science fiction.

Williamson's novelette was an excellent example of the modern type of science fiction he'd been writing before the war caught up with him; stories like "Breakdown," "Collision Orbit," "Minus Sign," and "Opposites—React!" "The Equalizer" showed how a small, portable atomic converter which could transmute almost any element and could be put in the hands of all citizens at virtually no cost would make governments, power blocs, and their cities as useless as tits on a boar hog.

The second novelette in this issue marked the first appearance in a science fiction magazine of Poul Anderson, one of the most accomplished of the modern authors writing in the field. (To forestall any argu-

ments, his actual first appearance was in "Probability Zero" for September, 1944 with "A Matter of Relativity," but "Probability Zero" stories by fans, and Anderson was just a fan at that time, were not true professional appearances.) "Tomorrow's Children," written in collaboration with F.N. Waldrop, was concerned with the genetic effect of radiation and fallout on the survivors of the next war. With the United States and the rest of the world reduced almost to anarchy, a handful of grimly determined men constitute themselves the de facto government of the United States and attempt to restore order out of the chaos. Hugh Drummond, a colonel in the Air Force, is assigned by General Robinson, the Acting President, to make a census of the country and attempt to determine the extent of mutations in babies born in the three or so years since the war ended. Drummond finds that the birth rate is a little over half that of pre-war, and that about seventy-five per cent of all births are mutant, and that about two-thirds of these are viable and presumably fertile; because of the high level of contamination of the atmosphere and the Earth, this can be expected to be the order of things into the indefinite future. It will therefore become necessary, Drummond argued, for man to become psychologically mature and to regard all men as human without regard to their apparent differences in form. This was a surprisingly forceful and mature story for one as young as was Anderson when he wrote it; altogether an admirable story and, for a first effort, even more so.

The third story of note in this issue was William Tenn's second published story, "Child's Play." (His first had been "Alexander the Bait," a short in the May, 1946 Astounding.) "Child's Play," the story of the "Bild-A-Man" set that arrived on Sam Weber's doorstep one morning with a card attached saying "Merry Christmas, 2153" started out on a light note, but ended in as chilling a manner as possible. Also in this issue was another of Isaac Asimov's robot stories, "Little Lost Robot"; a good story, but a lot of fans were wishing Asimov would write more "Foundation" stories instead of so many "Robot" stories.

Featured on the cover for April was "Home of the Gods," by E. A. (sic) van Vogt, another of the series of "Linn" which found the Lord Clane, now a young man of twenty-five, figuring decisively in the military action on Venus. The transposition of van Vogt's initials on the cover would have gone unnoticed by most people if Campbell hadn't printed a small notice at the end of the story assuring everyone that van Vogt hadn't changed his name.

A first story, and a short story at that, accomplished the relatively rare feat of taking first place in the "Analytical Laboratory" for this month. "Time and Time Again," by H. Beam Piper was a story in which Allan Hartley, chemist, author of several highly successful novels, and currently a Captain in Chemical Research, is severely wounded during the siege of Buffalo during World War III, is given a heavy narcotic shot for his pain, goes to sleep and wakes up to find he has returned in time thirty years to August 7, 1945, and is occupying his own thirteen-year-old body with all of his adult knowledge intact.

The story was a good one, but I remember being somewhat surprised at its rating in the "An Lab," personally favoring "Home of the Gods." The cover, incidentally, was a so-so job by Timmins.

The May cover by Rogers is possibly one of the very finest he has ever turned out for *Astounding*. It is quietly colorful, beautifully composed, and wonderfully illustrative. The story it illustrated was Lawrence O'Donnell's "Fury," the Kuttners' three-part sequel to "Clash by Night." The story takes place in the undersea Keeps of Venus, some years after the events related in "Clash by Night," and revolves around the character of Sam Reed, who is actually (although he is unaware of it) Sam Harker, the grandson of Zachariah Harker and the heir of the great Harker family. Sam's mother had died in giving birth to him, and his father, Blaze Harker, in blind, insensate hatred, had had Sam endocrinologically manipulated so that when he grew up he possessed none of the physical characteristics of the Immortals to whom he belonged.

Sam grew up a stocky, muscular, ugly man, totally bald; he was wise in the ways of the underworld. He becomes involved with the Harker family and also a scheme to colonize topside on Venus; he eventually becomes top dog on the planet only to be overthrown in the end, but not before having more than his share of adventures. This is one of the Kuttners' finest novels, colorful, intricately plotted and with excellent characterization.

Sturgeon was back with another fine story, "Tiny and the Monster," about Tiny, a Great Dane, who acted as an intermediary sensitive between a benign "monstrous" visitor from outer space who was stranded on Earth with a vital part of his ship broken and in need of replacement, and a girl metallurgist who had been chosen by the Monster to design the gadget it needed.

One of the minor classics of time travel appeared in this issue, "E for Effort," by a new writer, T. L. Sherred. A device is invented by an ex-army radar technician by which he can view any period in past time anywhere on Earth and project a solidograph of the scene. He teams up with an idealistic drifter and the two of them start making super-epic historical movies by photographing appropriate scenes from the past; Alexander the Great, the decline and fall of the Roman Empire, etc. After making a pot of money and a world-wide reputation they reveal their real plans for the use of the time viewer, to prevent future wars. With the time viewer in the hands of the people of the world, secret treaties and aggressive war plans by governments would be impossible. In the end this idealistic pair earns an "E for Effort"; which would be small consolation to them were they around to receive it.

The "Universe" type, or the generations long interstellar voyage, has always been a challenging theme for a science fiction writer. It allows him to set up a situation in a closed environment in which he can develop religions, governments, or simply problems involving people under exaggerated conditions. He has a world in microcosm with which he can do as he wishes. Heinlein's "Universe" is the

classic example against which all similar stories are compared. One of the best of these was A. E. van Vogt's "Centaurus II," which chronicled the degeneration of character and the gradual disintegration of command over four generations on the Centaurus II, whose mission it was to determine the fate of the first expedition to Alpha Centauri, check the system for habitable planets, then explore the systems of Sirius and Procyon before returning to Earth.

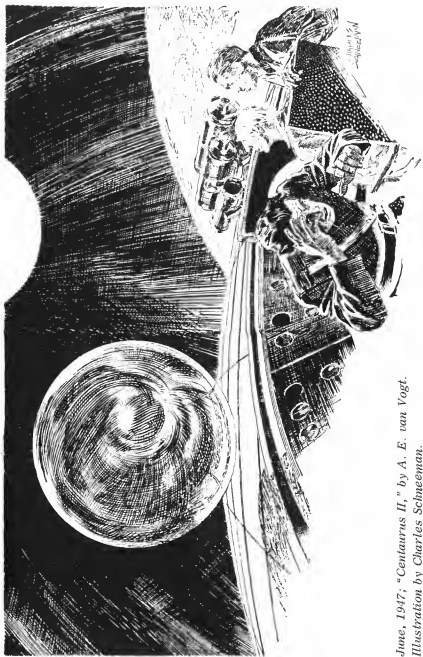
Unlike "Universe," the purpose of the trip was never forgotten despite mutinies, murders, and changes of command, but as the distances between the ship and Earth lengthened in both space and time, the mission became a secondary concern of most of the people on board, with the ship itself—and maneuverings for power and command—becoming primary. The story was quite naturally compared to "Universe," but, except for the basic plot idea, there really was no comparison. Although it was not as epic in scope as "Universe," "Centaurus II" remains a classic because of its sheer interest as a story and because of van Vogt's fine handling of the characters and atmosphere.

Schneeman's cover for the June issue (his first in seven and a half years) was his fifth and best. His cover for Nat Schachner's "Worlds Don't Care" (April, 1939), a view of Saturn as seen from Japetus, is generally considered to be his best—and a very lovely astronomical painting it was, too. But the real proof of Schneeman's talent rested with his cover for "Centaurus II" which was a colorful, dramatic, and accurate illustration of the story, and leads one to believe that he could have been the best of all Astounding cover artists if he had had more covers to his credit. His interior illustrations, needless to say, were superb.

"With Folded Hands..." Jack Williamson's cover story for July, was additional proof, if any were needed, that he is one of the better writers in the genre. The story of the arrival of the Rhodomagnetic Humanoids, with their irresistible and solicitous Prime Directive, "To Serve and Obey, and Guard Men from Harm," and the futile efforts of an old and broken man, Mr. Sledge, to destroy what he had built by blasting the Central on the far planet of Wing IV with a rhodomagnetic beam and thus relieve all of mankind of the oppressive benevolence of the Humanoids, was an almost flawless example of Williamson's growth as a skillful and sensitive writer.

Poul Anderson, who had made such a telling impression with his first story, "Tomorrow's Children," returned—alone, this time—with a sequel to that story, "Logic." In the former story, Colonel Hugh Drummond, serving as the representative of the Acting President, had flown around the country to make some sort of census of the survivors of World War III and at the same time try and get some idea of the seriousness and extent of human mutations. After finding that mutations would be extensive, viable and fertile, Drummond pleaded that a radical change in the attitudes of non-mutant humans would be absolutely essential if the human race were to survive—in any form.

"Logic" takes us several years along in time when Drummond has



June, 1947; "Centaurus II," by A. E. van Vogt.
Illustration by Charles Schneeman.

become president, and the country has become slightly stabilized following the period of almost total anarchy of the post-war years, and takes a close look at a mutant child, Alaric Wayne, the son of normal parents. These two stories—with no detectable rewriting or revisions—form the first half of Anderson's novel, Twilight World (Dodd, Mead, 1961). The fact that fourteen years after the first two stories were written, Poul Anderson, who had matured into a brilliant and skillful writer, felt they were good enough to stand on their own merits in company with completely new material, speaks highly for these first two efforts of one of the modern giants of science fiction.

One of the most eagerly awaited returns from the war was that of L. Ron Hubbard. Hubbard's science fiction reputation had been made and nailed down for all time with his incomparable classic, "Final Blackout," but his overall reputation was based on such novels for Unknown as: "Fear," "Death's Deputy," "Slaves of Sleep," "The Case of the Friendly Corpse," "The Ghoul," and others.

Most fans hoped for Hubbard to return to the pages of Astounding with something on the order of "Final Blackout." What they got instead was "The End is Not Yet," a three-part serial beginning in August. This novel concerned the efforts of an idealist, Paul Martel, to prevent Jules Fabrecken, an international industrialist, from starting an atomic war between the United States and Russia, which were the only two powers capable of opposing his dream of a fascist empire. This really wasn't a bad story, but it didn't even begin to challenge "Final Blackout." Rogers' cover was not too good, but his interior illustrations were excellent.

In "Mechanistria" (January, 1942) and "Symbiotica" (October, 1943) Eric Frank Russell wrote two stories of planets with exotic, specialized life forms which gave Jay Score and the rest of the crew of the ship Upsydaisy several anxious moments before resolving their difficulties. "Hobbyist," another story of a planet with weird flora and fauna, involved only one man, stranded on a planet without fuel for his ship, who is puzzled to find on landing that every living thing on the planet—vegetable, animal, insect, and a strange crystalline object he finds in a field some distance from his landing site—is one of a kind with no duplications. He ultimately learns that everything on the planet is the end result of an unusual hobby by an incomprehensibly alien hobbyist. This little gem of Eric Frank Russell's is livened by the presence of an interesting fellow crewman of the protagonist: a macaw.

The September cover was the first of Alejandro's purely symbolical paintings on which his fame rests. It was an attractive painting of a blue-skinned man sailing through a multi-colored, cloudy space, stretching to reach a star in the upper right corner, a ring of fire encircling his body. Alejandro's covers never had too much appeal, even though they were well done and decorative.

October marked two firsts for Astounding; the first Chesley Bonestell cover, and the first of the "Ole Doc Methuselah" stories of Rene Lafayette (a pseudonym of L. Ron Hubbard). Bonestell's cover ("Sun...

Mercury in Transit") failed to supplant Schneeman's Saturn painting as the best astronomical cover so far appearing on the magazine, but was quite good.

"Ole Doc Methuselah," and the other stories in this series, concerned the adventures of Ole Doc, a Soldier of Light, who travels around the universe in his golden space ship dispensing his medical services where needed. According to the code of the Universal Medical Council, a Soldier of Light is not supposed to interfere in local politics, petty quarrels, involve himself with law, etc. But, Ole Doc, accompanied by his devoted slave, Hippocrates, always seemed to get himself involved in something or other that he shouldn't, in spite of the code. Ole Doc, incidently, received his medical degree from Johns Hopkins in 1946; seven hundred years before the time of these stories. The "Ole Doc Methuselah" stories were immensely enjoyable; there was nothing pretentious about them, they were full of rousing action, colorful characters, spiced with wit, and yet, underneath it all, had some serious speculative ideas about one possible course organized medicine might take in the future and a picture of medical advances that was very intriguing.

For all loyal E. E. Smith fans, October seemed an interminably long month, but finally, at long last, October 21st rolled around, and with it the November issue and the long awaited beginning of the climax to the "Lensman" saga, "Children of the Lens." Almost six years had elapsed since the conclusion of "Second Stage Lensmen" in the February, 1942 issue with its stunning disclosure that the supposed guiding genius of Boskone was apparently a demented, renegade Arisian. To those who cared (and despite a growing chorus of nit-picking criticism of Smith's writings heard in some quarters, there were still a goodly number who hadn't abandoned the good doctor), it seemed that Doc had written himself right out of a series. We were quite curious to see how he would top what was considered to be untoppable.

The action of "Children of the Lens" takes place some twenty years after the events related in "Second Stage Lensmen." Kinnison, believing the Boskonian threat to Civilization finished following the destruction of Fossten, the "mad Arisian," settled on the planet Klovia, the Patrol's stronghold and headquarters in the Second Galaxy, and assumed the duties of Galactic Coordinator. There, in time, he and Clarrissa raised to young adulthood five children: a boy, Christopher, and four girls, two sets of twins. The children are, unbeknownst to their parents, Third Stage Lensmen (L3's) and as far superior mentally to their father, Kimball Kinnison, as was the Gray Lensman to the average human.

After twenty years of non-Boskonian activity things begin to happen here and there and it soon becomes evident that Boskone is again threatening Civilization. It is eventually discovered that Boskone is the front for the assault on Civilization, and most particularly Arisia, that has been carried on for eons by the Eddorians, a race as old as the Arisians, but diametrically opposed to everything they stand for.

The Children of the Lens learn from Mentor that they are the ultimate result of millennia-long manipulation of the life lines of their parents by the Arisians, that their intellects are greater even than the Arisians, and it is hoped they will be the weapon that will eventually destroy Eddore. This they do by fusing their minds into one inconceivably powerful unit and, using this fusion as a mental lens, they focus the concentrated power of the minds of every Lensman and of every Arisian in the Universe on the planet of Eddore. As the Children of the Lens stand locked together as a unit, concentrating on this mighty effort, a gigantic lens comes into being around them and through this giant lens the needle of force bores through all the shields of Eddore and in an instant all Eddorian life is wiped out.

Following the conclusion of hostilities, Kit and the girls learn from Mentor that they are the first of a new race of super beings who will eventually supplant the Arisians as Guardians of Civilization. A few eyebrows were raised when it was intimated that in order for this new race of super beings to increase in numbers beyond the original five it would be necessary for Christopher Kinnison to enter into a polygamous incestuous relationship with his four sisters. But regardless of how this offended some readers, Doc Smith's honesty in facing up to this situation was a mighty blow against the wall of taboos that surrounded science fiction and the pulp fiction field generally.

"Children of the Lens" brought to a conclusion what is probably the greatest single work ever to appear in science fiction magazines; the Gray Lensman saga. The four novels published in Astounding; "Galactic Patrol," "Gray Lensman," "Second Stage Lensmen," and "Children of the Lens," ran in their total wordage for well over four hundred thousand words of adventure, mystery, and suspense. The schema of the saga was of the things heroic sagas are made; the clash of gods with men of heroic mold fighting on the side of good. For what are the Arisians and the Eddorians if they are not gods, the gods of the good and the gods of the evil? And Kimball Kinnison, Worsel, Tregonsee, Nadreck, the Red Lensman Clarrissa Kinnison, and the Children of the Lens are surely heroes in the classic sense. Smith's drama is played out on a stage encompassing at least two galaxies plus God only knows how much hyperspace. All of life, good and evil, inhabiting these two island universes is involved in one sense or another in this titanic conflict; a conflict which has been raging through eons of time.

If, on close analysis, or even without close analysis, Smith's work proves to be less than a perfect work of literature, this doesn't in the least obscure or alter the fact that he has fulfilled, many times over, his primary obligation as a writer of fiction; he has entertained.

A word now about the rather unusual publishing history of the Lensman stories. The first installment of "Children of the Lens" appeared on the newsstands October 21, 1947. The story was prefaced with an introduction written by Christopher Kinnison, L3, of Klovia, which relates the events leading up to the beginning of "Children." To anyone having read the three preceding novels this was just a recap of what

had gone before. But the more observant fans were surprised to see brief references to Virgil Samms, the Triplanetary League, the golden meteors of the Triplanetary League, Rodebush, and Cleveland made in this synopsis. And elsewhere in the story an occasional mention was made of Nevia and the Nevians. These were, without any doubt, references to his 1934 Amazing Stories novel, "Triplanetary," which, as far as most of us knew, had nothing whatsoever to do with the Lensman saga. The mystery of these references was not to be a mystery for too long.

In 1948, Fantasy Press published Triplanetary, by E. E. Smith, Ph.D., and the questions were answered. "Triplanetary" (the magazine version) had been revised to make it the first of the Lensman novels. In the book version the complete details of the Arisian-Eddorian conflict were presented in the first chapter, and for the next 97 pages Smith traces the histories of the Kinnison and MacDougall lines from the fall of Atlantis to 19-?, all the time showing the workings of Eddore and Arisia in the background. The remainder of the book was the old "Triplanetary" as revised. In these pages Eddore and Arisia are constantly before the reader (although, of course, hidden from the protagonists of the novel) and the great villain of the original story, Gray Roger is revealed (again, only to the reader) as the Eddorian Gharlane, who again appears in the book version of Second Stage Lensmen as Fossten.

In 1950, Fantasy Press brought out First Lensman, an entirely new book forming a bridge between Triplanetary and Galactic Patrol, also published in 1950 by Fantasy Press. First Lensman delineated even further the hidden Eddorian-Arisian conflict, and told of the first human to approach Arisia for help in the continuing fight against crime and the bestowal on this human, Virgil Samms, of the lens and the formation of the Galactic Patrol. The second to receive the lens was Roderick "Rod the Rock" Kinnison.

None of this, of course, was even hinted at in the magazine versions of "Galactic Patrol" and "Gray Lensman," the first mention of Eddore in Astounding occurred in the February, 1942 issue, the last installment of "Second Stage Lensmen," on page 103. Kinnison, in the guise of Traska Gannel who is soon to become the Tyrant of Thrale and thus the head of Boskone, is visited in his quarters unexpectedly by the Tyrant's prime minister, Fossten, who asks him a completely incomprehensible question: "Just when did you leave Eddore?" Fossten gives no explanation of his question, nor, really, does the author. This same question is asked—this time by Fossten-Gharlane—on page 250 of the book with a slight change: "Just when did you leave the Circle?" In the magazine version, Fossten is in doubt as to whether Traska Gannel is a bona fide Boskonian, or whether he is in fact Star-A-Star, the dread Lensman. In the book, Fossten-Gharlane wonders if Gannel is from the Innermost Circle, the governing council of Eddore, or if he is Star-A-Star.

Now, the question is, which came first, the magazine version or the

book version? Was Eddore conceived of as the force behind Boskone with the writing of "Galactic Patrol," or was it a later invention dreamed up as Boskone became more complex by the time of "Second Stage Lensmen?" Was "Second Stage Lensmen" really intended to be the climax to a trilogy (as was assumed at the time), with "Children of the Lens" written after the war in response to demands for a sequel? After all, it was not inconceivable that Smith took that one vague reference to Eddore in "Second Stage Lensmen" and expanded on it for the final explanation of Boskone in "Children of the Lens." The natural assumption, due to the publication dates, would be that the magazine versions were the originals, and after writing "Children of the Lens" (or concurrent with its writing) he revised "Triplanetary" to tie it into the Lensman series. But let Doc Smith explain it in his own words:

"The Children of the Lens" was the story, but it could not be told without 300,000 words of introductory material. It was not outlined in fine detail until after "Galactic Patrol" and "Gray Lensman" both were written, but the broad strokes—Arisians, Eddorians, the Boskonian ladder, and the logical break-points between the rungs of that ladder—were plotted and graphed before the first rough draft of "Galactic Patrol" was started. Also, the grand climax of "Children of the Lens" ("The Power of Love," chapter 29, from about the middle of page 285 to the asterisks on page 289 in the book version. The same scene appears on pages 152 to 157 in the February, 1948 issue of Astounding, the fourth and last installment of the serial.) was written and polished, almost exactly as it appeared ten or more years later, before the final draft of "Galactic Patrol" was mailed to Astounding.

The Eddorians were not mentioned sooner because John W. Campbell, Jr. did not want them mentioned sooner, although he knew about them almost as soon as I did. Magazine technique—s'prise, s'prise, toujours S'PRISE. They appeared in the book series right at first because I was calling the shots and, in my opinion, that was where they should have appeared. I note that you don't agree, but that fact doesn't convince me that I'm wrong.

