

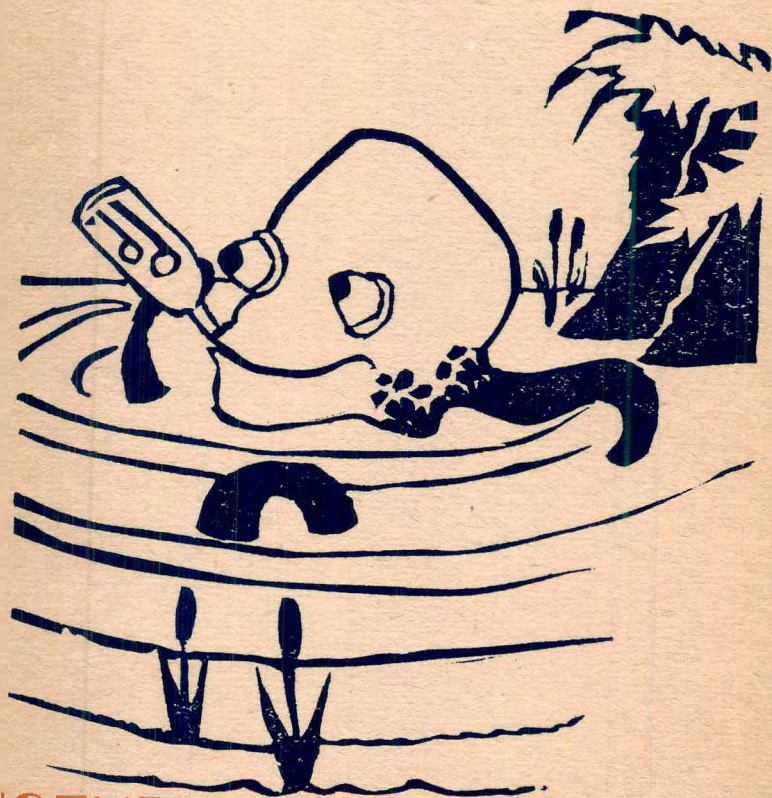
10 CENTS

EUSIFANSO

VOLUME TWO

NUMBER THREE

JANUARY 1961



EUGENE
SCIENCE-FANTASY
ARTISANS

Copyright 1951 by
Rosco E. Wright

This is
EUSIFANSO
for January-1951

THE EDITORIAL IT	4
ATLANTEAN PEACE	6
PAINTING OF THE MONTH	13
FEEDBACK	15
NUCLEAR SPACE-DRIVE	17
PRO-OWLS	20
NORWESCON MASQUE	21
WORDS WORDS WORDS	33
CONSEQUENCES	36
INVOCATION TO LILLITH	38
SATELLITE COLD LAB	39
DOCUMENTARY EVIDENCE	42
A LAYMAN ON DIANETICS	44

ART & LAYOUT BY REW
SCIENTIFIC DIAGRAMS BY NFH

**EUSIFANSO: SPONSORED BY THE EU-
GENE SCIENCE-FANTASY ARTISANS AND
IS PRINTED BY THE LITTLE PRESS AT 146
E. 12TH EUGENE, OREGON. TYPE FOR THIS
ISSUE HANDSET BY BRYCE DECKER, N.
HARTMAN, R. WRIGHT, & E. ZIMMERMAN,**

**EDITOR: ROSCO WRIGHT
SCIENCE EDITOR: NORMAN HARTMAN
ASSOCIATE: ED ZIMMERMAN
CONSULTANT: CLARENCE RUTHERFORD**

**EIGHTH ISSUE
VOL. 2 No. 3**



the
editorial **IT**◆◆◆

Here is Rosco again. This time Sandy went to San Francisco to stay and, as senior officer of the ESFA, the responsibility of getting out EUSIFANSO again fell on my not unwilling shoulders. This is going to be fun!

Now that we have had our fun... there is at this point a matter to drop in your laps, i.e. EUSI will no longer boast of, or try to maintain, a regular schedule. We are however going to experiment with new techniques in layout, color combinations and typography. We will also make an honest effort to give you literate, artistic, and perhaps intelligent material. You will frequently differ with our tastes and we should be galled to hear about such things. We are open for suggestions on some layout technique you would like to see us try ---excepting, of course, laying out in a pine box, or one other type of layout, which we do anyway.

In short EUSI is an experimental magazine. However, you will find some compensation in the fact that you, if you are on our good-list, will receive such things as Norm Hartman's AMOEBA, and some planned 'arty' booklets from Rew-- all GRATIS. However, gentle reader and everyone else, we accept no responsibility for being called back into the armed forces.

Oh, yes, how do you stay on EUSI's good list? Well you can (1) be a taxation sans representation cuss, and subscribe; (2) write us after each issue; (3) send in material; (4) drop dead and tell us about it.

... YE ED



ATLANTEAN PEACE

BY MANLY BANISTER



When the world was very young, the mightiest race that lived on the face of the Earth peopled a continent which we now call Atlantis, the land that has been.

At this time, men were at a stage of scientific development where they knew the secrets of building great edifices, of hewing giant memorials in stone, and of creating deadly and far-reaching weapons with which to engage in the art of war.

The Atlanteans were a deadly and godless race. They had many gods, to be sure, but no God, for their gods were the gods of bitterness and hatred, gods of might and personal glory, and the Atlanteans sanctified themselves in the presence of their gods rather than revered them.