As to explaining it—I can't—you and I could argue for hours, I suppose, without either of us convincing or converting the other. So about all I can say is, I guess, that I don't like an author to hold out on me. I like to know everything he knows, so as to be with him step by step in every development; for which reason I like to keep the reader informed—fully informed at every stage of the story.

"Triplanetary" was not, originally, part of the Lensman series at all. Nor was the enlarged version in any sense a sequel. You see, throughout the "Skylark" series I was experimenting with a universe—a universe that was mathematically indefensible.

(After writing "Spacehounds of IPC") I had the brainstorm

about inertialessness, and on that as prime basis I built the "Triplanetary" universe, which both Bates and Tremaine of Astounding liked very much; so did the fans. I liked it very much myself, so much that when I started to dream up the cops-and-robbers story that was to become the Lensman story, I adopted the "Triplanetary" universe for it, practically without any change at all.

...a lot of fans recognized the universe and, even before "Children of the Lens" had all appeared, were telling me (and others) that "Triplanetary" should be revised as the first Lensman story and that one (some said two or three) more should be written to fill the gap between "Triplanetary" and "Galactic Patrol." Campbell pooh-poohed the idea (he was right, of course, from a magazine editor's standpoint) so nothing came of it until (Lloyd Arthur) Eshbach started Fantasy Press and a large group of fans, under the leadership of E. Everett Evans, began really to bear down on the idea. I was very glad to do it, of course, since it gave me the chance to do something that, as far as I knew, had never been done before.

(From a letter dated June 18, 1963.)

With all due respect to Doctor Smith, it is still my opinion that the Lensman series read in book form only loses a great deal of the excitement, suspense, and feeling of anticipation that one gets from the magazine versions where the forces operating behind Boskone are not disclosed until the climactic novel. The expansion of the menace of Boskone, the step by step disclosures of the increasing complexity and scope of the struggle that Civilization was involved in that were painstakingly developed in each succeeding novel in the magazine versions, was in great measure one of the most important elements in the stories in assuring sustained interest throughout the series.

Regardless of this criticism, and the even harsher criticism of some of the more trenchant critics of Doc Smith's epics, I still consider the Lensman saga to be one of the great classics of science fiction and believe that the book versions, because of their permanence, are essential to any library of definitive science fiction. All six novels have been published by Fantasy Press in attractive, illustrated volumes: Triplanetary (1948), First Lensman (1950), Galactic Patrol (1950), Gray Lensman (1951), Second Stage Lensmen (1953), and Children of the Lens (1954). It might also be mentioned that an additional novel related to, but not part of the Lensman saga has been published: The Vortex Blaster (Gnome Press, 1960). An indispensable companion to the collected works of E. E. Smith is The Universes of E. E. Smith, by Ron Ellik and Bill Evans, "A Concordance to the Lensman and Skylark Novels" (Advent: Publishers, 1966).

But, to get back to the November issue, there was one other story that most certainly deserves notice; Theodore Sturgeon's memorable and classic "Thunder and Roses," one of the finest anti-bomb stories ever written. The United States has been completely and utterly laid waste by a simultaneous nuclear attack from both the East and the

West, but has so far failed to retaliate even though it has more missiles armed, aimed, and ready to go than the total number used on it by its enemies. The survival of man all over the world is highly problematical due to the intensity of the contamination of the world's atmosphere with carbon fourteen. It is the decision of the government of the United States to strike one last blow for humanity by not lashing back in senseless hate purely for vengeance, thus giving mankind one slim chance to survive. The struggle between hate and humanity is focused in one man, an Army sergeant who has accidentally discovered the location of the master control that can automatically launch all of America's remaining ready missiles spotted around the country. Sturgeon's eloquent plea against massive retaliation where nothing is served but vengeance was a plea for sanity and humanity in the atomic age. But how much more urgent is his plea in this age of the hydrogen bomb. "Thunder and Roses" is as pertinent today as it was when it was written.

And finally, although it pains me to have to say so, Hubert Rogers' cover for "Children of the Lens" was even poorer than his "Second Stage Lensmen" cover. It was, in fact, the poorest of the five covers illustrating Lensman stories done by Rogers. His interior illustrations to the serial, however, were excellent.

Simak's chronicle of the "Webster Family" made its final Astounding appearance in the December issue with "Aesop," the cover novelette, and perhaps the best story of the series. The theme around which this story revolved was the persistent nature of the killing instinct in man. Jenkins, the ancient and revered robot who had remained on Earth after man's departure in order to help the animals on their upward climb, had, after several thousand years, pretty well eliminated the concept of killing from the society of the animals. But, not too unexpectedly, violent death returned to Earth by the hands of a webster (as the handful of man's descendants who remained on Earth were known to the animals) who thoughtlessly killed a robin with a crude bow and arrow he'd built. Jenkins realized that if the websters were allowed to remain on Earth their innate aggressiveness would eventually lead to their dominance over the animals and the end of the dream of a peaceful world of gentle animals. But, Jenkins felt, his websters deserved a chance to make a better world than their ancestors had; this chance he gave them by leading them to an alternate Earth, virgin and uninhabited, leaving the dogs and other animals at last on their own, to make of their world what they would.

This was a truly fine series told with great skill and imagination. The idea of animals supplanting man was not a new one, but Simak took this old idea and imbued it with new stature and meaning. Simak's handling of the interrelationship between men (personified by the succeeding generations of one family, the Websters), robots (in the person of Jenkins), and the dogs and other animals was brilliantly carried off. This series was unquestionably one of the best examples of the type of mature science fiction that Campbell was striving for in

Astounding. It was better than many modern so-called mature and sophisticated science fiction stories written by less skillful and sensitive writers than Simak.

A. E. van Vogt added another novelette to his "Child of the Gods" series with "The Barbarian," which told of the attempted invasion of the Empire of Linn by Czinczar, leader of the barbarians from Jupiter's moon, Europa, and of his eventual defeat by Clane. This series was very enjoyable, not only because, as mentioned earlier, of the appeal of Robert Graves' Claudian romances which were the apparent inspiration for this series, but because van Vogt seemed to have devoted considerable thought to his construction of his future "Roman" Empire, Linn. Although the parallel was obvious in a broad sense, the details were strictly van Vogt, and the characters, particularly Clane, were reasonably true products of their civilization and not mere cardboard projections of their historical models.

The balance of the issue was made up of two short stories, "Age of Unreason," by Alfred Coppel, Jr., and "The Dreamers," by Michael Yamin, an article by John W. Abrams, "White Dwarf Stars," and the second installment of "Children of the Lens." And finally, the cover was a quiet and rather striking one by Alejandro, illustrating "Aesop."

The year 1947 has been dealt with at some length because it has always seemed to be a pivotal year. The Golden Age was echoed in such stories as the Kuttners' "Fury," Sturgeon's "Maturity," Simak's "City" series, Williamson's "The Equalizer" and "With Folded Hands...," and above all in E. E. Smith's "Children of the Lens." Forecasts of fine, even great things to come were intimated in the debuts this year of two of the men who would be leaders of the field in the coming fifties and sixties: H. Beam Piper with his "Time and Time Again," and most particularly, Poul Anderson with his memorable "Tomorrow's Children" and its sequel, "Logic."

By 1947, many who had been away to the wars were beginning to return; Jack Williamson, Smith, L. Ron Hubbard, Hubert Rogers, Schneeman, and the inimitable Edd Cartier. The imminent return of Heinlein, de Camp, a more productive Asimov, and others was anticipated. 1948 was due to get off to an accelerated start with the long awaited sequel to Asimov's "The Mule", "Now You See It..."

But in spite of these auguries for the future—a future that just might be every bit as great as the Golden Age in many respects—the Golden Age was over, and nothing could prolong it or revive it.

The Golden Age of Astounding is something thought of as having embraced the entire decade of the forties, particularly by those fans to whom this era of science fiction is but legend. Many fans who were reading Astounding at this time, or collectors with a scholarly approach to science fiction more often narrow it down to the war years—1940 through 1945. The heart of the Golden Age is bracketed by the July, 1939 and the December, 1943 issues, with the peak being the years 1940, 1941, and 1942. These were the years following Campbell's

editorial apprenticeship when he seemed to have the greatest enthusiasm for his job, when he had the greatest rapport with his writers, when his feedback of ideas between him and his stable of top writers was operating at maximum efficiency. Ideas germinated in Campbell's mind at a fantastic rate and he rushed them out to his writers in a never ending stream. Campbell still feeds ideas to his writers, but they seem to lack that element of inspired genius, the dynamic quality they had in the forties.

1947 marked the tenth anniversary of Campbell's editorship of Astounding, ten eventful and revolutionary years for science fiction. Even allowing for the relatively lacklustre quality of 1944 to 1946, these ten years and three months (123 issues) are perhaps the most significant years in the entire history of science fiction, and are certainly the most important in the history of Astounding. Campbell has never been content to sit back and rest on his laurels, or to take the cautious approach to new ideas or innovations. He has always tried to keep science fiction in a state of flux, to keep it ahead of the accelerating advances in the world of scientific thought, knowing that complacency in editorial attitudes would inevitably lead to a static science fiction which would reduce or eliminate any value it might have in the world of ideas. This, of course, has led him into some questionable bypaths and has brought the ire of articulate fans down upon his uncaring head at times, but he has carried on, sublimely confident in his own ability to guide and mold science fiction into something always better.

In 1947 the 5th World Science Fiction Convention (Philcon) was held in Philadelphia on the July Fourth weekend. The Guest of Honor, quite naturally, was John W. Campbell, Jr.

THE THRESHOLD OF MATURITY: 1948

The Silver Years of Astounding, which got off to such a good start in 1947, continued to develop increasing richness in 1948. In outward appearance the magazine was so far superior to any other science fiction magazine on the stands that any comparison would be pointless. The covers—by Rogers, Bonestell, Alejandro, Timmins, and Orban—were uniformly outstanding, and the interior art took a tremendous leap upward in overall quality in the work of Rogers, Cartier, and Orban.

In 1948 and the years following, the Astounding brand of science fiction continued to be the best in the field. Amazing Stories and Fantastic Adventures were still serving up adolescent pap and were virtually ignored by more mature fans. Thrilling Wonder Stories and Startling Stories were the two magazines at this time giving Astounding the closest competition and consistently published good, if not quite superlative, science fiction. Famous Fantastic Mysteries and Fantastic Novels continued to present reprints—the former, reprints of books which had never before appeared in magazines; the latter, revived in March, 1948 after its demise in April, 1941, resumed the earlier policy of Famous Fantastic Mysteries and Fantastic Novels of reprinting fantasy classics from the pages of the early Munsey magazines by reprinting A. Merritt's immortal classic, "The Ship of Ishtar." The remaining science fiction magazine being published in 1948 was Planet Stories which had its own unique flavor, a mixture of fantasy and space opera with liberal dollops of maidens in distress, BEM's, handsome heroes, flashing ray guns, and colorful space battles: not particularly mature science fiction, but most of the time lots of fun for relaxed reading. One shouldn't overlook the Avon Fantasy Reader, edited by Donald A. Wollheim, a fine magazine devoted entirely to reprints, mostly fantasy and weird, but some science fiction.

By the end of 1948 it became apparent that Campbell was getting

close to achieving the goal he had set himself when he became editor of Astounding, to bring science fiction to a level of maturity that would commend it to critical consideration as a serious literary form. Although science fiction was, and still is, largely ignored by most critics outside the field (unless it be a work by Aldous Huxley, C. S. Lewis, Nevil Shute, Philip Wylie, etc.), this didn't in the least alter the fact that the science fiction found in the pages of Astounding during 1948 and in the succeeding years was considerably more mature and sophisticated than that of previous years, and immeasurably more so than the bulk of contemporary science fiction found in the other magazines.

However, a lot of fans felt that the increasing emphasis placed on literary values in science fiction tended to lessen the impact of science fiction as a medium for presenting and exploring ideas; that certain intangible story values are obscured or lost in striving for "literary" perfection. This is not to say that the average science fiction fan has a literary tin ear and can't appreciate good writing. On the whole he does appreciate good writing. What it does mean is that the average science fiction fan, usually a literate and well-educated person, wants a strong story with a strong or thought-provoking idea incorporated in it, and if it is additionally enhanced with literary style, well and good. But his primary interest in science fiction is in the story and the idea; his interest in literature can be satisfied in the mainstream.

The stories found in Astounding in 1948 and 1949 abounded in ideas, some old, some new. So far most of them were not particularly weakened by literariness—the story was still the thing.

The outstanding features of the 1948 Astounding were, of course, the serials, of which there were three: "...And Searching Mind," by Jack Williamson, the sequel to his 1947 novelette, "With Folded Hands..." "Dreadful Sanctuary," by Eric Frank Russell, a novel almost of the stature of his Unknown novel, "Sinister Barrier." And closing out the year, A. E. van Vogt gave us "The Players of A," the long-awaited sequel to "The World of A."

Of almost equal importance to the novels were a handful of novelettes and one short story: "Now You See It..." by Isaac Asimov, the penultimate chapter in the "Foundation" series; "Police Operation," by H. Beam Piper, the first of the popular Paratime Police series; "In Hiding," by Wilmar H. Shiras; "Genius," by Poul Anderson; "The Rull," by A. E. van Vogt, and the short story, "That Only A Mother," by Judith Merrill.

"Now You See It..." featured in the January issue, was a long novelette which finally brought the Second Foundation to the center of the stage. The Mule, that strange man with mutant powers which enabled him to control men's minds and emotions, who had been unpredicted in Hari Seldon's Plan, had conquered the Foundation and most of the galaxy and was determined to continue with his conquests until the entire inhabited universe was under his rule. By conquering the Foundation, with its capital on Terminus, the Mule had seemingly

brought Seldon's Plan to an abrupt end. Seldon's Plan had been carefully worked out so that it would reach fruition a thousand years after the fall of the Galactic Empire. Integral to Seldon's Plan had been the two Foundations set up just prior to the breakup of the Empire, one—the First—at Terminus, the Second at Star's End at the opposite end of the galaxy. The First Foundation was based on the physical sciences and designed to provide the political framework of a single universal state, while the Second Foundation was based on the mental sciences and was to prepare a world of mental supermen who would form the leading class of the new empire.

In the three hundred years since the founding of the Foundations, the First had risen from a weak and obscure political entity on the Rim of the Galaxy to the successor of the old Galactic Empire and the dominant force in the galaxy—until the advent of the Mule. Through all this time, the Second Foundation remained hidden and a mystery, its very existence questioned by many. One who didn't question its existence was the Mule.

The Mule, believing that as long as the Second Foundation remained hidden and unconquered, it posed a threat to his dreams of unquestioned dominion over the entire galaxy, paused in his course of empire and turned his attention to the problem of rooting out and destroying the Second Foundation. Serving as his instrument in this project was General Han Pritcher, a former Captain in the underground of the Democratic Opposition who, after the Foundation fell without a fight to the Mule, continued to fight the Mule until he had been Converted. As a "Converted," General Pritcher was completely loyal and devoted to the "First Citizen," as the Mule preferred to be called. Assisting Pritcher was Bail Channis, an Unconverted, but by reason of self-interest, a loyal follower of the Mule. It was the task of these two to explore certain leads in certain areas of the galaxy, discover if possible the location of the base planet of the Second Foundation, report back to the Mule, and guide the invading forces to the Second Foundation.

In time these two are convinced they have discovered the Second Foundation, or at least its leaders, on the forbidding and frigid world of Rossem. Apprised of this discovery, the Mule makes an appearance on Rossem in advance of his invading fleet to savor the full taste of his victory. There follows a long confrontation between the Mule and the First Speaker of the Elders of Rossem. The Mule demands the surrender of the Second Foundation in order to avoid needless death and destruction. The First Speaker counters with an explanation of why surrender is out of the question. Bail Channis, as the Mule well knew, was a Second Founder but, instead of having been planted on the Mule's capital planet, Kalgan, in order to lead the Mule away from the Second Foundation, he'd been placed there to lead the Mule to the Second Foundation. The system of Tazenda and the planet Rossem were not part of the Second Foundation—Rossem was, instead, a "Potemkin Village," designed to trap the Mule. The Second Foundation was still hidden, the Mule and his dreams of empire were finished.

The Second Foundation, not having the physical and scientific might of the First, had been forced to rely on deception to evade the Mule, and on the mental powers of its citizens for the ultimate defeat of the Mule. At the very moment the Mule and the First Speaker stood on Rossem talking, the "Elders" were on their way to Kalgan and when the Mule returned to his capital he would find a disintegrating empire.

"Your Empire is done, Mutant."

Slowly the Mule bowed his head, as anger and despair cornered his mind completely. "Yes. Too late—Too late—Now I see it."

"Now you see it," agreed the First Speaker, "and now you don't."

At that moment the Mule's mind lay open and unguarded. And in that moment the First Speaker deftly entered and made an infinitesimal adjustment in the mind of the mutant. And so, with all memory of the recent conversation with the First Speaker wiped from his mind and the notion of the Second Foundation a blank to him, the Mule returns to his Empire, a man of peace, to continue his rule for the few years remaining to him. And after his death, Seldon's Plan will go on—somehow.

A marvelous story which left one impatiently awaiting its sequel. This story was beautifully illustrated on the cover and with interiors by Hubert Rogers, who also provided the fine illustrations to "Children of the Lens," the third installment of which appeared in this issue. The remainder of the illustrations in the issue were excellently handled by Edd Cartier.

Jack Williamson's novelette, "With Folded Hands..." in the July, 1947 issue, had been a near perfect story, polished and complete, and requiring, really, no sequel. However, a sequel was intimated in the story and it is quite likely Williamson did have one in mind. Whether or not Williamson originally planned one is really an academic point for a sequel did appear in three parts, starting in March, following the conclusion of E. E. Smith's "Children of the Lens."

"With Folded Hands..." told of the arrival on a planet of the Rhodomagnetic humanoids, sleek robots who could seemingly do anything and were guided by the inflexible directive, "To Serve and Obey, and Guard Men from Harm." It told of the gradual, but implacable take-over by the Humanoids of every physical activity and function of men, "for their own protection," and their release from the need for physical labor. It told of the growing alarm of some at the implications for the future in this mechanical paternalism, and it told of the abortive attempt of Mr. Sledge to destroy the home planet of the Humanoids, Wing IV, and thus end their threat to man. Mr. Sledge had created the Humanoids on the planet Wing IV. He had designed them originally to stop war, but they had been designed too well. They were too efficient, too perfect, too benevolent, and blindly obedient to their Prime Directive as they spread across the inhabited parts of the galaxy, driven and controlled by rhodomagnetic beams from the relay grid from the

central mechanical brain on Wing IV. It was this central brain on Wing IV that Mr. Sledge attempted to destroy with a rhodomagnetic beam only to be stopped by his own creations.

"...And Searching Mind" takes place some thirty years later and in a different sector of the galaxy, but concerned with the same thing; the destruction of the grid on Wing IV and the elimination of the humanoids. The agents working for the destruction of Wing IV are an odd assortment of people. First and foremost is Mr. White, a large, impressive man with a flowing mane of flaming hair and a beard to match, who is the leader of the rag-tag-and-bob-tail band that is attempting to destroy the seemingly indestructible. Mr. White is a philosopher. The rest of the band was made up of three men and a girl: Graystone the Great, formerly a stage magician and professional telepath; Lucky Ford, a professional gambler with the power of telekinesis; Ash Overstreet, a former newspaperman with a remarkable nose for news—a clairvoyant, extratemporal, and the most remarkable of all, Dawn Hall, an appealing nine-year-old girl who had been rescued from a reform school by Mr. White. Dawn was able to teleport. White recruits Dr. Webb Claypool, a rhodomagnetic engineer at the Starmont Observatory in order to add his knowledge of rhodomagnetics to his arsenal of psychophysic powers. Claypool at first refuses to join White in his crusade, but later changes his mind. White also tries to interest Frank Ironsmith, a genial easy-going mathematician at Starmont. Ironsmith refuses to accept White's warnings of the menace of the approaching humanoids and goes on his enigmatic way. At the end Claypool and Ironsmith find themselves apparently at polar extremities in the war against the humanoids. And in the denouement, Mr. Sledge, the man who started it all a hundred years earlier, reappears to resolve the conflict between man and machine, the physical sciences and the mental sciences.

Williamson's novel was big and it was complex. But even though it was not a simple romantic adventure like his earlier "Legion of Space" tales, it still possessed much of the sweep, adventure and color that made those classics so memorable.

"...And Searching Mind" was published in book form as The Humanoids (Simon and Schuster, 1949) in a slightly revised form. The most interesting form these revisions took was in the names of some of the characters: Webb Claypool became Dr. Clay Forester, Dawn Hall became Jane Carter, A. White became Mark White, and Mr. Sledge metamorphosed into Dr. Warren Mansfield. Frank Ironsmith, Lucky Ford, Graystone the Great, and Ash Overstreet—as well as most of the secondary characters—all retained their original names. Why Williamson felt impelled to change the names he did from distinctive names to rather colorless ones is a minor mystery, but was probably done at the urging of his publisher.

"Dreadful Sanctuary," by Eric Frank Russell, a long, three-part serial beginning in June, was a taut, fast-paced and remarkably believable science fiction story which was, at the same time, an excellent

detective story. The year is 1972 and John J. Armstrong, a businessman who has designed some gadgets for the eighteenth moon rocket, decides to investigate the reasons behind the failures of the preceding seventeen rockets to get off the ground. His investigations lead him to a seemingly innocent international organization called the Norman Club. The Normans, or Normal Men, claim to be Martians who are acting as keepers to prevent the psychopathic race of men from regaining the stars and reinfesting the sane race from which they had originally been separated. Armstrong discovers that the Norman Club is a vast conspiracy that reaches into the highest levels of governments and is working to bring about World War III in order to cut off further rocket developments. But whether or not the Norman Club is as it claims, an organization of Martians running a planetary insane asylum—"How do you know you're Sane?" the Normans ask Armstrong—to keep man from recontaminating the universe, or is an international conspiracy bent on taking over the world, is not fully revealed until the end of the novel. The reader, throughout most of the story, "Pays his penny and takes his choice." Either choice left one at the time with the disturbing realization that it could be as Russell pictured it.

In Russell's first novel, "Sinister Barrier" (Unknown, March, 1939), he advanced the Fortean hypothesis that "we are property," the cattle-like property of non-human beings. This made for an exciting story, but it was essentially unconvincing as an explanation for widely scattered, faultily reported and seemingly unexplainable events and phenomena that so intrigued Charles Fort and the Forteans. "Dreadful Sanctuary," on the other hand, while it may have had its inspiration in Fort, was still a more intelligent and serious examination and attempted explanation of the weird and inexplicable conduct of post-war mankind. Who is to say that mankind isn't insane? And who is to say we aren't living on a planetary insane asylum watched over by Martians or other extra-terrestrials? "Dreadful Sanctuary" was the first story of any importance or merit by a first rate writer in the field of science fiction to explore this fascinating possibility. Heinlein, in his "Outline of Future History," labeled the post-war years the "Crazy Years," but it wasn't until 1952 that he wrote a story dealing with apparent mass insanity ("The Year of the Jackpot," Galaxy, March, 1952). And, of course, in the mainstream there is Kafka and, more recently, One Flew Over the Cuckoo's Nest and Catch 22 which deal in one way or another with mass lunacy.

The next serial in Astounding went from the immediacy and realism of Russell's novel to the marvelous unreality of van Vogt's latest, "The Players of A." Gilbert Gosseyn is back in this one, and in an even more confusing and complex role than in the classic "World of A." Gosseyn is involved with the "players" who manipulated him in the first novel, and particularly with the insubstantial, shadowy being known as the Follower who shows a continuing, and possibly sinister interest in Gosseyn. Gosseyn, with his Null-A powers and extra brain, gets kicked all over the galaxy, from the Null-A, semantically oriented

Venus to the far reaches of the universe where he finds himself in the services of Enro the Red, warlord and dictator-ruler of the Greatest Empire, who is waging a historic battle in the Sixth Decant of the galaxy for the control of all of space. Back and forth he goes, a pawn of players he never sees—except for occasional glimpses of the amorphous Follower.

Although the story was frequently bewildering, it hardly mattered: it had sweep, grandeur, color, fascinating characters, fast-driving action, and...yes, a Sense of Wonder arising from intimations of cosmic, significant factors in the background. The same Sense of Wonder one found with the original magazine versions of the "Lensman" stories, where Eddore was kept offstage, out of view of the audience, but constantly affecting the drama, giving greater meaning to the action.

When van Vogt was in top form he was hard to beat. A critic can take a van Vogt novel apart, brick by brick, and leave it a shambles, as Damon Knight did in his *In Search of Wonder* (Advent: Publishers, 1956), and one can't argue with him on a critical level. But, to really enjoy a van Vogt novel such as "The Players of \bar{A} ," the reader has only to give himself up to the magic of van Vogt's story, ride with the rushing current that never stills till it reaches its destination. If the reader does this, he will have a much more rewarding experience than if he reads with an analytical eye.

"The Players of \bar{A} " was long, four installments beginning in October, and was most effectively illustrated by Rogers with two covers and excellent interior illustrations.

One of the most impressive debuts in science fiction was made in the June, 1948 issue of *Astounding*: Judith Merrill with her memorable short story, "That Only \bar{A} Mother." This was a story that only a woman could write with true feeling, but it most certainly was not a woman's story in the conventional meaning of that term. It was a poignant tale of a young mother's serene conviction that her beautiful daughter, who could talk by the age of seven months and was obviously a prodigy, was in every other way physically normal. The child's father had worked for some years at Oak Ridge.

H. Beam Piper, in the July issue, began his popular Paratime series with a novelette, "Police Operation." In an earlier short story, "He Walked Around the Horses" (April, 1948), Piper presented a fictional answer to a well-known Fortean mystery: In 1809 an Englishman named Bathurst, while on a trip across Germany, stepped around his coach horses in an inn courtyard in Perleburg, Prussia, and vanished, completely and—as far as anyone knows—forever. "Police Operation," and the other stories in the series had to do with a highly organized and complex police force operating in paratime, across probable time lines. The primary purpose of the paratime police is to police the multitudinous probable time lines at all levels in an effort to keep them separated and unknowing of each other and if, as occasionally happens, something or someone from one time line appears in another the Paratime Police show up to take care of the problem as quietly as

possible, and to take corrective action to restore reasonable normality and to provide an acceptable explanation of the event.

The Paratime Police stories were entertaining tales not intended to be taken too seriously which provided one possible answer to such Fortean mysteries as unexplained disappearances, strange visitations, apparent violations of natural physical laws, etc. Piper admittedly got his idea for the Paratime Police from Charles Fort: "...there may be something in the nature of an occult police force, which operates to divert human suspicions, and to supply explanations that are good enough for whatever, somewhat in the nature of minds, human beings have—or that, if there be occult mischief makers and occult ravagers, they may be of a world also of other beings that are acting to check them, and to divert suspicions from themselves, because they, too, may be exploiting life upon this earth, but in ways more subtle, and in orderly, or organized fashion." (Charles Fort: Lo!)

December, 1948 saw the first of many stories by Poul Anderson featured on the covers of Astounding. "Genius," the featured novelette, was Poul Anderson's third published story, and told of a distant planet, far from Sol, peopled by super geniuses who had been kept in happy ignorance of their origin or the fact that they were a long term experiment by the Empire (of which they had no knowledge) set up to observe the ways of genius, and of the way the planet of geniuses subtly turned the tables on the Empire.

In addition to Poul Anderson's excellent novelette, this issue also contained one by Eric Frank Russell, "Late Night Final," which was based on an idea that Russell was to return to and examine with much greater depth and perception in 1951 in one of his best-known stories, "And Then There Were None." The idea on which "Late Night Final" was based is that of the confrontation of brute force backed by rigid, unquestioning discipline with that of a culture governed simply by belief in an idea and existing as an idyllic, almost classically pure communist society. Russell told the story from the viewpoint of the commander of the invading authoritarians and did a beautiful job of it.

The one short story in the December issue was the first story in a small calibre series by H. B. Fyfe, "The Bureau of Slick Tricks," which was about the Bureau of Special Trading on Terra whose special task had to do with dealing with unusual economic problems involving unusual extraterrestrials.

The December, 1948 cover for Poul Anderson's "Genius," was a surprisingly effective one by Orban; his first for any sf magazine.

One of the real sleepers of the year was a first story, a novelette, by a new feminine writer, "In Hiding" by Wilmar H. Shiras. This story appeared in the November issue without any prior announcement in "In Times to Come," and therefore the pleased surprise most readers found was all the greater. "In Hiding" was about the almost insuperable problems confronting a decidedly supranormal ten-year-old boy, Timothy Paul, who, for his own protection, had to pose as a perfectly normal, average boy of his age, and of the attendant problems of a

psychiatrist, Peter Welles, who quite by accident stumbles onto Timothy and his problem. In a way, Mrs. Shiras' story gave off faint echoes of Olaf Stapledon's classic novel of the superman, Odd John. Stapledon's superman, John Wainwright, was a homo superior child born to average homo sapien parents who is convinced through most of his life that he is unique and must therefore maintain a surface masquerade of sorts. Another parallel between the two stories is in the use of a normal, but highly intelligent adult as the confidant of the superman and the viewpoint character: in Odd John it is the narrator, affectionately if a little contemptuously addressed as "Fido" by John, who, by his close and constant association with John, accentuates his superman characteristics. In "In Hiding" it is Peter Welles, a trained psychiatrist (and an adult), who provides the contrast to the supranormal talents of ten-year-old Timothy Paul.

In the novelette "Co-Operate—Or Else!" (April, 1942), and the short story, "The Second Solution" (October, 1942), A. E. van Vogt told of the difficulties Professor Jamieson had in coping with the monstrous Ezwal of Carson's Planet—huge beings looking somewhat like a giant sloth, but with six limbs and three eyes, highly intelligent and telepathic, and completely antagonistic to the concept of cooperative action. Because of the Earth forces' need of Carson's Planet for a base in their war against the Rull, it was Jamieson's job to work out an entente with the highly independent Ezwal.

The lead novelette in the May issue was "The Rull," which brought the Rull-human conflict to a focus in the persons of Meesh, the leader of leaders of the invading Rulls, and Professor Jamieson, both stranded by accident on the lifeless planet Laertes III, and each the prisoner of the other. The conflict between these two totally alien beings, isolated from their respective forces, as each tries to impose his will on the other in order to gain some insight on the racial characteristics of his species, made for a tense and exciting story.

There were, of course, many other fine stories in this year: some of them as good, if not better, than the ones singled out. Such stories as Sturgeon's "There is No Defense" (February); Leinster's "West Wind" (March), dealing with the use of the prevailing west wind by a small nation to spread radioactive dust over the armies of the major power invading it, and in the same issue, another of Rene Lafayette's Ole Doc Methuselah stories, "Her Majesty's Aberration." These all deserve more than a mention. But this isn't all: Lewis Padgett had another of his wonderful, wacky Gallegher stories leading off the April issue, "Ex Machina"; Murray Leinster had another fine story in May, "The Strange Case of John Kingman"; L. Ron Hubbard was back again in September as Rene Lafayette with another of the Ole Doc Methuselah yarns, "The Great Air Monopoly"; Theodore Sturgeon was featured again in October with "Unite and Conquer," a novelette, and followed it in November with a short story, "The Love of Heaven."

These were all better than average stories, and all contributed their part to making 1948 one of the best years of the last half of the decade.



April, 1948; "Ex Machina," by Lewis Padgett. Illustration by Cartier.

There were few physical changes instituted in Astounding during this year. The page count remained at 162 and the price at twenty-five cents. The cover painting continued to cover the full page with the logo at the top, unchanged in style or size from the previous year, and the featured story in a line at the bottom, or blocked out in either of the lower corners. The only exceptions to this style were the covers by Bonestell for April, July, and September; the Alejandro symbolic covers for February and May, and Canedo's for August. The cover for August was the only one by "Canedo" on Astounding. ("Canedo" was actually Alejandro Canedo.) It was a quite good symbolical painting representing the power of the atom as the key to the universe.

Rogers took the honors for covers in 1948 with four. The January cover for Asimov's "Now You See It..." showing a rocketship hovering over a dark and desolate landscape, was the best of the Rogers' and the best of the year. His painting for March, illustrating Williamson's "...And Searching Mind," was probably the most dramatic. This painting featured a massive full-face portrait of the red-headed, red-bearded philosopher, A. White, with a stream of spaceships and a humanoid in the background. The other two Rogers covers, for October and November, both for van Vogt's "The Players of A," were not exceptional, but were still good Rogers. The previously expressed opinion of Alejandro was not materially changed by his two covers for this year. The biggest disappointment in covers were the astronomical paintings of

Bonestell, none of which came close to matching the dramatic Sense of Wonder imparted by Schneeman's Saturn painting for April, 1939—still, to this date (1948), the best astronomical painting to appear on the cover of Astounding. The remaining two covers were both pleasant surprises: the Timmins for June, illustrating Russell's "Dreadful Sanctuary," was one of his very best, and Orban's cover for December made one wonder why he'd never been used before—this one cover of his was better than ninety per cent of Timmins' total output.

The interior art was well taken care of by Rogers, Cartier and Orban. There were a couple or so of other artists used occasionally, but none on a par with these three. The only thing lacking to make the interior art department perfect was the work of Charles Schneeman.

With the December issue, Astounding severed its last artistic contact with a bygone era. From December, 1943 until November, 1948, the contents page had been decorated on its left hand margin with a cut from an illustration by Elliott Dold featuring one of his unique space-ships. With the dropping of this last touch of the past it was almost as if Campbell was putting the science fiction world on notice that henceforth Astounding was through with the past, that it had evolved into something new and complex, that it couldn't be held back by even this small reminder of an earlier and simpler science fiction. Whatever the reasons for its discontinuance, many old time fans hated to see it go, and said so in letters to "Brass Tacks"—to no avail.

Astounding continued to present at least one or two articles per issue which were at least interesting to those who like articles in science fiction magazines. J. J. Coupling (who wrote fiction under his real name of John R. Pierce) was a contributor of articles, as were E. L. Locke, Willy Ley, R. S. Richardson, Joseph A. Winter, M.D., L. Sprague de Camp and Isaac Asimov. In the March issue, L. Sprague de Camp, who had worked for the government during the war in research on pressure suits and oxygen systems for high altitude flyers, recounted some of the practical problems involved with the designing of such equipment. The article was called "The Space Suit," and showed how this wartime work could be, and was being applied to space research. In the course of the article, de Camp (always the great debunker) demonstrated conclusively why the feat of Weinbaum's hero in "The Red Peri," who dashed unprotected across a thousand feet of vacuum on an airless planet with a girl in his arms (and made it without harm to either of them), was manifestly impossible.

But, of all the articles published this year, the most remarkable was the one by Asimov in the same March issue, "The Endochronic Properties of Resublimated Thiotimoline." This was an impressive article—in appearance, at any rate: six pages jammed with formulae, tables and graphs, and a half column of bibliography. But, it was all a big tongue-in-cheek hoax, from the nonexistent "Thiotimoline" to the bibliography.

It can truthfully be said that 1948, the first year of Campbell's second decade with Street & Smith and Astounding Science Fiction, was one of

the better years; not as great as the best of the Golden Age years, but far superior to most of the years from 1943 to 1946, and as good or better than many of the years of the fifties.

The criteria of what constitutes a good year is based on the serials presented during that year. This may be an arbitrary and debatable method, but it's the one used here. Take 1948 for instance: the year started off with the two concluding installments of E. E. Smith's climactic Lensman novel, "Children of the Lens," followed immediately by Williamson's three-part novel, "...And Searching Mind," which concluded in May. June began Eric Frank Russell's long three-parter, "Dreadful Sanctuary." Following Russell's novel there was a one month lull to enable the reader to catch his breath and gird up his loins before grappling with the bewildering complexities of "The Players of A," van Vogt's brilliant four-part fantasy beginning in October. Either of the two complete serials would have made the year one to remember, but to have both of the complete novels, plus two installments of the Smith novel and three of van Vogt's, made the year truly memorable.

The fine novelettes and short stories published during the year merely added frosting to an already rich cake.

COMING OF AGE: 1949

The final year of the forties was decidedly not one of the best. Nor was it one of the worst. Astounding continued to be the leader in the science fiction field, however, without serious contention. By the end of the year the science fiction field, which had had only two new magazines added to it since the war years (Avon Fantasy Reader, 1947 and Fantastic Novels, March, 1948), saw four new titles added to the list—and the fabulous science fiction boom of the fifties was on its way.

The first new magazine to make an appearance was Super Science Stories, in January. This was a rebirth for this magazine which had been born in 1940 and died, a casualty of the war, in May, 1943. Before its death, however, Super Science Stories had been presenting some very good science fiction and many fans considered it to be second only to Astounding; so its revival, in 1949 in the standard pulp format, was looked on as a favorable sign for the future. The other three magazines appeared toward the end of the year: Other Worlds, in November; A. Merritt's Fantasy, in December, and The Magazine of Fantasy, dated Fall, 1949. Other Worlds, a digest size magazine, led off its first issue with "The Fall of Lemuria," a novelette by Richard S. Shaver, and had as its editor, Raymond A. Palmer, for the past eleven years the editor of Amazing Stories. A. Merritt's Fantasy was a companion to Famous Fantastic Mysteries and Fantastic Novels; it was pulp size, and also presented reprints from the Munsey files—with the added gimmick of featuring a novel or story by A. Merritt in most issues. And, finally, The Magazine of Fantasy.

The Magazine of Fantasy was the real precursor of the big boom of the fifties. This digest size magazine, edited by Anthony Boucher and J. Francis McComas, which had its name changed with the second issue to The Magazine of Fantasy and Science Fiction, was eventually to become one of the Big Three of the science fiction field. At first,

despite the expanded title, The Magazine of Fantasy and Science Fiction leaned heavily toward fantasy but, in time, a better balance was struck and the fictional contents more accurately reflected the magazine's title.

With the advent of The Magazine of Fantasy and Science Fiction, the days that Astounding would remain the undisputed King of the Mountain were numbered, but for the time being, at any rate, Astounding was still the undisputed king.

Astounding, through the twelve months of 1949, presented many fine stories, mostly in the novelette length. Although there were four complete serials and parts of two others served up to the reader in these twelve issues, the year, for some reason, doesn't really stand out as one of the memorable ones for serials. By all that science fiction fans call holy, it should have been one of the top years for serials, considering the authors represented: A. E. van Vogt, Jack Williamson, Hal Clement, L. Sprague de Camp, Robert Heinlein, and Isaac Asimov. Perhaps it was due to the fact that three of the four complete serials were relatively short two-part novels and seemed little more than novelettes, and the major portions of the other two were in the year preceding and the year following this.

The van Vogt serial present in this year was, of course, the final installment of "The Players of \bar{A} " discussed in the last chapter. This was in January. In February, Will Stewart (Jack Williamson) began "Seetee Shock," his long-awaited three-part sequel to 1943's "Opposites—React!" "Seetee Shock" continued to explore the political ramifications of the development of limitless power to be derived from contra-terrene matter. The story contained most of the tried-and-true ingredients of a Williamson space tale; a young scientist-hero in conflict with his uncle, treason, political in-fighting, last minute efforts to avert a full scale interplanetary war, and a race against time by the hero to accomplish everything in about twelve days time before he succumbed to seetee shock, a fatal form of radiation sickness. "Seetee Shock" was good, slick Williamson but, even so, the novel seemed to lack the color, the bravura, the sweeping action, the bigger than life characters that made the best of Williamson's stories stand out.

The second complete serial for 1949 was in two parts, beginning in May. "Needle," by Hal Clement, was a science fiction-detective story. Both the detective and the criminal are extraterrestrials, semifluid beings who live in symbiosis with the grosser life forms of their native planet, dwelling within the body of the host and extending minute filaments throughout this body, taking over with their greater intelligence and quicker reactions. The criminal, an anti-social member of his own species, and the detective—called the Hunter—both crash their ships on Earth. The Hunter goes down in the Pacific Ocean, makes his way to an island and insinuates himself into the body of a teen-age boy in order to continue his search for the criminal on this alien world. The Hunter knows the criminal will have taken over the body of one of the billions of humans inhabiting the Earth: his job—find the needle

in the haystack. This was a fine story, Clement's first novel, and just about his best.

In July, L. Sprague de Camp had a short story, "The Animal-Cracker Plot," in which he introduced the universe of Viagens Interplanetarias, with its wacky and wonderful worlds of Vishnu, Krishna, Ormazd and the rest. This was the first of a whole bushel basket full of short stories, novelettes and novels which, if written ten years earlier, quite possibly would have appeared in Unknown. The "Viagens" stories, or the "Krishna" stories—they're called both—are science fiction stories built around a meticulously worked-out future in which Brazil is the dominant state and more-or-less controls space travel and intercultural relationships between Earth and the planets of the nearer systems. It is on these planets that most of the action of the "Viagens" series takes place, Krishna, Vishnu, etc., and it is in these settings where de Camp shines. Over the years he has built up those planets with geographies, religions, politics, languages and histories of a complexity that makes the Hyborean world of Robert E. Howard's Conan, or the Barsoomian world of Edgar Rice Burroughs' John Carter seem simple indeed.

The August cover featured a portrait by Rogers of a rather sly looking character dressed in chain mail with a sword at his side, a wrist-watch on his left wrist and a cigar in his right fist. The story announced on this cover was "The Queen of Zamba" by L. Sprague de Camp, a two-part novel. This was de Camp's first novel for Astounding since "The Stolen Dormouse" (April and May, 1941), and an even wackier novel than that wild tale. The hero of "The Queen of Zamba" is Victor Hasselborg, an investigator of insurance frauds, who is hired to track down and bring back the errant daughter of a Syrian textile magnate. Hasselborg finds that the daughter has taken off with an adventurer and BBC announcer and he traces them to Krishna, the planet of a nearby system whose people are quite similar to men in appearance except for pointed ears, green hair, and antennae on the forehead which serve as organs of smell. The story really gets rolling when Hasselborg gets to Krishna and finds he must surrender all his detecting paraphernalia and modern inventions at Novorecife, the outpost on the planet of Viagens Interplanetarias. There is an Interplanetary Council ruling prohibiting the introduction of any mechanical device or invention on Krishna for fear of the use they might be put to by the warlike Krishnans. Hasselborg, therefore, must pursue his quarry into the wilds of Krishna disguised as a Krishnan and using the means at hand to aid him in his search. He hears rumors of a so-called "Queen of Zamba" somewhere on Krishna, and suspecting who she really is, sets off in pursuit of this Queen, with danger, adventure, and romance dogging his every step. It was all great fun to read—right out of the pages of Unknown—and wonderful de Camp, but, unfortunately, it was a story that was soon forgotten.