From the outer edge of the Galaxy came the Voyager, bearing the orders of the Galactic Council, the judgment and condemnation of the Almighty League.

Yet, as he stepped foot upon the bare, brown skin of Earth, there was a determination in the spirit of the Voyager, such that he sought ways that he might circumvent the orders of the League and still be blameless in the matter himself.



He found himself in a land of heavy-laden apple trees, with the crimson streaked fruit ripe for the gatherer's basket. Insects droned among the bitter-sweet stalks of dusty wheat, yellowing in the glow of a benevolent sun. The grass was green at his feet, and the road was a drab, gray rivulet of dust that coursed between the fields and wound over the swelling green breast of the hills.

"Nothing so beautiful ought to be destroyed," thought the Voyager. "There is good in all men, and goodness wherever men are found. If I can find one bit of goodness upon which to build a new civilization in this land of Atlantis, I shall not destroy it."

The coarsely woven cloak the Voyager wore was a burden in his journeying, but he wore it closely muffled about him to conceal the differences that would mark him as an alien to the Atlanteans.

And so the Voyager came to a town, a spreading place of small huts and a village square, and he paused under a tree. To those who came to ask his identity, he taught the wisdom of the Almighty League, and bade that they spread it about through the land.

Many came to him there in the village square during the days that followed, and he taught them and counseled them; but they derided him and laughed in his face, and bruited the word about that here was a madman come among them to prate of peace and neighborly kindness.

The laughed at him in other places as well, and the words he taught were swept outward as in a torrent, twisted and maligned by the evil thinking of the degenerate people of Atlantis. And word came thus to Atlantes, the capital of this Atlantean land. There, the King of Atlantis, having heard of the Voyager and his teaching of peace, sent trusted troops to investigate and to make judgment of the matter, whatever seemed best to the centurion who commanded them.

And so the troops marched with a great clattering of armor into the village, poured into the public square where the Voyager sat with a derisive group around him.

“Ho! You stranger!” cried the centurion, coming up. He stood erect and proud as befitted a warlike scion of a warlike race, and did not deign to remove his helmet in respect of the elder years of the man before him.

The Voyager looked up and smiled mildly.

“I am no stranger,” said he. “I am your brother!”

“Madman! Fool!” cried the centurion. “I have no brother! Whence come you?”

The Voyager looked pensive a moment and drew his cloak more closely about him.

“I come from no place, for I am everywhere. I am Peace and Kindness.”

The centurion fell back a pace and called up an armored and spear-armed warrior to stand him company at his side.

“What nonsense is this?” asked the centurion at last. “You must have a land from whence you have come, for surely you are a stranger here!”

“Yes,” replied the Voyager. “It is a beautiful land, too. Something like your Atlantis.”

“Then why do you speak of Peace. . . and Kindness? We of Atlantis are a warrior race, drilled in the elements of science! Is there science in your land?”

The Voyager thought a moment. “Yes. I believe there is,” said he.

“Do your people construct ballistae that can hurl a stone of several hundredweight a quarter of a mile and crush a house? Do you have the Atlantean fire that will scald the armor off the back of a warrior at its slightest touch? Do you have arrows tipped with bronze that will fly for hundreds of yards and pierce a warrior as he stands?”

“No. We have none of those.”

“Do you build great edifices in honor of your rulers, columned temples for your gods, great statues in memorial of your glorious war dead?”

“No, we do none of those things, either.”

“Then tell me, old man--what do you do?”

“We live,” spoke the Voyager softly. “We live and are kind and enjoy the fruits of Nature. And when we die, we are quietly forgotten, as is most seemly.”

“Science!” sneered the centurion. “Do you call that science--no machines, no weapons? Do you live like rodents, in cowardly avoidance of the glories of war? Where is this land you speak of, and why are you here?”

“My land is far away,” said the Voyager, rising to his feet and assuming a majestic attitude. “It is so far away that the distance is unthinkable in terms of your miles and leagues. As for what I am doing here, I come to bring you Peace in one way or another; for I have been sent to judge the people of Atlantis and to decide whether you should be punished for your evil way, or be permitted to live in hope you will grow out of them.”

The centurion smiled, an expression of cold, cruel humor.

“It is I who have been sent to judge you, old man,” he said. “And you I have judged and found fit only to be executed. Peace--pfah!”

“What have I done,” asked the Voyager, “against your land or your King? Is there no jury to hear me and adjudge my guilt and condemnation?”

“I am the jury and the judge, too,” said the centurion. “I judge that you are an alien, and different. That is judgment enough to merit death. We of Atlantis have our own kind of justice, though it be swifter than merciful!”

“So be it!” murmured the Voyager. “I had about reached a similar judgment myself.”

The centurion made a sharp, peremptory motion with his hand. The warrior at his side instantly levelled his spear and plunged the bronze point deep into the Voyager’s side. The Voyager fell over, clutching at the haft of the spear with one hand, at the same time that a smile hovered upon his gray lips to spite the mortal agony of his wound.

Under his cloak, the fingers of the dying man’s right hand caressed a certain part of a thin, metallic belt he wore around his body. . . and so the Voyager died as he brought Peace to Atlantis.