The remaining two serials, the Heinlein and the Asimov, will be discussed a little later in this chapter because of the interesting circumstances surrounding the appearances of these two novels.

Second only to its serials, Astounding has always been strongest in its novelettes. This year had several which, if not of classic calibre, were at least up to expected standard. Lewis Padgett started off the year with "Private Eye," the cover story for January. Suppose, in the future, the courts and law enforcement agencies had at their disposal a gadget that could reach as far as fifty years in the past, pick up anyone's act in the past and project the action on a screen in the present. The Eye could only photograph action, not thoughts, but from a second by second examination of the acts the law could pretty well determine whether or not intent was present in the commission of, say, a killing. How would a man, determined to murder another man, go about covering his every act so that the Eye, somewhere up there in the future, would get no hint from even the most insignificant gesture that murder was planned? The Kuttners told the story in their usual masterful manner and threw in a lovely twist at the end. In the same January issue Isaac Asimov had a novelette, "The Red Queen's Race," which told of the attempt of a nuclear physicist to change history by sending a parchment volume containing selected passages from physics and chemistry texts translated into the Greek of Plato through time to ancient Greece. The title (from Through the Looking Glass, of course) tells the whole story as to whether or not he was successful in altering history as we know it.

Wilmar H. Shiras followed up her phenominal debut with "In Hiding" in the November, 1948 issue with a sequel, "Opening Doors," the lead novelette for March. This story tells of Timothy Paul's guarded search, through the mails, for other children gifted as he, and the different problems each of them had in "opening the doors" to the secret of the proper means of adjusting themselves to the world they live in. This story didn't have the impact of the first—few sequels ever do—but it held one with the sensitive manner in which Mrs. Shiras handled her young protagonists and their problems.

Rene Lafayette (L. Ron Hubbard, for those who don't remember) had two Ole Doc Methuselah novelettes during this year: "Plague!", the cover story for April, and "A Sound Investment," in June. "Plague!" concerned the plight of The Star of Space, a large passenger vessel bound from Spica to Earth, which is refused a landing on Earth because of the presence of a strange plague-like disease on board which has already killed over five hundred passengers and could very likely decimate the planet if allowed to infect anyone on the ground. Ole Doc comes a-running and in due time comes up with the diagnosis and cure for this frightful and unknown malady: common measles! In "A Sound Investment" Ole Doc and his four-armed "slave," Hippocrates, are forced to fight for their lives while at the same time determining the cause of the death of nearly everyone on the planets of the system of Fomalton. It eventually turns out that Generalissimo Lebel, the acting ruler of the system, had engineered the assassination of the ruler and was the author of all the deaths on the planet, using a sonic projector that induced fear in its victims to such a high degree that



December, 1949; "The Witches of Karres" illustration by Rogers.

they literally were frightened to death. The reason for all this carnage: Wilhelm Giotini, the ruler, had willed the income from his planets to the Universal Medical Society—The Soldiers of Light—and Lebel was trying to get all the surviving inhabitants of the planets to leave so he could claim the system by right of salvage, thus doing the U.M.S. out of their inheritance.

Since 1941 and 1942, Isaac Asimov had been concentrating most of his writing on two series of stories, the positronic robot series, and the Foundation series. The one is laid in the fairly near future, the other in the quite distant future. So far, there had been no connection between these two totally different themes, but in a novelette in the May issue, "Mother Earth," Asimov, for the first time, gave a hint that there might be a connection. The connection, of course, was not apparent at the time, it would only be after several future novels had appeared that one would begin to see the scope of Asimov's concept. The events in "Mother Earth" take place well after the introduction of positronic robots into the culture and in the earlier stages of man's colonization of nearer stellar systems. Earth still exerts dominion over the stars, but its power and influence is beginning to weaken as the Outer Worlds grow increasingly more independent and contemptuous of Earth.

"Mother Earth" serves as a prelude to two novels yet to come, "The Caves of Steel" (*Galaxy*, October/December, 1953), and "The Naked Sun" (*Astounding*, October/December, 1956). These are both essentially positronic robot stories, but they are laid in a period of galactic history which is just prior to the first glimmerings of the great Galactic Empire that controlled the galaxy up to the opening of the Foundation saga. By the time these two novels appeared, the discerning reader was in a position whereby he could get some idea of Asimov's scheme.

With the appearance of three other novels, it became obvious that Asimov's major works were all part of one vast concept, a galactic history of man. These other three novels, which were all part of his cosmic canvas, were "Tyrann" (Galaxy, January/March, 1951), later published by Doubleday as The Stars, Like Dust (1951), Pebble in the Sky (Doubleday, 1950), and "The Currents of Space" (Astounding, October/December, 1952; Doubleday, 1952).

James H. Schmitz, who had made one brief appearance in Unknown with a short story, "Greenface" (August, 1943), entered the science fiction field this year with two novelettes which remain two of his best, and best remembered stories, "Agent of Vega" in July, and the cover story for December, "The Witches of Karres." "Agent of Vega," the first of a series taking its name from this story, concerned the problems and adventures of a Zone Agent, a top agent of the Department of Galactic Zones, the super police force of the reigning power of the galaxy, the Vegan Confederation. These stories usually featured the adventures of a different Zone Agent each time. They were excellent stories, tightly written, well plotted, with plenty of action, color and fine characterization. "The Witches of Karres" told of how Captain Pausert of the Republic of Nikkeldepain landed his freighter Venture on the planet of Porlumma and there met, and took under his wing, the three witches of Karres, and of the adventures that subsequently befell him. The three witches were three little girls, Maleen, Leewit, and Goth. Captain Pausert bought the girls, slaves of three different merchants of Porlumma, with the humane intention of returning them to their home world of Karres. At the time he didn't realize how remarkable were these three little "witches," nor to what adventures they would lead him. This was an utterly delightful tale lovingly illustrated by Rogers.

Poul Anderson produced four stories this year, three shorts and a novelette, "The Double-Dyed Villains," the cover story for September. This was a good early example of the type of story Anderson excels at, fast moving action on an interstellar scale built around a solid thought provoking idea. Anderson's idea in "The Double-Dyed Villains" was that in order to maintain some semblance of peace and prevent utter carnage between the various systems of the galaxy, the Galactic League's Patrol must use measures that do not involve violence or killing on their part. In order to cope with desperate situations, the Patrolmen must be adept in every form of skulduggery (short of murder) conceivable; treachery, bribery, suborning, lying, character assassination—you name it—the Patrolmen would be past masters at it. It worked, too. Interestingly enough, this second cover story of Anderson's rated a cover painted by Orban, Orban's third and his second for an Anderson story.

There were, of course, a number of short stories and articles published during the year, but none of any great significance or outstanding merit. Christopher Youd, a British science fiction fan known as John Christopher today (for his fine novels), had his first science

A REQUIEM

June, 1949; "To Watch the Watchers," illustration by Paul Orban.

fiction story, "Christmas Tree," in the February issue, and his second, a novelette, "Colonial," in the April. Katherine MacLean had her first, "Defense Mechanism," in October. W. Macfarlane had a gentle little tale in the June issue which has endured in the memories of many fans because of its last line. "To Watch the Watchers" told of Tully Kloote, the first man to sail into interstellar space, of his self-sacrifice in order to enable the native race of the planet he discovered to survive, and of the memorial they erected in his memory; a crude statue of a man placed atop a hill with this inscription on the base: TULLY KLOOTE It is a proud and lonely thing to be a man.

Of the more than a dozen articles published during the year one of the most interesting to the average reader was "The Aphrodite Project" by Philip Latham (a pseudonym of Dr. R. S. Richardson), in the June issue which was an article written in fictional form about the first Venus probe in 1947, and of the sudden opening in the cloud layer surrounding Venus while it was under observation, thereby affording the observers the incredible opportunity of photographing for the first and only time a portion of the surface of Venus. According to the "article" the military



authorities classified the project and denied permission to release prints of the photographs taken; however, they did allow artist Chesley Bonestell to make a painting of Venus as it was seen by the observers, and that painting appeared on the cover of the June issue of Astounding.

No mention has been made so-far of the November, 1949 issue, and for a very good reason. This issue deserves a little sub-section of this chapter all to itself. November featured the first installment of two serials, one by Heinlein and one by Asimov, a novelette by Sturgeon, short stories by del Rey, van Vogt and de Camp, an article by R. S. Richardson, and a cover illustrating the Asimov serial, painted by Rogers. Campbell's editorial, "Science Fiction Prophecy," discussed the ways in which many prophecies made in science fiction had a good chance of actually materializing because science fiction writers had laid the groundwork for future practicing scientists and engineers to build on in their descriptions of their gadgetry, spaceships, etc. To quote Campbell: "This type of suggestion becomes prophecy because sound engineering ideas have been presented; the engineers assigned to actual rocketship development, having read the ideas naturally tend to consider them, try them, and use them. Generally, a desirable, practicably attainable idea, suggested in prophecy, has a chance of forcing itself into reality by its very existence.

"Like, for example, this particular issue of Astounding...."

In the November, 1948 Astounding, a letter by reader Richard A. Hoen appeared in "Brass Tacks" praising the November, 1949 issue. Mr. Hoen raved about the Rogers cover and the Schneeman pix for the cover story. Placing first in his listing of the stories was the cover story, "We Hail," by Don A. Stuart. Second was the installment of Anson MacDonald's "Gulf," not as good as "Beyond This Horizon," but darn good, said Mr. Hoen. Third went to van Vogt's "Final Command," Lester del Rey was fourth, with "Over the Top." Next, surprisingly, was L. Sprague de Camp with "Finished" and, incredibly, Theodore Sturgeon placed last with "What Dead Men Tell." There were two articles in the issue by Willy Ley and R. S. Richardson, and in "In Times To Come," Campbell announced that in January, E. E. Smith would start his latest epic, the first of a new series.

In the months that followed, nearly everyone, including Mr. Hoen, forgot about the letter. Nearly everyone, that is, except John W. Campbell, Jr. Very quietly, Campbell set about making this "prophecy" come as nearly true as it was within his power to do so. How close did the reality come to the prophecy? Well, let's take a closer look now at the real November, 1949 issue of Astounding Science Fiction.

The cover was by Rogers, not one of his best, but good. Don A. Stuart was not featured on the cover, but, it goes without saying, "Stuart" was omnipresent in the magazine. Featured, instead, was the long-awaited climax to the Foundation saga, "...And Now You Don't," by Isaac Asimov. "Gulf" was there, the first of two parts, authored, not by Anson MacDonald as prophesied by Mr. Hoen, but by Robert A.

Heinlein. The rest of the issue was made up of a novelette, "What Dead Men Tell," by Theodore Sturgeon, short stories, "Over the Top," by Lester del Rey, "Final Command," by A. E. van Vogt, "Finished," by L. Sprague de Camp, and one article, "The Time of Your Life," by R. S. Richardson. The column "In Times To Come" was missing, as were interior illustrations by Charles Schneeman. Not bad. The discrepancies between the prophecy and the actuality were explained by Campbell in the March, 1950 "Brass Tacks": "Most prophecy has minor slips in detail. It would be a stale world indeed if there were no room for variation of a prediction!"

In appreciation to Richard Hoen for giving him the inspiration for his "Master Hat Trick," Campbell sent him a special copy of this issue autographed by all the authors and a personal letter from himself.

Robert A. Heinlein's "Gulf" was a superman story. This long novelette (which was cut into two parts to satisfy the details of the prophecy) was Heinlein's first story for Astounding since "Waldo" in August, 1942, written under the Anson MacDonald pseudonym. "Gulf" takes place in the United States, in a time following World War III, the communist interregnum, and the revolution that overthrew the communists. This was almost pure action, but like most of Heinlein's tales of pure action, it was pretty well laced with ideas. The action revolved around the efforts of the forces of good and the forces of evil to gain possession of a spool of microfilm, the only record in existence of the "Nova Effect," a means of creating atomic fission in a planetary mass. The evil characters in this story were pretty standard, but reasonably well done. The good characters were the supermen, the New Men, outwardly indistinguishable from ordinary man, but separated from them by a wide gulf, the ability to think better, to integrate data and arrive at correct answers. Heinlein's supermen were ruthlessly benevolent as they operated behind the scenes, trying to keep man from destroying himself and at the same time insinuating themselves into positions of power. In later years when it became fashionable to analyze Heinlein's stories in an attempt to "prove" that he is authoritarian, reactionary, anti-democratic, bloodthirsty and warlike, "Gulf" was one of the stories cited to bolster that opinion. Heinlein's supermen operated under a completely different set of moral codes than ordinary men and didn't consider themselves bound by ordinary rules. Their organization was of necessity conspiratorial and anti-democratic, and political assassination was one of their favorite measures in bringing about a desired end. To some Heinlein seemed to be presenting his idea of what constituted an elite class of man and granting them, because of their high IQ's, exemption from the laws governing ordinary man. Whether or not the New Men of the story were actually mutated supermen really didn't matter. Supermen or self-styled elite, they were integral to the plot and believable in the context of the milieu in which they existed.

"...And Now You Don't" brought one of the great modern classics of science fiction to a satisfying end. The time is nearly four hundred years after the founding of the Foundations, and fifty years after the

death of the Mule, the mental mutant who conquered the galaxy and almost destroyed Seldon's Plan. The First Foundation, centered on Terminus, is again the dominant force in the galaxy, the Mule's Empire reduced to the world of Kalgan, his capital, and a few systems allied to it. Kalgan is ruled by the so-called First Citizen of the galaxy, the Lord Stettin, who seized power from the former First Citizen, who in turn traced his succession back to the Mule.

The First Foundation resented the Second, refused to concede that they needed to be "led" by the mentalists of the Second Foundation. Unless they destroy the Second Foundation they can never be masters of their own fate, will be nothing but puppets dangling at the end of strings pulled by the invisible Second Foundation. Leader in the search for the Second Foundation is one of the leading citizens of Terminus, Dr. Toran Darell, who has reason to believe that some of the men on the First Foundation have been mentally tampered with by the mentalists of the Second. In order to further the search for the Second Foundation he sends a colleague, Homir Munn, to Kalgan to study the records of the Mule's search for the Second Foundation. Darell's daughter Arcadia, a precocious fourteen-year-old, stows away on Munn's ship and accompanies him to Kalgan. Munn is given a free hand on Kalgan, but is later arrested by Stettin. Stettin plans to wait until Arcadia matures a bit so that he can marry her and thus unite his house with one of the great houses of the First Foundation.

Lady Callia, Lord Stettin's mistress, secretly helps Arcadia escape the First Citizen and Arcadia realizes Callia is really a Second Foundationer. She's convinced Callia has her own reasons for helping her escape and that she can't return to Terminus. It has suddenly become obvious to Arcadia where the Second Foundation must be located, and therefore she is the most important person in the galaxy. Arcadia is helped in her escape from Kalgan by Preem Palver and his wife, a middle aged pair of merchants from Trantor. Trantor was once the hub of the universe, the capital world of the First Galactic Empire, but since the fall of the Empire it had become an insignificant agricultural world. Arcadia was born on Trantor but hadn't been there since infancy.

Arcadia is "adopted" as their niece by the kindly Palvers to delude the police Stettin has sent in search of her, and accompanies them to the planet of her birth, Trantor. Darell gets word that his daughter has gone to Trantor through an agent on Kalgan working for Pelleas Anthon, a co-worker of Darell. Darell is urged by Anthon to follow his daughter to Trantor for his own safety because the Second Foundation is obviously on his trail and knows about his work, but Darell refuses, insisting that to do the unexpected is the only way to keep ahead of the Second Foundation.

Arcadia settles on Trantor with the Palvers until she can return to Terminus, and finds Trantor a fascinating world. At one time Trantor, set in the midst of the myriad suns at the center of the galaxy, was one gigantic city housing four hundred billion administrators, the greatest

capital in all recorded history. But now its metal has been stripped off and sold for scrap, the revealed land turned into farmland, its glories a thing of the past. The only thing remaining whole from the days of the Empire was the mighty library, the old Imperial Library. It was in this library that Hari Seldon labored and ultimately brought forth his Plan. Here Arcadia's grandparents had lived until the Mule died and they could return to Terminus, here her parents had come in search of clues to the location of the Second Foundation, and it was near the library that Arcadia was born.

Before Arcadia can return to Terminus, Lord Stettin launches a war against the First Foundation in a futile effort to restore the lost empire of the Mule. Arcadia persuades Preem Palver to go to Terminus to contract for the sale of food from Trantor, pointing out that he can make a huge profit. He agrees to go and Arcadia gets him to promise to contact her father and give him a message which she whispers into Palver's ear—five words.

Palver eventually gets to Terminus and relays Arcadia's message to her father. Shortly after this, Darell and his co-workers, including the returned Homir Munn, get together to report on the progress of the search for the Second Foundation. Homir Munn stuns everyone by declaring his research of the Mule's records on Kalgan has convinced him there isn't, nor has there ever been a Second Foundation, that it was thrown in by Seldon to act as a spur to the First Foundation. Anthon accuses Munn of having been mentally tampered with while on Kalgan and insists that they all submit to encephalographic comparisons with their earlier records to be sure they are all untampered with. The test proves that Munn has been tampered with.

Anthon then announces he knows where the Second Foundation really is—on Kalgan. The others reject this because of Seldon's statement that the Second Foundation was on Star's End, at the other end of the galaxy from the First at Terminus. Anthon stubbornly insists that Kalgan has to be it, and gives strong arguments to prove it. Darell comes back with the declaration that Anthon is wrong, that he knows where the Second Foundation is located. He tells them that Arcadia revealed its location in her five word message delivered to him by Preem Palver. Arcadia's message: "A circle has no end." The conclusion, inescapable and inevitable is that the Second Foundation is hidden on Terminus. Terminus is located on the utmost rim of the galaxy. Follow a circle to find its end and you end at the beginning.

Through a ruse, Darell then reveals that Anthon is a Second Foundationer and extracts from him the information that the Second Foundation consists of but fifty people strategically located on Terminus. Darell has some doubts about this figure or that all of the Second Foundation is located on Terminus because of the fear that the message from Arcadia may have been planted in her mind by a mentalist on Kalgan or Trantor. But when he tests Arcadia and finds her mind has been untampered with he realizes the centuries long search for the Second Foundation is over, that now they can go on with Seldon's Plan,

free of the haunting fear of the Second Foundation.

But...

In an unlocated room on an unlocated planet, two men are talking, the First Speaker and a student. They are discussing the successful conclusion of the Second Foundation's efforts in restoring the true course of Seldon's Plan. It had become necessary to once and for all remove from the First Foundation all fear of the Second. To do this meant to allow the First Foundation to find the Second through their own efforts and to destroy it, thus restoring their self-confidence and permitting them to carry on with their part of the Plan. But for the success of the Plan the Second Foundation had to be free to develop also. All the evidence believed in so implicitly by the First Foundation was either false or misleading. The key to everything, of course, was the location of the Second Foundation.

When Hari Seldon established the Foundations he located one, the First, at Terminus, at the outermost tip of the spiral arm of the galaxy. The Second Foundation, he said, "Was at Star's End, at the other end of the galaxy." The materialists of the First Foundation thought in terms of the physical sciences in their four hundred year search for the Second Foundation, measuring, calculating, ending up at a point on the rim one hundred and eighty degrees from the First, or back at Terminus. Seldon, however, was a social scientist and thought in more poetic terms. Seldon set up the Foundations in the waning days of the First Galactic Empire. Terminus was located at the furthest point from the center of Empire, on the rim of the galaxy where the Empire was weakest. To a social scientist, where would the opposite end of the galaxy be? Why, in the days of the Empire, at the center of the Empire, of course. Seldon had worked at the great University of Trantor and in the Imperial Library. It was on Trantor that he had gathered a hundred thousand people to help with his encyclopedia project which was to gather all the knowledge of the galaxy to insure the survival of that knowledge in the days when the Empire was no more. It was on Trantor that Seldon maneuvered the authorities into exiling his encyclopedists to the world of his choice, Terminus, after outraging the authorities by predicting the destruction of Trantor and the breakup of the Empire within five hundred years.

In explaining his choice of Terminus to a young mathematician, Seldon said, "It is enough for the moment that you know that a scientific refuge will be established on Terminus. And another will be established at the other end of the galaxy, let us say," and he smiled, "at Star's End." And a moment later, in talking of the people who would follow him into exile, he said, "Most will leave for Terminus, but some will stay. It will be easy to arrange."

The Second Foundation was, and always had been on Trantor. To Seldon, the other end of the galaxy from Terminus was at Trantor, the world where, in the shining days of the Empire, "all stars end."

And who was the First Speaker of the Second Foundation? Why, Preem Palver, of course.