. . . For, in that instant, the land of Atlantis began to shake. Nor did the soil and the rock-ribbed caverns below the soil cease their shaking, until the whole of that vast and iniquitous land was finally at peace. . . beneath the rolling gray waters of the sea.

—Manly Banister

There is no adequate defense,
except stupidity,
against the impact of a new idea.

P. W. BRIDGMAN

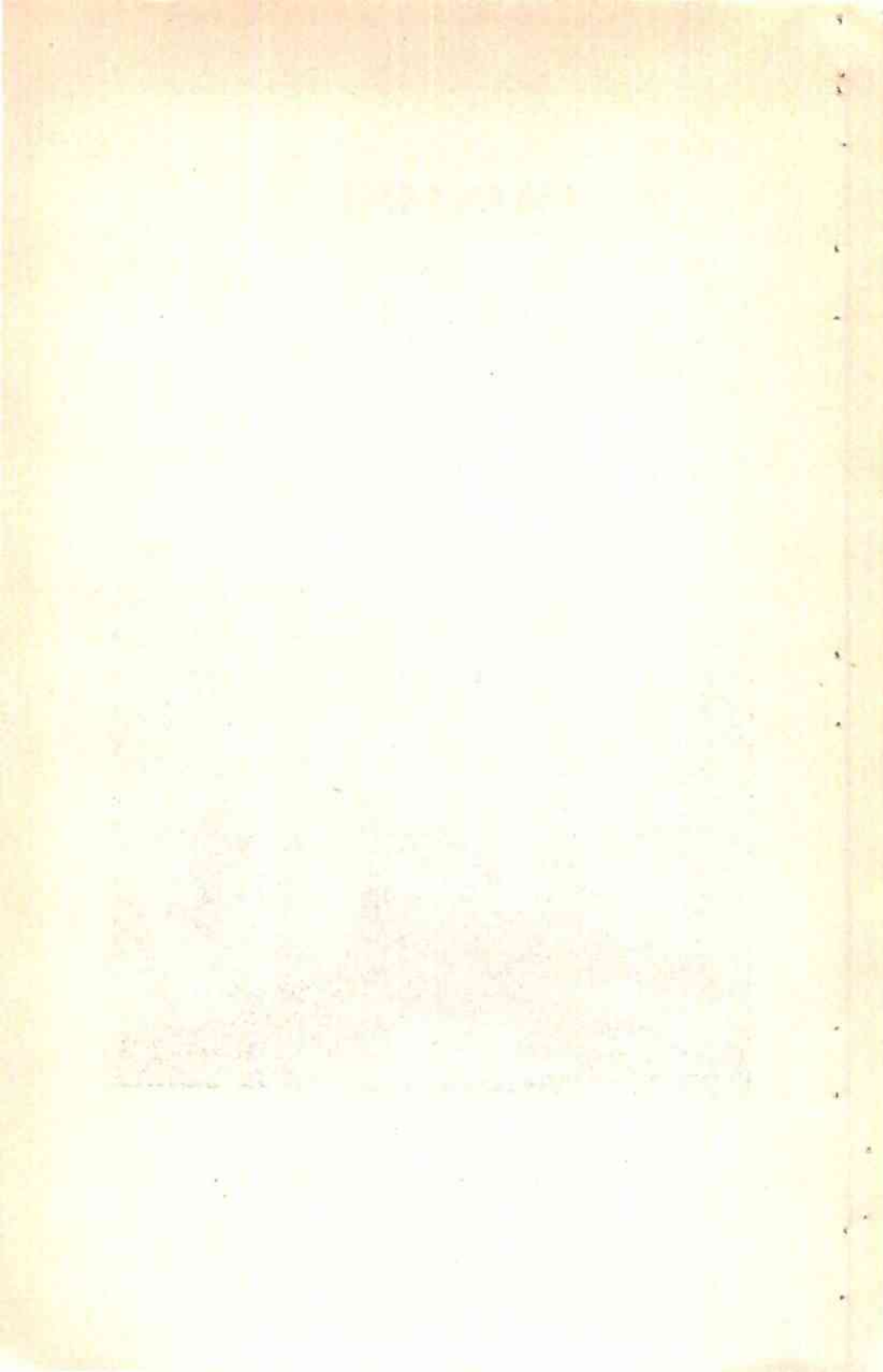
PAINTING

of the

MONTH

from original oil by R.E.W.





FEEDBACK

by

Hanback

An Open Letter to EUSIFANSO

Sirs:

I received the Volume 1, No. 6 issue of Eusifanso, in which you printed Chick Derry's Washington News-Letter as concerns me and the American Rocketry Association. I appreciate your allowing me to send you a letter for publication in one of your future issues as regards same.

The Association is not a phony organization perpetrated by any one man. It is for the most part just what its name implies, a rocket research society. However, the Stf Fan Division was set up as a means of trying to encourage better relationships between stf fans and professional research people. Obviously, this Division failed, and because of such obvious failure, is being disbanded at the end of 1950.

Mr. Derry could not have heard about the A. R. A. up to 1949, since the organization was not known under this name until March, 1949. Certain government agencies and scientific societies knew it under the name of Rocket Research, Inc. previous to that date.

As for Mr. Derry's statment on having not run across any ARA member other than myself, all I can say is that they either were too busy or didn't want to.