Physically, Astounding remained the same as the preceding year. Six artists were used on the covers during 1949. Rogers for January, February, July, August, and November. Orban for May and September, Alejandro for March and October, Bonestell for June, Santry for April, and Zboyan for December. The best covers were Rogers' for July depicting the Brookhaven Atomic Pile, and his portrait of Victor Hasselborg on the August cover. Rogers, Orban and Cartier handled most of the interior illustrations, with Cartier leading in quantity of production, if not quality.

Book reviews had become an almost, but not quite regular feature of Astounding during this year, with reviews presented by L. Sprague de Camp, P. Schuyler Miller, Willy Ley, Catherine de Camp, and R. S. Richardson, with P. Schuyler Miller the most frequent reviewer. Book publishers began to advertise their science fiction titles in Astounding as they began to get on the science fiction bandwagon. The page count and price remained the same, 162 pages for twenty-five cents. In February, Campbell began printing, under his name on the contents page, the call letters of his ham radio station, W2ZGU, and in March the name C. (Catherine) Tarrant appeared on the contents page as assistant editor, and remains there to this day.

Astounding, during 1949, had, on the whole, maintained the general postwar level of excellence that had been established in 1947, although it was somewhat more erratic than 1948, or even 1947. It didn't need an expert to see that the quality of writing was showing constant improvement as time went on, that the better Astounding writers were becoming skilled craftsmen.

The December, 1949 issue closed out not only the decade of the forties, but it rounded out twenty years of Astounding; it was the two hundred twenty-ninth issue to appear since the first Astounding Stories of Super-Science, January, 1930 appeared on the newsstands in December, 1929.

TWENTY YEARS IN RETROSPECT

Astounding began its career in the first months of the Depression and in the infancy of magazine science fiction. It was a pulp magazine oriented toward the action and adventure, the vividness and excitement that was to be found in the other magazines in the Clayton chain of pulps. By today's standards, it was the crudest sort of science fiction, bearing hardly any relationship to the polished, technically accurate science fiction found in the elegant, near-slick *Analog*.

In this twenty year period, *Astounding* had had three editors, two publishers, and three name changes. The first publisher, William L. Clayton, published a large chain of pulp magazines, and the chain as a whole was making good money prior to *Astounding*. Although Clayton personally was an ardent fan of *Astounding*, his prime object in publishing the magazine was to make money, the primary object of any publisher, then or now. Clayton couldn't depend on the relatively small nucleus of science fiction addicts of the day to make this magazine a money making proposition, *Astounding* had to appeal as well to the broader base of general pulp readers. *Astounding* was, essentially, just another adventure pulp in a more exotic dress.

The science fiction fan, however, was fortunate in that Clayton had as his editor of this new science fiction magazine a conscientious and able man, Harry Bates. Bates has come to be regarded over the years—quite unjustly—as an incompetent, lowbrow editor simply because today the stories he published thirty years ago show up as hammer-handed pulp work. What the fan of twenty or thirty years later fails to realize is that Bates had almost literally nothing to work with in the way of a reservoir of skilled, knowledgeable science fiction writers, nor a body of tradition going before on which to build. Magazine science fiction, modern science fiction, was just in the process of breaking away from the classic nineteenth century and early twentieth century

mold that had provided the original form of science fiction.

From the beginning, Bates paid his authors two cents a word on acceptance for their stories and worked closely with writers more familiar with the action-adventure school of pulp writing, teaching them and developing them into science fiction writers. He naturally augmented these writers with those more closely identified with science fiction, Ray Cummings, Murray Leinster, Jack Williamson, Nat Schachner, Capt. S. P. Meek, etc.

By the time the Clayton era came to a close, Astounding had been built up by Harry Bates to a commanding position in the field. Bates was just on the verge of expanding the horizons of Astounding, moving away from the pattern Astounding had established in its three years of existence, when the Clayton chain suddenly folded.

When Street & Smith took over the defunct Astounding and put F. Orlin Tremaine in command, a new era in the development of Astounding was begun. In comparison with the Clayton Astounding, the Street & Smith Astounding soon achieved an elegance in its physical appearance never equaled by its predecessor, in the quality of its paper, the heavier cover stock, profusion of interior illustrations, increased pages and wordage, etc. It also attracted more of the big name (by that time) writers in the field. This was not necessarily because Street & Smith was that much more wealthy a publishing house than was Clayton in its hey-day, or because Tremaine was a better editor than Bates. It was due, in large part, to the fact that Astounding was paying one cent a word on acceptance to authors. How could one cent a word attract more of the leading authors in the field, encourage them to submit their best work to Tremaine? Simple: the other two magazines in the field were paying fractions of a cent, as low as one-tenth of a cent a word on publication. Even paying half as much as Bates did, Tremaine was paying his authors considerably more than the other magazines.

The type of science fiction published in the first years of the Tremaine Astounding was not, actually, too much different from that presented by Bates. In spite of the thought variant policy, action was still very much in evidence. But even so, the Astounding brand of science fiction was beginning to evolve into something new and fresh. Campbell, with his Don A. Stuart stories, Weinbaum, C. L. Moore, and other lesser lights were beginning to demonstrate that science fiction could still be exciting while at the same time being more than competently written pulp fiction. Astounding was attracting more and better writers, and with each succeeding year new ideas, new themes were being added to the mystique of science fiction. Writers had tradition now to draw on; could add to, could expand on, give a new twist to established ideas. New ideas, new treatments, totally new themes were beginning to be explored as the Tremaine era neared its end. A rich vein of science fiction was waiting to be opened up.

Tremaine, however, was not the man to develop and exploit this potential bonanza. Tremaine was first and foremost a pulp magazine editor, and only secondarily a science fiction editor. His labors and

interests were spread over five or six magazines, one of which was Astounding. Tremaine made his magazine attractive to writers as a market for their stories with his higher rates and his willingness to accept new and even off-beat ideas. The authors responded with their best efforts. Tremaine built Astounding to the leading position in the field, not only in circulation, but in quality and in influence. It was a tremendously exciting magazine during most of Tremaine's editorship, apparently moving ever onward and upward, until toward the end when it suddenly seemed to begin to drift around aimlessly.

When John W. Campbell, Jr. took over the editor's chair of Astounding late in 1937, he took over a magazine that was the established leader in the field, but one that was beginning to show alarming evidence of inertia. Campbell had several qualities to commend him in his new job: he was first of all, and most importantly, a science fiction writer himself, a writer of proven talent fully conversant with every aspect of the field; he was young and enthusiastic and believed in the validity of science fiction as a literary form; he had a thorough educational grounding in the physical sciences, and an open and inquiring mind in other directions; he had the respect of other writers in the field. All this he brought to his new job with the determination to maintain Astounding's leadership while at the same time exploring new avenues, developing new writers, establishing new maturity in science fiction.

Although Campbell is quite rightly regarded as the man primarily responsible for modern science fiction, it might be well to ponder the words of a man almost unknown to the majority of present-day science fiction readers except as the author of a handful of early classic science fiction stories, the first editor of Astounding, Harry Bates:

It seems very hard for people to realize that history is a developing process. Modern science fiction was not born when Campbell first sat at the editorial desk: we, who went before him, built with our labor and sweat his editorial desk, and helped build a group of readers ready for his kind of magazine at a time when they were able to buy it. (April, 1962)

The great, the unforgettable period of Astounding's Golden Age couldn't have been without all the wild and wonderful science fiction that preceded it, that provided the firm base on which to build. The writers identified with the Golden Age, Simak, Sturgeon, van Vogt, Heinlein, Kuttner, Russell, Asimov, all the rest, couldn't have written the stories they did without the groundwork having been laid for them during all the years before.

Campbell hit his stride in late 1939 and 1940, in the last dying days of the depression and the beginning of the national defense boom. The world was in a ferment, new breakthroughs in science and technology were occurring almost daily, the mysteries surrounding the atom were being slowly, but inexorably peeled back, the science of flight was accelerating with the increasing threat, and then the onset of war; and Campbell took advantage of all this, and more, in flogging his writers into making every effort to update their ideas and develop maturity of

outlook. The great stories that overflow the pages of Astounding during the greater part of the forties testify to the almost perfect symbiosis that existed between Campbell and most of his writers during this era.

At this point it again becomes necessary to remind the reader that this book is in no way intended to be an exhaustive or definitive history of Astounding. Although my interest in science fiction is still strong to this day, and I read and collect it, and know full well that in literary terms the science fiction found today in Campbell's Analog is generally better than that of the Golden Age, and considerably superior to that of the thirties, my principal interest in science fiction is now an antiquarian interest.

The first twenty years of Astounding have been dealt with at great length because, as stated in the preface, I have a strong, a nostalgic interest in that period, and also because many present-day readers of science fiction have a desire to know at least a hint of what went before. Contrary to what some people might think, this interest in Astounding's past in no way ignores the genuine quality of today's Analog. The reader of today's mature science fiction, as exemplified particularly in Analog, is enjoying a high level science fiction that wouldn't be if it hadn't been for the steady development that took place in preceding years.

The aficionado of a specialized literary form such as science fiction or detective fiction is usually not content to simply read and enjoy the contemporary output in the field; he has also a natural curiosity about the past. He wants to know what the magazine (in this case, of course, Astounding) was like in the old days, what writers were popular, the type of science fiction they were writing, when they started, when they quit, when the great stories appeared, what the magazine looked like, how it was illustrated. In short, like any knowledgeable buff, he wants to know as much about the subject as he can find out.

It is in an attempt to satisfy this natural curiosity that this book has been primarily devoted to the first twenty years of Astounding. Most serious science fiction fans have at least a general knowledge of Astounding as it was during the fifties, have most of the issues of the magazine. But as they go further back in time it becomes increasingly more difficult to find the old issues of the magazine, and when they are found they are frequently quite expensive. While this book can in no way be a substitute for a complete file of Astounding, it can materially aid in filling in the gaps in knowledge many newer readers have, give them an awareness of the magazine's rich past, and enhance their appreciation of modern science fiction.

Modern science fiction can be considered to have begun in 1950. No attempt will be made, in the few pages remaining, to give more than a brief review of the last ten years of Astounding Science Fiction. Without denigrating the present in any way (and in terms of the total life of Astounding the period from 1950 on can be considered part of the present) the purpose in writing this book is to explore and illuminate the past, and by so doing relate modern science fiction, the science fiction John W. Campbell gives us in Analog, to that past.

MATURITY: 1950

Astounding came of age in the fifties, put behind its adolescent awkwardnesses and donned the mantle of maturity. As the second half of the twentieth century opened, Astounding was the only magazine consistently presenting "adult" science fiction; not necessarily in terms of themes or ideas, but more in the handling of these themes and ideas from an adult viewpoint.

In the fifties, Astounding seemed almost jewel-like in its perfection. It was printed on a fine quality of pulp paper that became increasingly more slick as the decade wore on; the type face used was clean and sharp, eminently readable; the general makeup restrained, yet dynamic. The covers were, almost without exception, tastefully executed if not always outstanding. The interior art, however, suffered its usual vicissitudes, plummeting from the high of Rogers and Cartier in the early years of the decade, through Kelly Freas in the middle years, technically a superb artist but one who was too prone to cartooning, down to van Dongen who dominated the later years, an artist who was slickly flashy on the surface, but fundamentally amateurish and pathetically unable to draw a human figure even as well as Wesso.

There were many fine, and some excellent stories published during the fifties, the best of which soon saw reprinting in the avalanche of anthologies that came out during the big boom, or as hardback or paperback novels. There were a number of small changes in the physical appearance of the magazine made during the fifties, but the major changes occurred in the fiction itself. The science base of the science fiction found in Astounding in its last decade was less and less the hard sciences of physics, mathematics, chemistry, etc., and more and more the less precise sciences of anthropology, sociology—and even less precise, parapsychology or psionics. The broadening of scientific knowledge and accelerating advances in technology that had followed

the war made an embarrassingly large amount of earlier science fiction virtually obsolete; it seemed to some that science fiction could no longer claim to be in advance of mundane science, that science had caught up with and was pulling ahead of science fiction.

Science fiction had, on the whole, become respectable by the fifties. Since the end of the war, which ushered in the Atomic Age, and before the fifties began, commercial television, transistors, electronic computers, jet aircraft, missiles and many other wonders were already household words. As the fifties advanced so did science and technology. In 1957 the first satellite put into a free orbit around the Earth was launched by the Soviets, and by the end of the decade the space between the Earth and the moon was criss-crossed and interlaced with satellites. All this had in one way or another been forecast by science fiction, but the forecasts had now become reality, and science was on the threshold of even greater things, interplanetary—even interstellar—travel, the physical exploration of the planets, the elimination of killing diseases, even the conquest of old age and death.

What scientific areas were left for science fiction to probe into, to speculate on? The old themes were still fertile ones on which to build variations, of course, and would continue to provide the basic inspirations for the best stories. However, since Heinlein, these themes alone were not enough; to elevate it above the pedestrian level an interplanetary tale, or a time travel story, or a robot yarn, or what-have-you, had to include some element of at least sociology or anthropology as a secondary or even a primary theme.

This problem of finding undeveloped themes for science-fictional exploitation was a real one for an editor of Campbell's temper. The hard sciences had been worked over and over until they were on the verge of becoming sterile and nonproductive. Real science seemed to be stealing science fiction's thunder. Extrapolation on the social sciences, politics, anthropology, etc., provided a partial answer, but Campbell felt he needed something really challenging to compete with the real world.

How about the challenge of that great terra incognita, the vast unknown areas of the human mind? Hmmm... Dr. J. B. Rhine of Duke University, one of Campbell's old alma maters, had for over twenty years been conducting some promising experiments in Extrasensory Perception (ESP). And in the past a number of stories centered on this theme had been popular with the fans, the Lensman stories of E. E. Smith, the Baldy stories of Padgett, the Humanoid stories of Jack Williamson, "Slan" by van Vogt, "Lost Legion," by Lyle Monroe (Robert A. Heinlein), from Super Science (November, 1941), and others.

True, these stories were all highly popular with the fans. But unfortunately, this theme was greatly overexploited in the fifties, both in fiction and in "fact." Once it became known that Campbell was receptive to stories dealing with psionics the dam burst and for years Astounding was flooded with psionic fiction—most of it second rate fiction by second rate authors. And in the realm of so-called "fact"

the editor got quite carried away, first with dianetics, then with ESP generally, then with Hieronymous machines and dowsing rods specifically, in his editorials and in many articles featured in the magazine, not to mention letters in "Brass Tacks."

This over-emphasis on psionics is considered by many fans to be the greatest single flaw in an otherwise fine magazine during the fifties.

1950 was the year in which the "science" of dianetics was revealed to a breathlessly awaiting world in the pages of Astounding. Although this new "science of the mind" was probably the single most sensational event of the year, not only in Astounding, but in the field generally, science fiction was still ostensibly the main business of Astounding and it is with the fiction that we'll deal with first, briefly.

L. Ron Hubbard's primary fictional contribution to the field in 1950 was a fine two-part short novel beginning in February, "To the Stars," which told of the sacrifices man would have to make once he became an interstellar traveler. A. E. van Vogt wound up the "Clane" series with what was, incidentally, his last appearance in Astounding: "The Wizard of Linn," a three-part novel starting in April. This was by far the best of the "child of the gods" series which saw Lord Clane of Linn win out over the interstellar invaders, the Riss (with the help of the barbarian leader, Czinczar), and win political control of the Linnan Empire by becoming at last the Lord Leader of Linn. This and the Hubbard novel were beautifully illustrated by Rogers on interiors and with covers.

This same April issue which presented the last major work in Astounding of one of the stellar giants of the Golden Age, presented the first segment of a major series by one of the stellar giants of the Modern Age, "Okie," by James Blish. Blish was one of the growing army of science fiction fans, active in the late thirties and early forties, who had graduated to professionalism. He had been writing off and on with moderate success since 1940, but "Okie" marked his emergence as a mature writer with great promise. This promise was realized in the years ahead and was recognized by the fans in a tangible fashion in 1959 and 1960. In 1959 his novel, A Case of Conscience (Ballantine, 1958), was awarded the Hugo for the best novel of 1958 at the 17th World Science Fiction Convention (1959) in Detroit, and in 1960 James Blish was Guest of Honor at the 18th World Science Fiction Convention in Pittsburgh.

"Okie" told of a time in the far future when entire cities and their populations roamed the stars as interstellar "Okies," selling their services to whoever would buy. With the invention of the spindizzy, an antigravitic propulsive device, it was now possible for cities to change their physical locations at will, not only on Earth but throughout interstellar space. Somewhat coincidental with the discovery of the spindizzy field was the discovery of anti-agathic drugs to ward off death and prolong life indefinitely, which made the long interstellar journeys of the nomad cities feasible. The city involved in "Okie," and most of

the other stories in the series is New York, guided by its wise and resourceful mayor, John Amalfi and the city manager, Mark Hazleton. The whole series, when completed, covers a span of 2,000 years, and constitutes a major contribution to the literature of science fiction.

This excellent and exciting tale (which took second place to van Vogt in the "Analytical Laboratory") was followed in December with a sequel, "Bindlestiff," the cover story. In this story, Manhattan crosses the Rift, discovers the planet He, a "Bindlestiff" city, one of the rare cities that operate outside the law, preying on other cities and planets; wages a successful battle against the Bindlestiff city, and for good and sufficient reasons tip the axis of the planet of He by means of strategically placed spindizzies and sends it coursing across intergalactic space. An excellent story, an even better story than the first, and one that firmly established James Blish as a writer of growing stature.

The December issue also contained another memorable story, "A Subway Named Mobius," by A. J. Deutsch. This was the well-known tale of the train that got lost on the complex Boston subway system. The story itself was negligible, but the idea was a honey and, no doubt to a Bostonian, disturbingly plausible.

The cover for this issue illustrated Blish's story and was the fifty-third and last cover painted



April, 1950; "Okie," by James Blish, illustration by Rogers.

for Astounding by William Timmins. Happily, it was, for Timmins, one of his better paintings.

The last three of L. Sprague de Camp's Viagens Interplanetarias stories to appear in Astounding were presented this year, "The Inspector's Teeth" (April), "Git Along!" (August), and a four-part serial, "The Hand of Zei" (October/January, 1951). In all there were fifteen "Krishna" stories, all published between 1949 and 1953 except for "The Tower of Zanid" which appeared as a four-part serial in Science Fiction Stories (May/August, 1958). Six of this total were published in Astounding where it all began with "The Animal-Cracker Plot" in July, 1949.

"The Inspector's Teeth" was chronologically the first of the "Viagens" stories and told of the accomplishment of a young Osirian student at an Earth university in recovering the false teeth of the Osirian Chief Inspector Ficesaqa which had been brought back to Earth and presented to Atlantic University by de Camara, the founder of Viagens Interplanetarias and the first Earthman to set foot on Osiris. The story of the young Osirian student Hithasefea and his sentimental regard for the Inspector's teeth was related to some very high Earth officials by the Osirian ambassador to explain why he was willing to sign an agreement with Earth which would lead to the forming of the Interplanetary Council. The ambassador was, of course, the self-same young student, Hithasefea. "Git Along!" was a slight but entertaining tale of an Earthling confidence man on Osiris who starts a dude ranch for Osirians on that planet.

"The Hand of Zei" takes place on Krishna in 2143 A.D., the second century of Earth's contact with Krishna. The hero of this yarn is Dirk Barnevelt, ghost-writer for the famous explorer Igor Shtain, who is sent to Krishna to look for Shtain when the explorer mysteriously disappears. Barnevelt is a shy young ex-schoolteacher with a mother complex who comes alive and discovers his manhood on the wild planet of Krishna as he searches for Shtain and woos the princess Zei, a beautiful young Krishnan who, it turns out in the end, is really an Earthwoman. This was a story of high adventure, pure entertainment. In New Frontiers (December, 1959; "The Krishna Stories"), a semi-professional magazine published and edited by Norman Metcalf, L. Sprague de Camp characterized the "Krishna" stories as "...pure entertainment in the form of light, humorous, swashbuckling, interplanetary adventure-romances—a sort of sophisticated Burroughs-type (Martian) story, more carefully thought out than their prototypes." "The Hand of Zei" was a perfect example of this.

This, and the other two "Krishna" stories published this year were delightfully illustrated by Edd Cartier who also painted the cover for the first installment of "The Hand of Zei" (October), a lovely thing and the only cover painted by him for Astounding.

Other stories of more than passing interest were "New Foundations," by Wilmar H. Shiras, the cover story for March and the final sequel to "In Hiding" published in Astounding; "Last Enemy," by H. Beam Piper,

a Paratime Police story which took the August cover by Miller; "The Lion and the Lamb," by Fritz Leiber (no longer "Jr."), a fine interplanetary tale which was also Leiber's first story for Astounding since "Destiny Times Three" in March and April, 1945; James H. Schmitz' "The Truth About Cushgar" in November, another Agent of Vega story and well up to par with the first two.

Cyril M. Kornbluth saw his first story in Astounding published in July, "The Little Black Bag." This was the novelette about the wondrous doctor's bag found by the old wino, Dr. Full, the magic it contained, how it affected the old doctor's life, and how it quite unwittingly avenged his death. This was Kornbluth's second story; his first was a short story, "The Only Thing We Learn" in the July, 1949 Startling Stories. These two stories were the first published under Kornbluth's real name.