As for the "pest" angle, if I have made myself a pest at any of the meetings, it was not intentional. I tried to avoid such.

Since our stf policies stated, at that time, that officers of fan clubs were eligible for Honorary Memberships, only the WSFA officers were given such memberships.

I can say that as far as the president and National Secretary of the ARA appearing at any meeting was wholly unlikely as they are both busy men. Mr. Carter, being the owner of an advertising agency has to travel a lot on business as regards such. Mr. Riccobene, on the other hand, is a night club singer, and was on a tour in the upper northeastern states at the time.

As for my being an officer of the ARA: I was appointed as National Director only because I was one of the founders of the original organization. Other than this and as Managing Editor of our official organ, Space Magazine, I have 2 in-Committee appointments and nothing else, Editorial Committee Chairman and Book Committee Clerk.

As for a reply to the Washington News-Letter article, as soon as I found out about it in Amazing Stories, I sent Mr. Derry a letter and sufficient postage for a copy of the WN-L and a reply. I did not hear anything from him!

Mr. Derry has exaggerated the ARA membership. We have several hundred active members, both technical and stf. However, the numbers on the membership cards refer only to the number of cards issued since 1945 and not as to the amount of members we have now!

As for the "house" names included in our list, we did not have any knowledge of such at the time they were made. Nor did we know that Robert W. Chambers and Duncan Farnsworth were both deceased (dead).

As for our organ, Space Magazine, Mr. Derry's referral to the difference of the cover of the first issue and its contents page is true. But such was only through accident and not on purpose.

If there are any other questions that arise as regards this controversy, I shall be glad to answer them and try to straighten out any further doubts about myself and the ARA.

Sincerely,

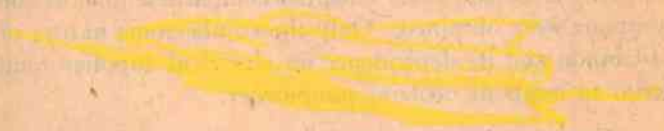
CLYDE T. HANBACK

NOTE

It is not the place of EUSIFANSO to take sides in the argument given above. The item was printed, at Hanback's request, to answer a bit of journalism encouraged by EUSIFANSO's former editor. We are too far removed from Mr. Hanback to adequately cover the matter. As for what has gone thus far: we feel we need not endorse Hanback - that is not the purpose of this magazine; we feel we need not damn Hanback since he has so adequately taken care of that. Further, we will print no more on this matter since it took thirteen hours to set the letter by hand and since Hanback's club is dead (deceased). . . .YE ED

NUCLEAR SPACE-DRIVE

by NORMAN E. HARTMAN



Much has been written about the men of the future who dash about the solar system in chemically fueled rockets. To my mind this is wrong to the point of being ridiculous. The probability is that no chemically fueled space-ship, I am not talking about unmanned experimental rockets, will ever leave this planet. The exhaust velocities are just too low, necessitating immense mass-ratios. The only non-nuclear power source which might be barely powerful enough is monatomic hydrogen, which is neither controllable nor safe. Neither do I believe that we will soon have mechanical teleportation.

The only hope for future space travel lies in the realm of nuclear powered space-ships. The principle set forth in volume two of 'Science and Engineering of Nuclear Power' (Addison-Wesley Press) of forcing hydrogen through an atomic pile might work, but its best results are not on a much higher plane than those of monatomic hydrogen, and it has the drawbacks of leaving radioactive 'splashes' behind at each takeoff and landing, and short engine life from rapid erosion of jet nozzles due to the high exhaust velocity.

Perhaps from what I have said the future of space travel does not appear too bright, but the fact is that with the knowledge of today and the experience to be gained within the next few years, ships could be built which could carry hundreds of passengers and

thousands of tons of freight between the worlds at a high rate of speed; to Mars and back in from three to five weeks.

By combining an old invention with a device which is even now being developed such a ship is distinctly possible. The old invention is the electromagnetic cannon, invented many years ago. In this device a long series of air-core electric coils, or solenoids, is activated in sequence; the magnetic field of each in its turn imparting acceleration to an iron bullet. With comparatively weak current and only a few solenoids velocities comparable to more conventional weapons were obtained. Only the cumbersome nature of this type of cannon and its dependence on electrical supplies renders it inferior to weapons utilizing gunpowder.

The second device is the atomic pile powered turbo-generator, which is even now being developed for warship and submarine use. The heat from an atomic pile is converted to electric power by means of a turbo-generator. These two devices, when properly combined, may give us the planets.