In the early forties, Kornbluth became a living legend before he reached the age of twenty. In the span of approximately two years, or at the most two-and-a-half, he produced a phenomenal number of stories for one so young, under a seemingly endless number of pseudonyms, the most famous being S. D. Gottesman, Cecil Corwin, and Kenneth Falconer. His best known stories of this period were "The Words of Guru," by Kenneth Falconer (Stirring Science Stories, June, 1941); "Kazam Collects," by S. D. Gottesman (Stirring Science Stories, June, 1941); "Mr. Packer Goes to Hell," by Cecil Corwin (Stirring Science Stories, June, 1941. All three in the same issue!); "Thirteen O'Clock," by Cecil Corwin (Stirring Science Stories, February, 1941) and "The City in the Sofa," by Cecil Corwin (Cosmic Stories, July, 1941). In the fifties, Kornbluth rose rapidly to the top level of science fiction writers, turning out an impressive number of first rate stories on his own and in collaboration with others, most particularly his good friend and earlier collaborator, Frederik Pohl. Kornbluth died, suddenly and unexpectedly, in March, 1958 at the age of thirty-four.

The May issue had two outstanding stories, the cover novelette by Poul Anderson, "The Helping Hand," and a short story by Jack Vance, "The Potters of Firsk." Anderson's story was an excellent example of the type he is pre-eminent at, a rousing tale infused with his own trenchant commentary on socio-political themes. In "The Helping Hand" he shows what happens to two planetary systems, one of which accepts cultural and economic assistance from the Commonwealth of Sol, the other, a rugged, barbaric system, refusing it. Vance's story tells of the potters of the planet Firsk who are unrivalled anywhere in the known universe in the fabrication of ceramics, and of the special element necessary to the composition of their superb pottery.

In the mid-forties, Amazing Stories, under the editorship of Raymond A. Palmer, exploited a series of stories by Richard S. Shaver, known collectively under the title of "The Shaver Mystery," by asserting that they were based on fact. The first of the Shaver stories was "I Remember Lemuria" in the March, 1945 Amazing which was a mish-mash of racial memory, super-science, and a race of degenerate

Lemurians who are inimical to man existing today in caves. Palmer to this day insists that Shaver is right, that "Deros" do exist in a honeycomb of caves, and interfere in the lives of men and in the course of events by means of rays projected to the surface. Palmer's insistence that the Shaver stories were essentially true alienated most fans and was believed in only by credulous adolescents and by what can only be described as the crackpot fringe of science fiction fandom. The "Shaver Mystery" remains the outstanding example yet of the editorial "over-enthusiasm" used to bring attention to a magazine in an effort to build circulation. However, many (not all, by any means) fans are of the opinion that Campbell ran Palmer a close second in 1950.

Toward the end of 1949 there were rumors circulating around that L. Ron Hubbard was coming out with something sensational in the near future, but what it was to be no one knew, or if they did they weren't saying. In the April, 1950 "In Times to Come" Campbell announced:

Next month's issue will, I believe, cause one full-scale explosion across the country. We are carrying a sixteen-thousand word article entitled "Dianetics ... An Introduction to a New Science," by L. Ron Hubbard. It will, I believe, be the first publication of the material. It is, I assure you, in full and absolute sincerity, one of the most important articles ever published. In this article, reporting on Hubbard's own research into the engineering question of how the human mind operates, immensely important basic discoveries are related. Among them:

A technique of psychotherapy has been developed which will cure any insanity not due to organic destruction of the brain.

A technique that gives any man a perfect, indelible, total memory, and perfect, errorless ability to compute his problems.

A basic answer, and a technique for curing—not alleviating—ulcers, arthritis, asthma, and many other nongerm diseases.

A totally new conception of the truly incredible ability and power of the human mind.

Evidence that insanity is contagious, and is not hereditary.

Campbell continues with his buildup: "This is no wild theory. It is not mysticism. It is a coldly precise engineering description of how the human mind operates, and how to go about restoring correct operation tested and used on some two hundred fifty cases. And it makes only one overall claim: the methods logically developed from that description work. The memory stimulation technique is so powerful that, within thirty minutes of entering therapy, most people will recall in full detail their own birth. I have observed it in action, and used the techniques myself."

The article, when it appeared in the May, 1950 issue, did indeed cause a full-scale explosion. Hubbard's article painted a glorious picture of how every man, with a few hours of therapy, could become a "clear" and in effect a totally sane person. And in addition it indicated

that anyone could, after reading Hubbard's book (Dianetics: The Modern Science of Mental Health—Manual of Dianetic Therapy, published by Hermitage House, New York City, simultaneously with the Astounding article) and going through a course of therapy, become a qualified Dianetics therapist—or “auditor”—regardless of whether or not one had any fundamental knowledge of medicine, or even of the physiology of the human body or the complexity of the human mind. The Astounding article, and the “science” of dianetics, was given a quasi-medical legitimacy by being introduced with a wholly unprofessionally enthusiastic endorsement by Joseph A. Winter, M.D. However, the medical profession wasn't buying Hubbard's engineering approach to mental therapy, and as the months went by with more and more unqualified amateurs becoming “experts” in the treatment of not only mental ills but physical disorders, they really became upset and alarmed. Dianetics enjoyed a tremendous success for some time and Hubbard grew fat, but in time the bubble burst and dianetics went out of style for all except a few dedicated disciples. But Hubbard was not to be denied: with dianetics at a low ebb he brought forth a higher, more advanced discipline built on the basics of dianetics, surrounded it with a lot of mumbo-jumbo, and called it Scientology. Today L. Ron Hubbard resides in England a wealthy man, the guiding genius and principle beneficiary of what many authorities consider one of the most audacious and successful medical “quack” movements of all time.

Hubbard followed up his long article with a shorter one, “The Analytical Mind,” in October and, by August, letters commenting on dianetics began to appear in “Brass Tacks.” According to an editorial note in the August “Brass Tacks” some two thousand letters had arrived in the first two weeks following the appearance of the article, and of that number only 0.2 per cent were unfavorable. The president of Hermitage House, the publisher of the dianetics handbook, reported in a letter that the book was selling at a rate of one thousand copies a day (at \$4.00) and that all proceeds, including those from the sale of the special leather bound edition of 100 copies at \$25.00 each, were going to The Hubbard Dianetic Research Foundation (of which Hubbard was the president). And so it went. Regardless of one's opinion as to the validity of Hubbard's new “science,” the science fiction field suffered two losses as a direct result of dianetics: Hubbard was now devoting all his time and energy to his Foundation and no longer wrote fiction, and A. E. van Vogt became a professional auditor and virtually abandoned the field for almost fourteen years, except for an occasional rewriting of short story series to make them into novels, and one or two minor original hardcover novels.

Many fans had ambivalent feelings toward the 1950 Astounding: they recognized and appreciated the fact that Campbell had raised the magazine to a high level of excellence and polish, but at the same time they had the vague feeling that by achieving the relative level of perfection and acceptance it had, Astounding had lost a good deal of the dynamic

quality inherent in the magazine of the thirties and particularly of the peak years of the Golden Age. There was a static quality to the magazine throughout the fifties that it had never had before. The artwork, both inside and on the covers, was almost uniformly good, but other magazines of lesser prestige—Startling Stories, Thrilling Wonder Stories, Famous Fantastic Mysteries, to name three—constantly equaled or excelled Astounding in interior artwork, and Galaxy, Fantasy and Science Fiction, Famous Fantastic Mysteries, and others often had far better cover paintings than Astounding. The letter column, "Brass Tacks," became, as the decade progressed, the dullest and least lively letter section in the science fiction field with discussions of the stories in Astounding, or discussions of science fiction in general virtually nonexistent. But even so, in the area that was still the most important, the area of the literature of science fiction, the Astounding brand of science fiction still led the field. However, in moving closer to the mainstream, in presenting science fiction that was more acceptable to a broader mass of readers, Astounding seemed to many of its fans to be lacking in much of the "gutsy" quality it had had in earlier years. There were a number of exceptions to this, of course, but far fewer than one would imagine over a ten year span. One reason, possibly, for the fewer "gutsy" or memorable stories in Astounding during the fifties was that Campbell no longer had a monopoly, or near monopoly, on the best talent in the field. Robert Heinlein, Isaac Asimov, Poul Anderson, Fritz Leiber, Henry Kuttner and others no longer automatically gave Campbell first look at their best works, particularly after Galaxy Science Fiction and Fantasy and Science Fiction entered the scene. In looking back over the years of Astounding, a peculiar phenomenon is noticed: without referring to back issue files, I find that I have little difficulty visualizing the magazine during specific years of the thirties or the first half of the forties, or recalling certain memorable stories or issues of the magazine and placing them in their proper niche in the time stream of Astounding. This doesn't hold true with the fifties. One year doesn't stand out above the other, they all flow together into one homogeneous mass. And while certain stories stick in the memory, it is exceedingly difficult to say, without checking, that such-and-such a story appeared in such-and-such a year, or that a particular year contained this or that outstanding story.

Astounding continued as a 162 page magazine through 1950, and the price remained at 25¢. C. Tarrant—presently Kay Tarrant in Analog—continued to be listed on the contents page as assistant editor, and in June the name of Walter J. McBride was added as advertising manager. From February, 1950 on Campbell discontinued listing the call letters of his ham radio station, W2ZGU, on the contents page under his name. For several years the address listed for Street & Smith Publications, Incorporated, was 775 Lidgerwood Avenue, Elizabeth, New Jersey, with General and Executive offices at 122 East 42nd Street, New York 17, New York. In October the entire Street & Smith

operation was listed as originating from the New York address. In May, 1951 the offices were moved to 575 Madison Avenue, New York 22, where they were to remain for a little better than ten years when they again moved, after the sale of Street & Smith Publications to The Conde Nast Publications, Inc., to 420 Lexington Avenue, New York, New York 10017.

There were seven different artists used on the covers during 1950, plus one photo cover, a scene from the George Pal Technicolor production of Robert A. Heinlein's Destination Moon used for July to illustrate Heinlein's article, "Shooting Destination Moon." Bonestell had one cover this year, a very poor one for January illustrating Phillip Latham's (Dr. R. S. Richardson) "The Xi Effect." Rogers had three: February for L. Ron Hubbard's "To The Stars," March for Wilmar H. Shiras, "New Foundations," and April for A. E. van Vogt's "The Wizard of Linn." Brush had the May cover for Poul Anderson's "The Helping Hand." Walt Miller, a better than average artist, was introduced with the June cover for Katherine MacLean's fine story, "Incommunicado," and followed it with two more, the August cover for "The Last Enemy" by H. Beam Piper, and September for Fritz Leiber's "The Lion and the Lamb." Edd Cartier had his one and only gem for Astounding in October for de Camp's "The Hand of Zei," Pattee had an excellent symbolic cover, titled "Choice," for November, and Timmins' last, and one of his better covers graced the December issue. Cartier, Orban and Rogers were the dominant interior illustrators, with assists from Miller, Brush, Ward, Hicks, Swanson, Noyga, and, appearing for the first time in January, Jack Gaughan, one of today's better science fiction artists. Timmins made one appearance with interior art in the December issue for James Blish's "Bindlestiff," for which he also did the cover, and, unfortunately, Charles Schneeman had illustrations for but one story, "Paradise Street," by Lawrence O'Donnell (C. L. Moore), in September.

The title logo remained the same as before, a small Astounding in a running script in the upper left hand corner, with SCIENCE FICTION in large block letters directly below. In order to give maximum emphasis to SCIENCE FICTION and play down Astounding, the cover was usually printed in such a way that Astounding blended into the background painting, in some cases being almost totally indistinguishable, whereas SCIENCE FICTION was almost invariably printed in a bright yellow or red, or a plain white, and from a moderate distance SCIENCE FICTION appeared to be the sole name of the magazine.

THE FINAL YEARS: 1951-1959

With the January, 1951 issue, Astounding celebrated its twenty-first birthday. This birthday issue was attractively covered with a beautiful symbolic painting by Hubert Rogers, "Achievement," the first of seven covers Rogers had for the year. Randall Garrett, who was to become one of the leading (which does not mean best) writers of the fifties under his own name and as one-half of Robert Randall (a pseudonym for the collaboration between Garrett and Robert Silverberg), had his first story for Astounding in this issue, "The Waiting Game," the lead-off novelette. Also in this number was the third of Hubbard's articles on dianetics, "Dianometry," which is "that branch of dianetics which measures thought capacity, computational ability and the rationality of the human mind. By its axioms and tests can be established the intelligence, the persistency, the ability, the aberrations and existing or potential insanity of an individual."

There were a goodly number of memorable stories published during 1951, mostly in the novelette length because, unless one counts the last installment of de Camp's "The Hand of Zei" in the January issue, there was only one serial published in the year. Among the more memorable novelettes were "Space Fear," by James H. Schmitz, another in the Agent of Vega series (March); "The Philosophical Corps," by E. B. Cole, the first of the series concerning that specialized arm of the Stellar Guard, the Philosophical Corps whose duties far exceeded those of merely apprehending criminals (also in March); "Temple Trouble," another excellent Paratime Police story by H. Beam Piper (April); Walter M. Miller, Jr.'s unforgettable first story, "Izzard and the Membrane," in which an American cyberneticist, captured by the Russians and brain-washed into building for them a huge and complex computer to guarantee the successful prosecution of the war against the United States, built an even better machine than he initially planned

(May); "Hunting Season," the chilling tale of an authoritarian future America where state criminals are stripped of what rights they have and turned loose like game to be hunted by State Huntsmen, marvelously told by Frank M. Robinson, another fan-turned-pro (November); "Dune Roller," by J. C. May, the story of some beautiful and seemingly harmless amber-like droplets found on the dunes flanking Lake Michigan.

Of more than passing interest were two quite different yarns, H. Beam Piper's controversial "Day of the Moron" (September), and Eric Frank Russell's classic "...And Then There Were None" (June). Piper's story told of the accelerating labor troubles ending in catastrophe plaguing the Long Island Nuclear Reaction Plant—the villain of the piece, in this case, being a conscientious union shop steward. The story was condemned by some as anti-labor and it was, in a sense. It was anti-labor only in so far as it showed the illogic of arbitrary rules, union rules, being allowed to override the judgment of intelligent men when the arbitrary reasoning of one man, backed by the rules, affected the welfare, life or death of many. Russell's story was the well known one of the landing of the mile long battleship, fully geared for war or pacification, on the planet of Gand, of the frustrating reception they received, and of the effect of Gandian passive resistance on the crew.

The only serial published during 1951 was "Iceworld," by Hal Clement, his second novel. This was a three-parter beginning in October which tells of the interstellar narcotics agent who traces the source of a vicious narcotic that is threatening to enslave his system to an almost unapproachably bitterly cold planet. The Planet of Ice, as the sulfur-breathing Sarrians call it, is actually Earth, the deadly narcotic, one whiff of which makes an addict of a Sarrian, is tobacco. Again, Clement, in this novel, demonstrated his devotion to rigorous accuracy and logic in building the scientific backgrounds of his aliens.

In August, Street & Smith finally gave in to spiraling cost increases and raised the price of Astounding to 35¢. With this price increase went a bonus of eight slick-paper pages, increasing the page count to 170. These additional pages were used for science articles and allowed the use of photographic illustrations. In August these added pages were at the back of the book, but with the September issue they were moved to the center. These additional pages were retained (except for May, 1953 when they were left out) until August, 1953 when they were dropped and the page count went back to 162. And the 35¢ price held good until November, 1959 when it went to 50¢—double the price at the beginning of the fifties, and for the same number of pages. Both these price increases had been preceded by trial runs in selected parts of the country to determine the reaction of the newsstand buyer to the higher price.

For several years Astounding had presented book reviews with reasonable regularity, written by a number of reviewers, the most frequent contributor being P. Schuyler Miller. In October, Astounding

instituted a new regular department, "The Reference Library," conducted by P. Schuyler Miller, which has appeared regularly every month since. This has always been a very popular feature with the fans and has generally been the best source in any media or magazine for reviews and commentary of science fiction published in book form. "Sky" Miller reviews a book in such a manner as to stimulate interest in the book and to give the reader the opportunity to form his own opinion as to whether or not he might want to acquire it. He is a book "reviewer," not a "critic" in the manner of Damon Knight or James Blish. An integral feature of every "Reference Library" is the essay of varying lengths on some aspect of science fiction that leads off the department and precedes the actual book reviews. It is not stretching a point to say that Sky Miller has had a profound effect on the reading sophistication of a countless number of science fiction fans over the past twelve years. At the 21st World Science Fiction Convention (1963) in Washington, D.C., P. Schuyler Miller was presented a special Hugo award in recognition of his service to the literature of science fiction.

Hubert Rogers walked away with all the honors for covers this year with seven excellent paintings, January, April, May, June, July, September, and December. The best of these were the May cover for Harry Stine's "Galactic Gadgeteers," the September for "Day of the Moron," and the December painting of a spaceship, entitled "Outward Bound." Walt Miller had the February cover for Raymond F. Jones' "I Tell You Three Times," Bonestell for November illustrating the movie "When Worlds Collide," and Orban presented his last cover in March illustrating Schmitz' "Space Fear." In August a new cover and interior artist was introduced, van Dongen. In addition to the August cover for "City of the Phoenix" by M.C. Pease, van Dongen also did the October cover for Hal Clement's "Iceworld."

In October there was a minor modification made in the title logo that was continued until February, 1953. The script used for Astounding was slightly altered and given greater prominence by the use of a heavier line, and the words SCIENCE FICTION were increased in size. In February, 1953 Astounding was increased slightly in size, while SCIENCE FICTION remained the same. For the March and April issues Astounding was given further emphasis and SCIENCE FICTION was reduced to almost half its former size. And then with the May issue the logo assumed the form it was to retain through January, 1960: the running script for Astounding was abandoned and lower case block letters adopted to give equal emphasis to the full name.

In November, 1951 a further change in the cover makeup was made. Heretofore the cover painting covered the entire page with the title logo, date and price overprinted at the top and the featured story at the bottom. With the November issue the cover painting was bled off the right hand side and the bottom of the page and given a one half inch margin on the left and a one and three-eighths inch margin at the top. The title of the feature story, or the title of the cover, was printed along the left hand margin and the title logo across the top margin,

thus leaving the cover painting entirely free of print. This lasted until January, 1954. This makeup was remarkably similar to the cover format used by Galaxy since its first issue, and H. L. Gold, the editor of Galaxy, was quite bitter in his condemnation of Campbell's "theft" of his format. However, Gold's argument that Campbell had "stolen" Galaxy's format was somewhat weakened by the fact that Comet Stories used almost the identical cover format ten years earlier. From this point the rivalry between Campbell and Gold became increasingly intensified. From February, 1954 on the margins were dropped and the painting again filled the entire cover area with the title logo imprinted over the painting and the story title at the bottom, either printed over the painting or on a black strip across the bottom.

Astounding, throughout its history, has been noted for the quantity and quality of its longer stories, particularly its serials, and secondarily its novelettes and short novels—usually two-part serials. In the fifties Astounding published twenty-eight complete serials in two, three, and four parts (the maximum number of installments of a novel, no matter what its length in words, published in Astounding since "Galactic Patrol," October, 1937 to March, 1938; six installments). Only rarely has there been as few as two serials published in any one year: it is usually on the order of at least three, and sometimes four or even five. In the fifties there were three different years in which four serials were published, 1955, 1958, and 1959; three in which there were three, 1950, 1954, and 1957; three which saw two, 1952, 1953, and 1956 and one year in which only one serial was published, 1951.

Although 1952 had only two serials, they were important ones. The first was "Gunner Cade," by Cyril Judd (a collaboration between Cyril M. Kornbluth and Judith Merrill), the story of a mercenary soldier in a regimented future, intelligent and resourceful, but thoroughly indoctrinated, who doesn't begin to think and act for himself until maneuvered into a position where it's forced on him (March/May). The other was Isaac Asimov's excellent and important novel, "The Currents of Space," the novel mentioned earlier which is part of his future history of the galaxy, preceding by several thousand years the era of the Foundation stories. This was the story of Rik, the spatio-analyst, who has been psycho-probed and left memoryless on the planet Florina, an agricultural planet under the dominion of Sark, a planet of a neighboring system. The action moves from Florina to Sark and back, as Rik, and those interested in him, seek to unravel the mystery surrounding him. This was an exciting novel, but of even greater interest was the background it gave to Asimov's galactic civilization in the period just before Trantor established its Galactic Empire (October/December).

1952 may have been a lean year for serials, but this was offset somewhat by the number of excellent novelettes and short stories that filled the year: "That Share of Glory" (January), by C. M. Kornbluth, about the College and Order of Heralds, a "religious" order that spread utilitarian culture throughout the galaxy; "Telek" (January), by Jack

Vance, a short novel of the abuse of telekinetic power by an elite few for political domination over the masses, and of how telekinetic power was eventually acquired by the many; "Blood's a Rover" (May), Chad Oliver's sensitive tale of Earth's thousand year plan to avoid destruction from an as-yet-to-be encountered race from another galaxy by accelerating the cultural development of other races in the galaxy without their knowledge. This was only one of many—and one of the best—of Oliver's stories built around anthropological themes; "Bridge" (February), by James Blish, the story of the bridge being built on Jupiter which forms an integral part of the first book in the four volume "Okie" series, "Cities in Flight" (Year 2018!, Avon, 1957). Other fine stories were: "Dumb Waiter" (April), by Walter M. Miller, Jr., "The Specter General" (June), by Theodore R. Cogswell, "Last Blast" (November), by Eric Frank Russell, and "Noise Level" (December), by Raymond F. Jones.