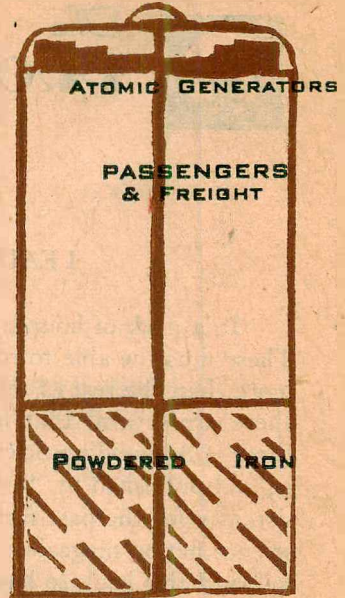
The physical features of the ship are as follows: Imagine a steel cylinder five hundred feet tall and two hundred and fifty feet wide, pierced by a central well thirty feet in diameter. Inside this well are gigantic girders and cables for the support and energization of mighty coils, and the coils themselves, which are perhaps ten feet long and ten feet in diameter, with an inside diameter of two and one half feet. Fifty of these stretch from the top to the bottom of the well. At the top of the well iron filings are fed at a predetermined velocity into a tube leading through the solenoids, which are energized at set intervals. The iron filings arrive at the entrance to each coil at the proper moment to be accelerated to the maximum amount. With such large coils and the almost unlimited power from several atomic turbo-generators, an acceleration within the solenoids of perhaps ten to twenty times that of a bullet in a rifle barrel might easily be attained. In the highest velocity 'wild-cat' rifles a muzzle velocity of five thousand feet per second has been attained and we will use ten times this as a basis for our calculations. Continuing this acceleration for five hundred feet we get an exhaust velocity of sixty-four miles per second. An acceleration

twenty times that would give us an exhaust velocity of one thousand two hundred and eighty miles per second, or six million seven hundred and sixty thousand feet per second.

If the cylinder were built with a two foot skin of steel it would have a volume of almost thirty-four million cubic feet. The empty shell would weigh two hundred and fifty thousand tons and the interior structure and power plants would weigh as much more. The lower third of the ship would be used to store the iron powder used for jet-mass, and the upper two thirds for passengers, freight, and power plants.

That would allow ten million cubic feet of powdered iron, or two million, three hundred and fifty-five thousand tons, giving a total mass for the ship when carrying passengers of two million, eight hundred and fifty-five thousand tons, or three million, five hundred thousand tons fully laden. This would give the ship a mass-ratio of three to one fully laden or five and seven-tenths to one when carrying passengers. On the basis of an exhaust velocity of sixty-four miles per second and a mass-ratio of three to one, the fully laden ship could accelerate at four gravities for fifteen hours. With that kind of performance a round trip to Mars could be made in a couple weeks. This, of course, is an interplanetary liner, and would have a price up in the hundred-millions. A smaller ship for exploratory work would weigh not more than a half million tons, would carry ten or twenty people, and would cost accordingly.

But it could be built within the next five years.



—Norman E. Hartman



The
PRO-OWLS
say...

LEADING THE FIELD

In a pack of hounds, there are several dogs known as 'leaders'. These must be able to run faster, trail more accurately, and know more than the rest of the pack. So with science-fiction magazines there are several that lead the field. The most notable among these is *Astounding Science-Fiction*, edited by John W. Campbell, jr, and published by Street and Smith. This magazine has consistently for the past fifteen years pointed out the path that other science-fiction magazines should follow. As other magazines have followed this lead, so have they prospered. *Astounding* constantly uses new artists, new authors, and new ideas, as opposed to some magazines which always use the same cover artists, and others which always present the same type of story. While there are several new science-fiction magazines in the field today which are trying to take away *Astounding's* lead, only time will tell whether or not they will be successful. As yet their output has been rather spotty.

The last few issues of ASF well illustrate the point about innovations. The October '50 issue has the beginning of a long serial by de Camp that is one of the best things he has done since *Unk*. ASF is one of the very few magazines in the field which presents serials. The rest of the October issue is also good, with thought-provoking stories and articles.

The November ASF has a good cover by an artist I never heard of before, I assume that it is a new artist. *Astounding* has a genius for finding symbolic cover paintings that are pleasing to the eye. The stories in this issue are mostly humorous, all by established authors. (cont. page 31)

PRO-OWLS

continued

The December ASF has a colorfully beautiful cover by their old stand-by, Timmins. The stories, with the exceptions of the cover story and the serial, are not up to par for ASF, but those two more than make up for any deficiency. The article is also very interesting.

There is one other point that I would like to bring up: the readers' column in ASF is far superior to that of any other magazine. The letters are, for the most part, mature, sensible, and well thought out.

The future of Astounding is far from assured. The new high-class magazines in the field pose a formidable threat to its supremacy. One reason for this is the attitude taken by Street and Smith on the author's rights. When they buy a story it belongs to them as completely as possible. Several of the newer magazines buy first North American rights only, and pay as much as twice as much for the stories. That is one sure way to get good stories, and it seems to be working. If Street and Smith do not change their policy Astounding could become just another second rate magazine, its place taken by any one of several newcomers.

—Norman E. Hartman

LITERARY RESPECTABILITY

THE MAGAZINE OF FANTASY AND SCIENCE FICTION edited by J. Francis McComas and the famous detective story writer Anthony Boucher has, in its short life, established a precedent in the science-fantasy field. Campbell introduced maturity, M of F & S-F introduced literary merit. Witness such fine stories as **THE HURKLE IS A HAPPY BEAST**, **IN THE DAYS OF OUR FATHERS** and about fifty percent of everything published in this little magazine.

It is not the purpose of this writer to say this magazine will become the top in the field —it might, but will more than likely hold a uniquely honored second place or special listing, yet it or another magazine like it is destined to stay. Science-Fantasy readers want intellectual and literary maturity, they have been crying for it for years and now that they are getting it my contention is that they will keep it to the exclusion of the shaggy-eared pulps that have cursed the field for so many years. The Mag. of F. & S-F is likely to stay longer than pulps because it has already established itself at a smaller size, without interior art and at a slightly higher price. For this the readers are getting a definite quality product well worth more money for less bulk. From the way some of the other magazines come out you'd think they were put out by people who would sell paintings of the masters by the inch.

—Flint Rockford

ADULT GLAMOR

In Sept. 1950, from WORLD EDITIONS, came an adult and sparkling science-fiction magazine paying writers approximately three times what other science-fiction magazines pay and running a French language edition, featuring superior adult covers, good typography, smooth paper, human interest stories, and the title GALAXY SCIENCE-FICTION. It is either first, second, or third of the top three —depending on personal taste.

GALAXY, tho bound much more expensively than its competitors, is small formatted and well in the size that could continue during a war economy.

—Argon val Marr

WORDS WORDS WORDS

KIND WORDS

I was just going to write a letter to Dennis F., re the last issue (No. 6) when the little work of art (No. 7) was delivered to me today. Allow me to compliment you most sincerely on this zine; I think it tops the Fanscient; the illos are especially fine, and without offending anyone, who doesn't like too much nude art. I don't care; but some do. But those here were simply magnificent.

I like poem No. 2, on page 7, it is cute. The others of course are swell also, but this deserves to be called cute. Unfortunately I can't write cute poetry, but I admire it. I'll inclose a few short ones; but they are not cute.

Emili A. Thompson 3963 NE. 9th Ave. Portland, 12, Oregon

HOPEFUL WORDS

Would you be so very kind as to let me have perhaps one or two recent copies of your magazine, please? I am preparing material for a BRITISH SCIENCE FICTION READERS' ANNUAL, and would be pleased to include this and any similar publication you may have in mind.

I could incidently, put any of your readers who might wish to, in touch with various friends here, all of whom have quite good collections of British science fiction which they wish to trade.

Chas. H. Frobisher, 67 Broomhill Ave. Knottingly, Yorkshire, England

FEW WORDS

Howzza Eugene menagerie doing?

And I still havent seen the latest EUSIFANSO, deceased?

Vernon L. McCain, Western Union, Payette, Idaho

FAN WORDS

Mighty fine print job you're putting out in EUSIFANSO. Wish I had half your help to put to work on NEKROMANT-ICON type cases! I am pleased with your lino-cuts especially the Mugwump Tree on the back cover. My first issue of Neko. was illustrated with lino, and I know what a job it is.

Manly Banister, 1905 Spruce St. Kansas City 1, Mo.

PARTING WORDS

Pro: The world certainly isn't what it was when I was a boy.

Fan: No, and it isn't what it was when we started setting type for this issue.

--Homo aberrationalis

There is no adequate defense
except cupidity
against the compact of another woman-

WILLMA P. KRICKMAIHKER

THE NEKROMANTICON

Amateur Magazine of Weird and Fantasy

25 CENTS PER COPY \$1 PER YEAR (4 ISSUES)

Let us have a look at your weird and fantasy manuscripts or artwork. We feature the work of Fandom's best amateur writers.

Weird, weird-fantasy, fantasy, and fantasy s-f. No horror stories or s-f gadgetry. We help you work up your material for publication.

1905 Spruce Kansas City 1, Missouri

...NOW...

EGOBOO

*A satirical fantasy of the
Fortieth Century*

Attractively printed and bound. No charge—send a postal for your free copy. Write EGOBOO, your name and address. Mail it to 1905 Spruce, Kansas City 1, Mo.

.CONSEQUENCES.

* * * * *
*

Let us face it, my friend, science fiction is not the most important thing in the world. It is only a significant aid to that important thing: wholesome servivial of the human race.

That thesis I offer you because, for the most part, science fiction deals with cause and effect; action and cosequences -either current, probable, or possible.

This is evidenced by all carefully constructed science-fiction which can include such stories as NULL—P by William Tenn—a story in which the human race lost sight of the competitive spirit and the desire to do better and substituted a worship of the “normal” or “statistical average”. As a result, since it is a law of nature that nothing can stand still, man, fearing to rise above the norm, degenerated into a moronic beast.

Other examples, still grizzly, are in the stories of mutations caused by an atomic war such as Judith Merrill’s intimate classic THAT ONLY A MOTHFR. Even more grizzly are the stories in which man does not face the atomic bomb but rather the threat of slow decay under a spirit-killing dictatorship. Witness George Orwell’s “1984” and many other stories.

Of course, I must tell you of the brighter prophesy. Since we can’t stand still there are the stories of man’s vast and great empire on other worlds. You will find such in Dr. E. E. Smith’s CHILDREN OF THE LENS and a multitude of other stories.