Hubert Rogers had only two covers in 1952, January and April, for Kornbluth's "That Share of Glory" and Walter M. Miller, Jr.'s "Dumb Waiter." Van Dongen had the February cover for William Tenn's "Firewater," May for "Blood's a Rover," June for "The Specter General," August for "The Face of the Enemy," by Thomas Wilson, and the October cover for "The Currents of Space." Pawelka, a new, and not-so-good artist debuted in March with the "Gunner Cade" cover and interiors, and repeated again in July with a mediocre symbolic cover for Jim Brown's "The Emissary." And Alejandro compounded the mediocrity in September with his poorest cover. The two best covers of the year appeared on the November and December issues. November saw the last of the great Golden Age artist, Charles Schneckman, with a quietly beautiful painting of a rocket poised on a Lunar landscape with its nose pointed at a dark blue Earth hanging in the sky on whose western hemisphere can be discerned three large areas of light—obviously atomic holocausts. December's cover was a "story" painting by Welker titled "The First Martian," showing an astronaut walking away from his wrecked ship on a featureless and bleak Martian desert. Most of the interior artwork was handled by Orban, Pawelka, and van Dongen, with a few drawings by Cartier and Rogers helping to keep the quality better than poor on an overall basis.

On the balance, 1952 was a pretty good year.

1953 had one inconsequential serial, "Null-ABC," by H. Beam Piper and John J. McGuire (February/March), and one major serial, possibly one of the most important novels of the decade, "Mission of Gravity," by Hal Clement (April/July). "Null-ABC" was the tale of the war between the literates and the illiterates in the twenty-second century, a period following numerous world wars, by which time it had been decided that literacy was one of the major causes of war, therefore, in order to eliminate war it was only necessary to eliminate literacy (except for a few select and tightly-knit literates needed to carry on with the normal course of business). Naturally, in time the illiterates came to resent this state of affairs and revolted. Not a bad story, but not particularly memorable.

"Mission of Gravity" is considered by most to be Clement's greatest novel and no doubt it is, though some prefer his earlier "Needle." But be that as it may, "Mission of Gravity" is undoubtedly one of the finest examples extant of almost pure "science" fiction. The story is laid on the solitary planet of the brighter component of 61 Cygni, a planet with a mass of five thousand times that of Earth. However, because of the matter of which it is composed it has a volume not much greater than that of Uranus. Generally, this would mean it would have a surface gravity some three hundred times that of Earth, but because of its extremely rapid rate of rotation the surface gravity at the equator is only three times that of Earth, while the tremendous flattening gives it considerably more than six hundred gravities at the poles. The problem is set up when a remote control rocket loaded with telemetry devices sent to the south pole to record and transmit data fails to respond to its take-off signal. Some data has been radioed out, but other valuable information remains in the rocket. How to get to the rocket and rescue its valuable cargo? Charles Lackland, a young scientist at the equatorial station, strikes up a friendship with one Captain Barlennan, skipper and owner of a Mesklinite tramp freighter (and possibly a pirate), and gets him to agree to make the incredibly long and dangerous surface trip to the south pole to recover the rocket. The problems confronting Lackland and his tiny (eighteen inches long) Mesklinite companion on their trip to the south pole are awesome, and Clement sets up the problems, and then works out their solutions in a scientifically logical manner. Perhaps the most impressive single factor in this novel—and in most of Clement's novels, for that matter—is the beautiful fashioning of the alien inhabitants of his utterly alien planets. He does this in a style that would make Stanley G. Weinbaum, were he alive today, green with envy.

In January, Poul Anderson had the cover story, "UN-Man," a short novel about the man murdered in several cities around the world, and who died of an accident on Mars, brought on partly by old age, who continued to work on the problem of his murders while carrying on more vigorous activities. Anderson had two more excellent novelettes featured on covers this year, "Enough Rope" (July), another tale of the Galactic League Patrol, "The Double-Dyed Villains" introduced in the story of that name in September, 1949, and "Sam Hall" (August) which told how the folk hero of an old song was "resurrected" to help overthrow an oppressive militaristic American government of a future time.

The "Baldy" series of Lewis Padgett was concluded in September with "Humpty Dumpty." Not only did this story bring to an end the "Baldy" series, it also brought to an end the long association between both C. L. Moore and Henry Kuttner as individual writers and as a team, and Astounding. Catherine Moore had appeared infrequently, but with telling effect, in Astounding as C. L. Moore since her first story, "Bright Illusion" (September, 1934), and more frequently after her marriage in 1940 to Henry Kuttner, as one-half of their brilliant collaborations, Lewis Padgett and Lawrence O'Donnell. Henry Kuttner's first story in Astounding was "The Disinherited," a short story in the August,

1938 issue. As Kuttner he wrote but two other stories for *Astounding*, "Nothing But Gingerbread Left" (January, 1943), and "Ghost" (May, 1943)—everything else he wrote for *Astounding* was under one of the collaborative pseudonyms with his wife. From September, 1953 until his tragic death from a heart attack on February 4, 1958, Kuttner did very little writing in the science fiction field, and what he did was done for one or another of the other magazines and not for the magazine in which he achieved his maturity as a writer, *Astounding Science Fiction*.

James Blish, in "Earthman, Come Home" (November), told of how the Okie city of Manhattan became stranded on a planet in the Greater Magellanic Cluster—apparently forever, because of defective spin-dizzies, rescued the people of the planet on which they settled from another city, a bindlestiff city, that had long ago preceded them, and of how they eventually returned "home." This novelette formed the concluding portion of *Earthman, Come Home* (Putnam's, 1955), the third volume in Blish's tetralogy, "Cities in Flight."

Van Dongen had four covers this year, February, for "Null-ABC" (a striking painting, it must be admitted), April, for "Mission of Gravity," August, for "Sam Hall," and December, for "Hide! Hide! Witch!," by Mark Clifton and Alex Apostolides. Miller had two fine covers, July for Anderson's "Enough Rope," and September for Clifton's and Apostolides' "What Thin Partitions." Pawelka came up with two, January, for "UN-Man," and March, for "Thou Good and Faithful," by John Loxmith (John Brunner), both quite poor. The May cover was a painting by Austin R. Baer, a student of a creative engineering course at M.I.T., and was titled "Interplanetary Industrial Design." The June and November covers were both photographs: the June cover was a photograph of a model rocket ship, illustrating "...And A Star To Steer Her By," by Lee Correy (G. Harry Stine), and the November cover was a view of the UN building from the Street & Smith offices. That leaves October unaccounted for. October marked the debut on the covers of *Astounding* of an outstanding artist, Frank Kelly Freas, with a beautiful painting illustrating Tom Godwin's "The Gulf Between"; Freas was an artist who would leave an indelible mark on the science fiction field.

In the January, 1953 "Analytical Laboratory" Campbell announced that starting with the April issue the author placing first in the standings according to reader votes would receive a bonus of 1¢ a word over the base 3¢ a word, and the author placing second in the ratings, a bonus of 1/2¢. This policy is continued to this day in *Analog*.

1954 gave us two short novels and one long one: "Sucker Bait," by Isaac Asimov (February/March), "Question and Answer," by Poul Anderson (June/July) and "They'd Rather be Right," by Mark Clifton and Frank Riley (August/November). Asimov's "Sucker Bait" was an excellent tale of planetary exploration and character development. The story is laid on the planet Troas in the Lagrange system in the Hercules cluster. Troas has a companion planet called Illium (the two are nicknamed "Junior" and "Sister," "Junior" being Troas), and Lagrange is actually a double sun—Lagrange I and Lagrange II. Junior

has been discovered to be uninhabited but habitable, and a colonizing expedition is sent to open it up. In a little over a year this colony of a thousand men, women, and children is wiped out mysteriously, possibly by disease, and interest in Troas lapses for a hundred years when the events of this story begin.

Poul Anderson's "Question and Answer" was an excellent tale of planetary exploration and character development. The story is laid on the planet Troas in the Lagrange system in the Hercules cluster. Troas has a...but this is the same as the Asimov yarn! And so it was. At this time the Twayne Publishing Company was running a gimmick in publishing "Twayne Triplets," books containing three short novels written by three different authors, each developing a single idea in their own individual ways. The Asimov and Anderson novellas were originally planned as two-thirds of one of these "triplets"—a book that was never published.

"They'd Rather Be Right," Mark Clifton's and Frank Riley's four-part serial, was a sequel to Mark Clifton's and Alex Apostolides' novelette, "Hide! Hide! Witch!" the previous December, and the same authors' short story, "Crazy Joey," in the August, 1953 issue. "They'd Rather Be Right" was the story of Bossy, the cybernetics machine storing all of man's knowledge but none of his prejudices, which can, it turns out, rejuvenate individuals and bring out psi powers. This was Mark Clifton's first novel, probably his best novel and was awarded the Hugo at the 13th World Science Fiction Convention (1955) as the best novel of 1954. (The "Hugo" is the Science Fiction Achievement Award; it is nicknamed in affectionate reference to Hugo Gernsback, the Father of magazine science fiction. The award is a trophy in the form of a V2-shaped rocket resting on its tailfins on a wooden base.)

A few of the better shorter stories of the year were "Exile" (January), and "Fighting Philosopher" (April), both by Everett B. Cole and both part of the "Philosophical Corps" series, "Immigrant" (March), by Clifford D. Simak (this was called "Immigration" on the cover), and "Rite of Passage" (April), by Chad Oliver. James Blish took the cover in May with "At Death's End," another segment in the "Cities in Flight" series, this one telling of the search for and discovery of an anti-*agathic*, an anti-death drug, the discovery of which was to make the long star journeys of the Okie cities endurable for their citizens. In August, Tom Godwin had a story that created considerable discussion in the science fiction world, "The Cold Equations." This was the story of the one man spaceship, a ship with only enough fuel, etc., to carry one man to his destination safely. The ship was an EDS, an Emergency Dispatch Ship, designed for one man and one man only. In the unlikely event that a stowaway was to be found on an EDS the pilot had no alternative but to follow the letter of the law found in Paragraph L, Section 8 of Interstellar Regulations: Any stowaway discovered in an EDS shall be jettisoned immediately following discovery. What does a decent, but conscientious pilot do when he finds he has a stowaway—and the stowaway a girl with everything to live for? In Septem-

ber, Fredric Brown delighted nearly everyone with his lighthearted short novel, "Martians, Go Home," and in October, Poul Anderson had another of his excellent short novels, "The Big Rain," dealing with the politics of exploitation on Venus.

Cover artists for 1954 were van Dongen, Kelly Freas, Alejandro, and Bonestell. Van Dongen had three covers this year, the Christmas design on the January issue (if this seems a strange theme for January, remember, this issue appeared on the newsstands on December 16, 1953), a fine painting of a hooded skull on the May issue for Blish's "At Death's End," and an interesting illustration of Anderson's "The Big Rain" for October. Alejandro had another symbolic cover for July, and Bonestell had a breathtaking painting of "Mars seen from Phobos" on the December cover. All the rest were by Kelly Freas, with his August cover for Mark Clifton's and Frank Riley's "They'd Rather Be Right" probably the best of the lot. Beginning with the February, 1954 issue, "cover symbols" were added to the covers, ostensibly to help in quick identification of Astounding in the glut of magazines on the newsstands. These were small diagrammatic drawings appearing in the upper left corner behind the title logo, and were present on all but thirteen covers for the balance of the decade.

Poul Anderson's four-part novel in 1955, "The Long Way Home," was Anderson at his very best. This was the story of the starship Explorer and its crew of scientists who return to Earth after what they believe to be a one-year-long trip only to find they had been gone for five thousand years and the Earth they returned to an utterly alien one. They are received with hostility but grudgingly accepted because of their passenger picked up on the planet Holat, a thousand light-years from Sol—Saris Hronna. The picture changes radically when Saris Hronna escapes...and Poul Anderson is off on another memorable yarn compounded of high adventure and social commentary, as only he can do it. Incidentally, Ace Books earned Campbell's ire by jumping the gun and coming out with this book, under the title No World Of Their Own before the July issue of Astounding with the climactic installment hit the newsstands.

Eric Frank Russell's "Call Him Dead" (August/October) was a fast paced but disappointing psionic whodunit of an attempted takeover of Earth by a life form from Venus who assume the bodies of Earthlings and can only be detected by Wade Harper, a maker of micromanipulatory instruments and since childhood a secret telepath. There were strong overtones of his earlier, and much better, "Dreadful Sanctuary" in this yarn and seemed almost a rewriting of it with just enough of a variation of the plot to make it publishably different. Also appearing this year was another short novel of the Paratime Police by H. Beam Piper, "Time Crime" (February/March), but the really big novel of the year (and one of the best of the entire fifties) was "Under Pressure," by Frank Herbert (November, 1955/January, 1956).

"Under Pressure" (published in hardcovers as Dragon In the Sea, Doubleday, 1956, and in paperback as 21st Century Sub, Avon, 1956)

was the intensely realistic tale of the atomic powered "subtug" Fenian Ram S1881 and its hazardous mission to pirate oil from the vast underwater deposits of the Eastern Hemisphere, with which America and her allies of the western hemisphere were at war. The hero of this story (other than the Fenian Ram) was Ensign Johnny Ramsey, electronics officer on the Ram who not only had to cope with enemy anti-sub wolf packs, but with an unknown saboteur aboard the Ram. The feeling of reality, the sense of "this is how it must feel in an atomic powered submarine, eight thousand feet below sea level, a submarine that could at any moment become a radioactive coffin," was tremendous. So tremendous, in fact, that the reader assumed Herbert had either served as a submariner or had taken a cruise in an atomic sub at some time in order to get the background "feel" of a submarine. When asked about this, Herbert's answer is one writer's refutation of the maxim that one can't write knowingly about something one doesn't have first-hand knowledge of: Herbert, a newspaperman, had been assigned in some capacity or another to the Naval Department at the Pentagon. While there he read every available piece of literature he could get from whatever archives such things come from on submarines. He got all his technical data from official and semi-official documents and then projected it to the twenty-first century. As far as the "feel" of being in a submarine which he conveyed so admirably is concerned, that was just plain craftsmanship—he never set foot in a submarine until after he'd written the book.

The January, 1955 issue featured a short novel, "The Darfsteller," a story of the conflict between human and android, by Walter M. Miller, Jr., which was to win the Hugo later in the year at the 13th World Science Fiction Convention in Cleveland. Other stories of more than passing interest this year were "Field Expedient" (also in January), by Chad Oliver, "The Players" (April), by Everett B. Cole, "Risk" (May), by Asimov, again Cole with "Final Weapon" (June), "Victory" (August), by Lester del Rey, Jack Vance's fine novelette, "The Gift of Gab" (September), "Cubs of the Wolf" (November), by Raymond F. Jones and "Sand Doom" (December), a "Colonial Survey" story by Murray Leinster, the first of this series which is also sometimes referred to as the "Landing Grid" series.

Kelly Freas had eight of the twelve covers for the year, including the Christmas cover for January. Van Dongen had two, the March cover for Mark Clifton's "Sense From Thought Divide," and November for "Under Pressure." The May cover was a scene from Paramount's production of George Pal's The Conquest of Space, and October featured the first cover for Astounding by Ed Emsh, a memorable symbolic painting titled "Follow Me..." One of the more delightful surprises of the year—for older readers of Astounding—was the brief reappearance of Hubert Rogers in the art department. There were no covers by him, but his illustrations for del Rey's "Victory" (August), Francis Donovan's "The Short Life" (October), and Jones' "Cubs of the Wolf" (November) were very welcome, indeed.

Robert A. Heinlein's return to Astounding after six years (his last story in Astounding had been "Gulf," November/December, 1949) was with a three-part novel, "Double Star," the story of the ham actor Lorenzo Smythe's impersonation of John J. Bonforte, interplanetary politician (February/April). Heinlein, before the war, was identified in the minds of most readers as an "Astounding" author, one whose important stories and novels appeared almost exclusively in that magazine. Since the war this no longer held true. His most famous short story of the post war period, "The Green Hills of Earth," appeared in The Saturday Evening Post in 1947; one of his finest stories—in any length—was the memorable "The Man Who Sold the Moon," which first saw print as the title story for the first book collection of the "Future History" stories (The Man Who Sold the Moon, Shasta, 1950), and his exciting novel of extraterrestrial invasion, "The Puppet Masters," had been one of the highlights of the 1951 Galaxy Science Fiction (September/November). But the main reason Heinlein was not seen with more frequency in Astounding, or the other magazines, was the fact that he was devoting the major share of his writing to his phenomenally successful juveniles for Scribner's: Rocket Ship Galileo, Space Cadet, Red Planet, Farmer In the Sky, etc., and was making more from those than he could writing regularly for the magazines.

The only other serial published in 1956 was Isaac Asimov's excellent sequel to "The Caves of Steel" (Galaxy, October/December, 1953), "The Naked Sun." This novel carried on with the further adventures of Earth detective Elijah Baley and his robot partner R. (Robot) Daneel Olivaw as they attempt to solve a series of murders on a planet where murder is impossible. This was one of the novels mentioned earlier which help to tie the Robot series and the Foundation series into one (October/November).

Except for the two serials there were really few truly memorable stories published this year. However, there were a number of good, readable yarns that were at least up to the Astounding standard for slick, mature science fiction: among these were three "Colonial Survey" stories by Murray Leinster, two of which were cover stories, "Exploration Team" (March), "Critical Difference" (July), and "The Swamp Was Upside Down" (September). Others worthy of a mention are Sturgeon's "Won't You Walk—" (January, illustrated by Rogers), "The Dead Past" (April), by Asimov, "Plus X" (June), by Eric Frank Russell, "Tomb Tapper" (July), by Blish.

Again, Kelly Freas walked away with the honors for covers with five: February and April for Heinlein's "Double Star" (this is the first time to my knowledge that a three-part serial in Astounding has had a cover for the first and third installment—the usual practice is to give the cover to the first two) a beautifully wild thing for "Plus X" in July, September for Christopher Anvil's "Pandora's Planet" and November for "Sour Note on Palayata," by James H. Schmitz. Van Dongen had the January Christmas cover, the May cover for Everett B. Cole's "The Missionaries," July for "Critical Difference," October for "The

Naked Sun" and December for Robert Randall's "False Prophet." The remaining two covers were by Ed Emsh, both excellent: March for "Exploration Team" and a story telling painting, "The Healer," for August.

James Blish led off 1957 with a two-part short novel, "Get Out of My Sky" (January/February), which was based roughly on the same plot idea as Asimov's "Sucker Bait" and Anderson's "Question and Answer," but nowhere near as good as either. This was followed by "The Dawning Light" (March/May) by Robert Randall (Garrett and Silverberg), another of the Bel Rogas yarns. Heinlein made up for his long absence from *Astounding* with another serial this year, "Citizen of the Galaxy" (September/December). Although classified as a juvenile, this novel of the sickly, scab-infested young slave Thorby, purchased at the slave market of Jubbulpore, capital of Jubbul and of the Nine Worlds, by Baslim, the one-eyed, one-legged beggar, and of his search for identity was almost vintage Heinlein and an enjoyable story, juvenile or not.

In the December, 1938 and January, 1939 *Astoundings*, Manly Wade Wellman had a two-part serial which told of the eventual destruction of the alien invaders and conquerers of Earth by a handful of resourceful Earthmen who went up against overwhelmingly superior force with gnat-like persistence and elusiveness, making such nuisances of themselves that they finally won the war and drove the conquerers away. "Nuisance Value" was the name of this short novel. In January, 1957 Eric Frank Russell had a short novel on substantially the same theme and with the identical title, "Nuisance Value." Russell, however, told of what happened when seven capable and imaginative Earthmen are captured by the enemy in an interstellar war and placed in a prison camp with several thousand alien, but allied to Earth, prisoners. Needless to say, of the two stories Russell's was by far the superior. H. Beam Piper had an interesting yarn in the February issue, "Omni-lingual," which was concerned with the effort to learn the key to reading Martian, a language that was dead forty thousand years before man on Earth learned to write. Poul Anderson had a lovely novelette in April, "Call Me Joe," a very human story of man's attempt to introduce intelligent life on the surface of Jupiter, and of the subject and focus of this attempt, the pseudojovian *Pseudocentaurus Sapien*, Joe. Anderson also had two other fine novelettes this year, "Among Thieves" (June), and "Brake" (August), but neither the equal of "Call Me Joe." In the May short novel, "What's Eating You?," Randall Garrett told an interesting story around the idea of the need for an interstellar quarantine station on the moon to prevent the introduction of unknown diseases to Earth by interstellar explorers, and at the same time examine the very real questions of "what are ethics?" and "what is truth?"