I repeat: man can not stand still. He must either go up or down, forward or backward, right or wrong and it behoves you to

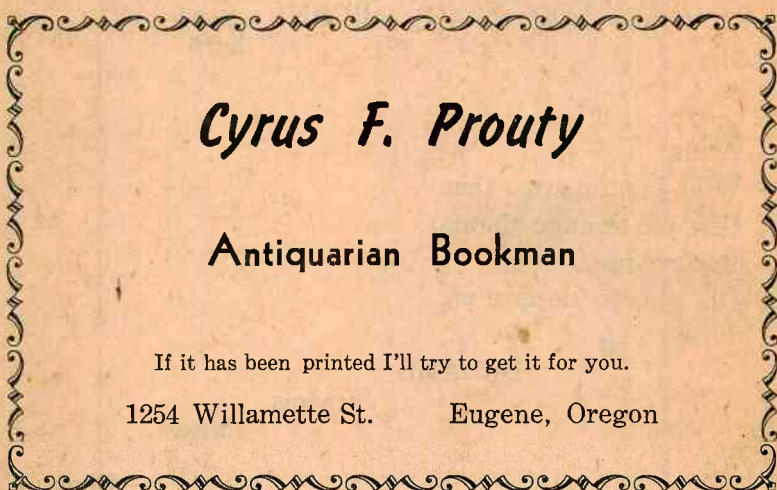
decide where you wish to go and to sacrifice for that good and greater goal. You have a sacrifice now. A world crisis is upon you.

This will mean laying many of your less important interests aside. This means most or all science-fiction magazines, your amateur publishing hobbies, much of your usual work—but NOT your dreams.

You will never go forward unless you keep looking forward, dreaming, planing, and reasoning forward.

My friend, in the darkest, coldest part of the winter, while you live a grim science-fiction story you thought would not occur in your day, such is the time for you to hold your head high and to look and live for the next harvest. The winter will pass, and if you have the fortune and stamina to survive, believe me, my friend, the grapes are exceedingly sweet.

—Rosco Wright



Cyrus F. Prouty

Antiquarian Bookman

If it has been printed I'll try to get it for you.

1254 Willamette St. Eugene, Oregon

INVOCATION TO LILLITH

Eyes,
Deep darkling eyes that
Drink of nightly skys,
That glisten,
Look and seem to listen
As starbeams

STRIKE

strike

strike

Lips,
Soft silky lips that
Speak of eerie trips
To a clime
Out of space and time
Where passions

BURN

burn

burn

Arms,
Wild wanton arms that
Give me strange alarms,
Recieve me,
Oh, sweetly decieve me,
Thou thing of

DREAMS

dreams

dreams

—Ebon Wyett

SATELLITE COLD LAB

by NORMAN E. HARTMAN

Among the many advantages inherent in a research laboratory situated in space is one which has been rather neglected. While there have been articles and discussions on establishing electronic labs in a vacuum and chemistry and biology labs in free-fall, only passing mention has been made of laboratories for research into the effects of extreme cold. Working on Earth with cumbersome and ineffective machinery, scientists have succeeded in reducing the temperature of very small enclosed spaces to nearly absolute zero, and have done valuable research under great handicaps.

In a satellite laboratory it would be possible to have large amounts of equipment at such low temperatures. Instead of small enclosed spaces at a very low temperature there would be small enclosed people at, comparatively, a very high temperature. It would be possible to supplement the naturally low temperatures with additional refrigerating machinery in order to reach even lower temperatures. It might be possible not only to reach absolute zero but to have entire units of machinery designed to operate under such extreme conditions.

No, you don't have to set up your lab out on the orbit of Pluto to get these results. Such a lab could be set up in an orbit about Earth.

Neither am I propagating any nonsense about the 'cold of space' so beloved by early science-fiction writers. I am simply

relying on the physical fact that in a vacuum the only way that an object can change its temperature is by means of incoming and outgoing radiation. The main source of incoming radiation is the sun. Minor sources are the stars and reflected rays from the Earth, Luna, and asteroidal dusts, the 'Gugenschein' extolled by Charles Fort.

Large mirrors interposed between the station and the sun, if properly designed, will take care of the major source of heat (see figure 1). Flat mirrors to reflect the direct rays of the sun, conical mirrors to dispose of heat radiations from the first mirrors, and mirror plating on the hull itself should completely stop the sun's rays. Reflection from the Earth and Luna can be taken care of by placing the lab in an orbit about the Earth at perhaps three times the distance of the moon and by means of the afore-said mirror plating. The 'Gugenschein' can be disposed of in the same way.

Another problem to be disposed of is that of heat conduction along the structural members positioning the mirrors before the lab. It would be possible to simply set the mirrors out in space and let them float there, but since any meteor dust or tiniest particle striking them would cause them to drift out of alignment, it would be better to anchor them. Any material will conduct heat, especially at temperatures close to absolute zero, but part of the trouble could be avoided by using a material like silver which does not become a superconductor at low temperatures. Another consideration would be that of brittleness at low temperature. The obvious places to stop the flow of heat are at the ends of structural members. Since great strength is not needed in a free orbit, and since heat will flow wherever two objects are in direct contact, the best solution would be a jointure with empty spaces between all parts.

This is not as impossible as it sounds. Perhaps some of you have seen the experiment where a permanent magnet is suspended in space over another permanent magnet, and all of you have seen how, turned one way, a pair of magnets attract each other when one is reversed.

If the base of a rod has magnets set in it correctly and is set into a correctly designed socket (see figure 2) the repulsion will keep the base of the rod from touching the socket, so that there can be no conduction of heat across the gap. If it is necessary to change the position of the station, so that stresses come into being along the structural members, the base of the member will be forced into contact with the wall of the socket, but as soon as the stress is removed it will again float free.