Murray Leinster had three Med Service stories published this year, "Ribbon in the Sky," the cover story for June, "Med Service," a short novel in August and "The Grandfather's War," a short novel in October. The Med Service stories are related to the Colonial Survey stories and are part of the landing grid interstellar culture that Leinster had

meticulously built up. These stories related the several adventures on different worlds of Calhoun of the Interstellar Medical Service, accompanied at all times by the small, furry, saucer-eyed Tormal Murgatroyd, who was not only a pet and companion on the long trips in the Med Ship Aesclepius Twenty, but a walking laboratory. On the surface there is an unfortunate parallel between Leinster's Med Service tales and those of L. Ron Hubbard's Ole Doc Methuselah: Leinster's star roaming Interstellar Medical Service, Hubbard's Soldiers of Light; Leinster's Med Service man, Calhoun, Hubbard's Soldier of Light, Ole Doc Methuselah; Calhoun's extraterrestrial companion, the Tormal Murgatroyd, Ole Doc's extraterrestrial, Hippocrates, etc. These parallels are too obvious to dismiss—certainly, Leinster's Med Service stories were inspired by Hubbard's Ole Doc Methuselah tales, but the parallel ends with these surface trappings. Hubbard's yarns were essentially light-hearted romps, even when dealing with the grimmest themes, and the resolutions of the problems confronting Ole Doc were usually gimmicky. Leinster's stories, on the other hand, more often than not dealt with serious and complex problems or issues and their solutions were arrived at in a logical and non-gimmicky fashion.

A few of the other fine stories appearing this year were Kate Wilhelm's short story, "The Mile Long Spaceship" (April), "Needler," by Randall Garrett (June), another of his short novels, a short novel by Isaac Asimov, "Profession" (July), "Look Out! Duck!," a farce by David Gordon (September), Christopher Anvil's "The Gentle Earth" (November), and "Precedent," by Robert Silverberg (December).

Kelly Freas contributed six of the twelve covers for the year, February for "Omnilingual," a real beauty for April illustrating "Call Me Joe," July for "Profession," August for "Brake," November for "The Gentle Earth" and December for "Precedent." Van Dongen was present with the January cover for "Get Out of My Sky," March for "The Dawning Light," June for "Ribbon in the Sky," and September for "Citizen of the Galaxy." Emsh had two covers, the May cover for "What's Eating You?" and a symbolic or "story" cover for October, "Thinking Machine." (The cover for May, and the story it illustrates represents a fine fusion of the talents of an artist and a writer. It seems that Emsh went to Campbell's office one day with an idea for a symbolic cover, and a fine idea it was, too. Present in Campbell's office at the time was Randall Garrett and the three of them started kicking the idea around with the end result being an excellent cover painting and an excellent story, each the partial inspiration of the other.)

Poul Anderson completely dominated Astounding in the serial department in 1958 with three: "The Man Who Counts" (February/April), "We Have Fed Our Seas" (August/September), and "A Bicycle Built for Brew" (November/December). "The Man Who Counts" concerned the adventures of Nicholas van Rijn, head of the Solar Spice & Liquor Company, who crash-lands in a great empty ocean on the giant planet Diomedes, and gets involved in a local war of the natives of the area. Anderson is almost without a peer when it comes to writing swashbuckling ad-

venture tales, and in this he buckles a swash with the best of them. But accenting the action, color and characters (particularly van Rijn—"the man who counts") in this novel is the obvious painstaking care he has taken in constructing his world of Diomedes on a soundly scientific foundation.

"We Have Fed Our Seas" (published in book form as The Enemy Stars, Lippincott, 1958) was the memorable and haunting story of the starship Southern Cross, its centuries-long journey and the men who manned it—particularly the last four on whom the destiny of the ship hinged. This is one of Poul Anderson's very finest novels and will in time, I'm sure, come to be regarded as a classic. His remaining novel of the year, "A Bicycle Built For Brew," was definitely not, nor intended to be, a serious novel. It was, instead, a very delightful space romp built around the gimmick of using beer as a rocket fuel.

The fourth novel for 1958 was another of Hal Clement's meticulously detailed pictures of a planet brutally alien to humans, its ecology, and the reactions of a group of humans suddenly thrust into this alien environment. "Close To Critical" was its name and it left many readers completely cold (May/July).

There seems, in retrospect, to have been a dearth of stories of classic calibre published in 1958 other than "We Have Fed Our Seas" and, possibly, "The Man Who Counts." However, there were a few shorter works of more than transient interest, among them Pauline Ashwell's wonderfully wacky tale of Lizzie Lee, late of the planet Excensus 23, currently in her first year of Cultural Engineering at Russett Interplanetary College of Humanities on Earth, which is told in the first person by L. Lee in a manner that violates just about every rule of English grammar, punctuation and composition in the book, and then some, in "Unwillingly to School" (January). L. Sprague de Camp returned to Astounding with a typically logical de Camp yarn concerning the results obtained from an attempt by a twentieth century time-traveling scientist to introduce advanced scientific concepts into classical Greek times, in "Aristotle and the Gun" (February), and Jack Vance, in "The Miracle Workers" (July), painted a brilliant word picture of a planet where science functions in the guise of magic. (In various of the illustrations to Vance's story, Kelly Freas used as models John W. Campbell, Robert Silverberg, Randall Garrett, and Ed Emsh—I'll leave it to the readers to make their own identifications.) Not the least of the stories published this year was Clifford D. Simak's "The Big Front Yard" (October), a variation on Simak's recurring theme that most extraterrestrial aliens man will come in contact with will be basically friendly.

Four artists were used on the covers in 1958, Freas, van Dongen, Emsh, and Martinez. Freas had the January Christmas cover, the March cover for Dean McLaughlin's "The Man on the Bottom," April for Russell's "Basic Right," a beautiful thing for "The Miracle Workers" in July, and one for "The Big Front Yard" for October. Van Dongen had a colorless painting for "The Man Who Counts" in February, a

quite good one for "Close to Critical" in May, and in August for "We Have Fed Our Seas" and November for "A Bicycle Built for Brew." The September cover was an uninspiring "story" painting by Martinez, "Common Ground," and Emsch had two "story" covers, both excellent, "Pastoral" for June and "The Fundamentals Don't Change" for December. It might be worth noting in passing that with the February issue, Astounding instituted the practice, continued well into the Analog years, of beginning each story with a stylized initial, a T-square for "T", a suture needle for "C", etc.

It is poetically fitting that the best serial of 1959, the last year of Astounding, was by the man who had the best story in the very first issue of Astounding thirty years earlier, Murray Leinster. "The Pirates of Ersatz" (February/April) was one of the landing grid stories and a thoroughly enjoyable yarn. This was the story of Bron Hoddan, a young man of ideals who rebels against the space piracy practiced by his family on the planet Zan and makes his way to Walden, the most civilized planet in that part of the galaxy, to make his fortune as an electronic engineer, grow rich, and marry a pretty girl. Needless to say, many adventures befall our hero before he realizes his goals.

Gordon R. Dickson had a better than average novel in "Dorsai!" (May/July), an examination of an interplanetary culture in which a small planet, Dorsai, whose chief export is mercenary soldiers, plays a leading role. Mark Phillips (Laurence M. Janifer and Randall Garrett) contributed a tale in which psionics run wild, "That Sweet Little Old Lady" (September/October), the main character of which is the son of one John J. Malone, the immortal hard drinking Irish attorney created by Craig Rice for her detective novels. And finally, Everett B. Cole closed out the year, the decade, and thirty years of Astounding with an entertaining but inconsequential two-part novel, "The Best Made Plans" (November/December), about a struggle for political power on a colonial planet.

Let's face it; 1959 just was not a year of great, or even particularly memorable stories, although it did have its share of readable stories competently written. In January there were Poul Anderson's "Robin Hood's Barn" and one of the Rim stories of A. Bertram Chandler, "To Run the Rim," as well as "A Study in Still Life" by Eric Frank Russell. In March, David Gordon (Randall Garrett) told the story of Pizarro's conquest of Peru in such a manner that, until the last line, it read like a tale of interplanetary conquest and derring-do straight out of the pages of the late Planet Stories. This was "Despoilers of the Golden Empire"; it was illustrated magnificently by Kelly Freas whose full-page frontispiece to the story is the finest single black and white drawing he has done for Astounding. Winston P. Sanders made his debut in Astounding with a cover story, "Wherever You Are," which featured a horrible bug-eyed monster who was deathly afraid of the girl. (Winston P. Sanders is the pseudonym of a leading science fiction author who, for purely personal reasons, has asked that his real name not be made public. Anyone familiar with "Winnie-the-Pooh" should be able to spot

the derivation of the name "Winston P. Sanders," however.) A few more stories worthy of at least a mention are: "Transfusion" by Chad Oliver (June), Randall Garrett's "But, I Don't Think" (July) and "The Destroyers" (December), "The Aliens" by Murray Leinster and another of Chandler's Rim stories, "The Outsiders" (August), "Dodkin's Job" by Jack Vance (October), and "A Filbert Is a Nut" by Rick Raphael (November).

Kelly Freas had six covers, January, "Merry Christmas," a lovely painting of a pirate for February's "The Pirates of Ersatz," a real wild BEM for "Wherever You Are" in April, July for "But, I Don't Think," September for "That Sweet Little Old Lady," and October for Christopher Anvil's "The Lawbreakers." Van Dongen had the May, June, August, November and December covers, and Emsh had one "story" cover, "Adventure is Somewhere Else," for March.

This has been a very brief resume of the twenty-eight novels and a few of the better novelettes and short stories appearing in Astounding during the magazine's final decade. Of the twenty-eight novels published during the fifties, only a handful stand out as worthy to take their places along side the classics of the first twenty years: "To the Stars," "The Wizard of Linn," "Gunner Cade," "The Currents of Space," "The Long Way Home," "Double Star," "Under Pressure," "The Naked Sun," "Citizen of the Galaxy," "We Have Fed Our Seas," "Mission of Gravity." Of the shorter fiction one would have to draw from the full ten years of the fifties to compile a list of classically memorable stories the equal of a comparable list from the Golden Age of Astounding, 1939 to 1943.

The stories published in Astounding during the fifties were, in the main, better written and more mature than most of the earlier stories—even those of the Golden Age. But in spite of this most of them failed to grab at the imagination and emotions as did many of the less polished and sophisticated stories of the thirties and forties. The late Cleve Cartmill, in an article written for an amateur magazine published by the author (Bixel No. 1, September, 1962), characterized the science fiction of the late forties and the fifties as "inanimately introspective," and explained his meaning in this way:

(After the war the serious science fiction writer) turned (his) thoughts inward. What is man, why is man, where is he going? That sort of thing.

This is all very fine, and has been the subject in one respect or others of some rewarding "mainstream" fiction. But when you try to fit it into the traditional format of science fiction it sometimes becomes dull reading, talky, pedestrian, probing without action.

The late Hank Kuttner once told me, "First you get your hero up a tree. Then you throw rocks at him." This was science fiction: action and reader identification. And if the story

started to sag, you had somebody walk through a door (or a wall) with a blaster in his hand.

It wasn't sophisticated, maybe; it wasn't slick. But it was entertaining, and if the writer wove in a philosophical theme it seemed to have stature.

The primary purpose of fiction is to entertain. So says Somerset Maugham, who ought to know.

This is what science fiction seems to have stopped doing some time ago. The hero starts on a perfectly legitimate project of mayhem, arson, and world-saving, and he soon becomes heavy laden with problems of a social, religious, or sexual nature and all he does is talk about them.

When he gets up a tree, instead of dodging brickbats he dodges issues.

Whether or not one entirely agrees with Mr. Cartmill, he does have a point.

In the fifties, Astounding came up against some stiff competition from a number of magazines, some old, some new. Of the older magazines, Thrilling Wonder Stories and Startling Stories were the two which, in the early fifties, published a steady stream of excellent novels and novelettes by Murray Leinster, Jack Vance, Leigh Brackett, Edmond Hamilton, L. Sprague de Camp, Philip Jose Farmer, Arthur C. Clarke, Poul Anderson and others.

It was, however, from two new magazines that Astounding received its greatest challenge to its preeminence in the field: The Magazine of Fantasy and Science Fiction (first issue, Fall, 1949), and Galaxy Science Fiction (first issue, October, 1950). With the advent of these two magazines, Astounding was no longer the single quality market paying top rates. Fantasy and Science Fiction concentrated on short stories, but as time went on longer stories became more frequent, and in time a few serials appeared, many of them—although not all—by authors heretofore largely identified with Astounding: Poul Anderson's two-parter, the first serial to be published in the magazine, "Three Hearts and Three Lions" (September/October, 1953), "A Canticle for Leibowitz," by Walter M. Miller, Jr. (April, 1955), "The (Widget), the (Wadget), and Boff," by Theodore Sturgeon (November/December, 1955), "Rite of Passage," by C. L. Moore and Henry Kuttner (May, 1956), and four serials from Robert Heinlein, "Star LummoX" (May/July, 1954), "The Door Into Summer" (October/December, 1956), "Have Spacesuit—Will Travel" (August/October, 1958), and the Hugo Award winner, "Starship Soldier" (October/November, 1959).

Galaxy (edited by H. L. Gold until 1961, since then by Frederik Pohl) came on the scene with a great fanfare and the boast that it would soon be the number one science fiction magazine—and for a time it looked as if that would be the case. From the beginning Galaxy was extremely strong in the serial and novella department, starting its career with a

major three-part novel by Clifford D. Simak, "Time Quarry" (October/December, 1950: published as Time and Time Again, by Simon & Schuster, 1950, and as First He Died, by Dell, 1951), which was followed immediately by Isaac Asimov's three-parter, "Tyrann" (The Stars Like Dust) (January/March, 1951). In the following months and years, Galaxy published such important novels and novellas as: "The Puppet Masters," by Robert Heinlein (September/November, 1951), "The Demolished Man," by Alfred Bester (January/March, 1952), "Gravy Planet" (The Space Merchants), by C. M. Kornbluth and Frederik Pohl (June/August, 1952), "The Fireman," by Ray Bradbury (February, 1951), "Baby is Three," by Theodore Sturgeon (October, 1952), and many others.

The fifties saw the Big Boom in science fiction during which an incredible number of science fiction magazines came on the scene, and it also saw, by the end of the decade, the Big Bust which reduced the field to a handful of hardy survivors. (Among the older victims of the big bust were such important magazines as Thrilling Wonder Stories, Startling Stories, Famous Fantastic Mysteries, Planet Stories, Super Science Stories and Weird Tales.) Some of these magazines lasted for several years, others for just a couple of months or so. In quality they ranged all the way from Beyond Fantasy Fiction (an Unknown type companion to Galaxy), Venture (a companion to Fantasy and Science Fiction), Fantasy Magazine, Satellite Science Fiction, Future, Science Fiction Stories, If, down to such crud as Tops, Spaceways, Vortex, Cosmos, etc.

Regardless of the criticisms leveled at the Astounding of the fifties in the preceding pages, and in the face of the not inconsiderable competition from Fantasy and Science Fiction, Galaxy, Thrilling Wonder, Startling, Satellite, Infinity, If, and others at various times during the ten years, Astounding still averaged out as the science fiction magazine.

Occasionally, in discussing the work of a particular author mention has been made to Guest of Honor appearances at science fiction conventions and the awarding of Hugo trophies. Now would be a good time to bring this into focus as it relates to Astounding and the authors primarily identified with it. The big science fiction convention is, of course, the annual World Science Fiction Convention at which, since 1953, the Hugo awards have been presented to the author of the outstanding novel, short story, the editor of the top magazine, the outstanding artist—all voted on by the members of the Convention.

First, as to Guest of Honor appearances: John W. Campbell, Jr. has been Guest of Honor at three world conventions; the 5th in Philadelphia (1947), the 12th in San Francisco (1954) and the 15th in London (1957). Fritz Leiber was honored at the 9th in New Orleans (1951), Isaac Asimov at the 13th in Cleveland (1955), Poul Anderson at the 17th in Detroit (1959). Robert Heinlein has had two Guest of Honor invitations, the only person other than Campbell to be honored more than once. The first time, as mentioned earlier, was at the 3rd World Science Fiction Convention in Denver (1941), the second at the 19th in Seattle (1961).

Of lesser importance than the World Science Fiction Convention are the various annual Regional Conferences such as the Midwestern Regional Science Fiction Conference (the MidWesCon) held in Cincinnati each June and the West Coast Science Fantasy Conference (the Westercon) held each year in a different city on the West Coast. Since 1950, the Westercon has traditionally selected a Guest of Honor. Those chosen for this honor are authors residing in the Western states and several of them have, at one time or another, been strongly linked to Astounding. At the 3rd Westercon in Los Angeles in 1950, Dr. R. S. Richardson was presented as the "Featured Speaker," but from the following year on, the Westerscons followed the practice of the World Conventions and chose a Guest of Honor: Jack Williamson at the 7th in San Francisco (1954; this Westercon was combined with the 12th World Convention at which Campbell was Guest of Honor); Mark Clifton at the 10th in Hollywood (1957), Fritz Leiber at the 14th in Oakland (1961), and Jack Vance at the 15th in Los Angeles (1962).

Considering the outstanding competition for Hugos in the nine years they have been presented between 1953 and 1963 (no awards were given at San Francisco in 1954), Astounding has not done too badly. Taking the awards as presented through the years of Astounding's existence:

1953 Philadelphia

Astounding tied with Galaxy for best magazine, but lost out in all other categories.

1955 Cleveland

"They'd Rather Be Right" by Mark Clifton and Frank Riley (August/November, 1954) won the award for best novel, "The Darfsteller" by Walter M. Miller (January, 1955) won for the best novelette, and "Allamagoosa" by Eric Frank Russell (May, 1955) for short story—all from Astounding. Frank Kelly Freas won the Hugo for his superior covers and interior illustrations from Astounding, and Astounding was awarded the Hugo as best magazine—a clean sweep!

1956 New York

Heinlein's "Double Star" (February/April, 1956) won the award for best novel, "Exploration Team" by Murray Leinster

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(March, 1956) for best novelette, Frank Kelly Freas, again for his Astounding covers and interiors, and Astounding again awarded the best magazine trophy.

1957 London

Astounding won as the best American Professional Magazine.

1958 Los Angeles

Astounding lost out all along the line, except for Freas, who was awarded the Hugo for his artwork. However, by this time Freas was doing work for other magazines and couldn't rightly be considered exclusively an Astounding artist.

1959 Detroit

Astounding didn't do too well this year, either. The only trophies garnered by Astounding were for best novelette, "The Big Front Yard" by Clifford D. Simak (October, 1958), and another award to Kelly Freas for his artwork.

1960 Pittsburgh

For the second time, Astounding drew a complete blank! It didn't even have, as it did in 1958, an award to Kelly Freas to save it from total disaster.

Beyond this point, though Astounding no longer existed, Analog continued to collect a few trophies, but that is another magazine entirely, and another story. We need not concern ourselves with them in this tabulation.

A lot has been left unsaid about Astounding during the fifties, but it was never an intention to deal too extensively with the last ten years of the magazine's life. For a representative sampling of the shorter fiction published in Astounding during this period (not the best, however) the anthology Prologue to Analog (Doubleday, 1962) is recommended. Edited, of course, by John W. Campbell, it contains stories from 1953 to 1960, and an interesting introduction by Campbell explaining the rationale behind the metamorphosis from Astounding Science Fiction to Analog Science Fact - Science Fiction.

But for a detailed look at Astounding from 1950 to 1959 and Analog from 1960 to ___ we must wait for another historian to step forward, one with a stronger affection and a higher regard for the magazine in

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those years than the present chronicler.

Astounding was born in the lean years of the Great Depression and died in the fat years of the fifties. But, of course, it didn't really die; it simply changed its costume and assumed a new name, one more in keeping with the times.

From a science fiction fan's viewpoint it was my great good fortune to discover the magazine in one of its greatest and most colorful years—1934, and to remain an intensely devoted fan of the magazine for the next ten or twelve years. If the intensity of my devotion to the magazine tapered off after that it was only in a matter of degrees. It's too much to expect the same degree of ardency fifteen, or twenty, or thirty years after a love affair begins. Love remains and respect is there, but it's mellowed and tempered by time.

There never was nor will there ever be another magazine quite like Astounding from 1930 to 1943—it was unique. Astounding, during its entire lifetime, was a constantly mutating magazine. During most of its lifetime it was an exciting magazine. If, after 1943, or—stretching it a bit—1949, much of the excitement of earlier years lessened for me and others of my generation of readers and fans, it is not necessarily the fault of the magazine or the editor, but our fault—for growing old.

And old science fiction fans love to reminisce about the great years of the twenties and thirties, the Golden Age of the forties.

This book has been one slightly aging fan's affectionate reminiscence of a great magazine. By the time this book is published I will have been reading Astounding (and Analog) for a full thirty years: I hope to be reading Analog (or whatever the title might be then) thirty years from now. But one thing you can be sure of, and that is, if I am alive and reading Analog (or whatever) in 1994 I will still occasionally think back to the Astounding of the fabulous thirties and the incomparable, legendary Golden Age of the forties and renew old friendships with Hawk Carse, Dick Seaton, Martin Crane, Aarn Munro, "Old Faithful," Kimball Kinnison, Jommy Cross, "The Lieutenant," Robert Hedrock, Lazarus Long, and...but the list is endless.

The list is endless and the characters are imperishable, unforgettable. May none of them, and the stories that gave them being, ever be totally forgotten. If this book helps to insure this in even a small way,

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I will be content.

And if this book gives the reader some small portion of the pleasure it gave me in the writing, stimulates an interest in and an appreciation of the past of this great and wonderful magazine, I will be doubly content and feel that I have been bountifully repaid for these pleasurable labors.

A labor of love is really not labor at all.

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... GONE!

Analog
Science
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