For the mirrors, any light shiny metal will do. One metal which has been suggested is sodium. I have illustrated the mirrors in figure one to be double,

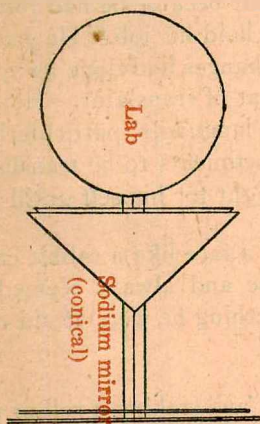


Fig. 1

so that if they were penetrated by a small meteor no harm would be done unless the holes through both mirrors were in a direct line with the sun.

The remaining problems, aside from getting out there in the first place, concern living at the station in space. Since the living quarters would have to be heated, personnel not being too efficient near the melting point of helium, the best solution would be to house the scientists in their own station in an orbit around the lab. Most of the work could be done by remote control, with the rest done in highly insulated triple-ply space-suits, with the two outer shells kept in the lab when not in use. After being worn they would be placed outside in the shadow of the station until they were cold enough to be taken inside. These suits could only be worn for a very short period at a time because of the bottling up of heat in

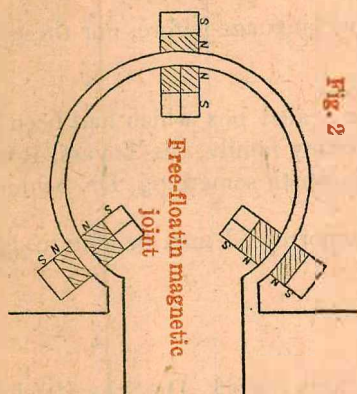


Fig. 2

them. When you realize the marvelous job done by low-temperature research with today's inadequate equipment, you will realize that with such a station, the stars are the limit. —NEH

DOCUMENTARY EVIDENCE

by Ed Zimmerman

Words were what he dealt in. He had been a professor of languages in eastern Europe before the communist had taken over the school and kicked him out because he had refused to mix in politics and join the party to hold his job. He had had some money saved, but the currency changes had done away with that. So he turned to a new field —that of translator. He had always loved to read documents in other languages, particularly old ones. There were a large number of documents to be translated for the communists so he was doing all right for himself until one day...

A small brown man with a face like a rabbit came in. He was nervously twitching his nose and always seemed about to look over his shoulder as if something he were afraid of were following him.

“Can you translate this?” and, taking a roll of parchment from under his coat, he spread it upon the table.

“I have never seen this language before, nor these letters, but I can try.”

“I found the roll in a sealed box which had been passed down from the earliest times of my family, the Tovars. It was my last possession and I hope it is worth something, Dr. Schmidt.”

“Can you come back tomorrow? I may be able to do something with it.”

“I’ll be here.”

As it was now about four o’clock, Dr. Schmidt closed up shop and started in on the manuscript. It was not in any language he knew, so had to try to work it out like a cryptogram. It was undeniably old. A part of it seemed to be made up of symbols

something like those of alchemists. That was it! The document was an alchemist's formula. He looked it over. Yes, the symbols fitted together. He had most of the engrediants in his shop as he used them to bring out faded writing or documental changes that shouldn't have been there.

The next morning the small brown man came in early.

"Do you have it translated?" was the avid inquiry.

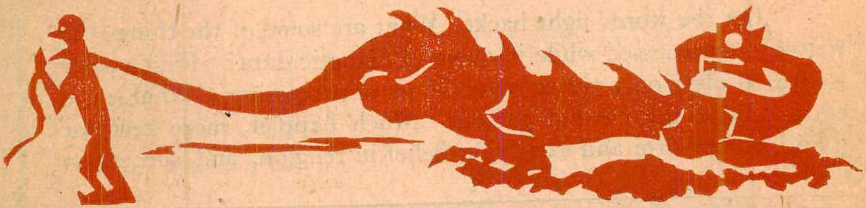
"Yes and I mixed up the concoction called for in the paper. Here it is."

He handed a bottle of purple liquid to the man, who said: "This is the secret of my ancestor's power" and quickly gulped it down.

Dr. Schmidt looked up. The small brown man was gone. Instead, before him was a small brown rabbit.

He mused to himself: "I didn't have time to tell him that the document said that his ancestors used that formula upon their enemies."

—Ed Zimmerman



CLARENCE RUTHERFORD

presents

A
LAYMAN ON
DIANETICS

“—will sweep the nation” —“—more important than the atomic bomb” —“—the great steps in civilization are the wheel, fire, and, now, dianetics—” With these words, and more, dianetics was loosed upon us some eight months ago. They are big words, wild words, and, as many subsequent reviews have shown, fighting words.

And now, briefly, this layman would like to give pause long enough to see whether or not these words can fight back. Understand, please, the writer is not an expert of any kind in any field. He prides himself only in trying to keep an open and inquiring mind.

Let the words fight back. What are some of the things the writer has witnessed while in quest of dianetic data? First a clear—cleared after only thirty seven hours of processing. What is the testimony of the cleared person? Much happier, more zest for living, a very firm and satisfying belief in religion, and success in

business far surpassing his fondest hopes. Second: a person with something near a hundred hours of processing who has been practically relieved from the plague of colds. Third: a subject who has had some forty hours of processing and is now free of migraine headaches, and carsickness which had been considered "natural" all his life.

All these things I have seen, and more, much more. And so, as you may think, I'm sold. The words can support themselves. Yet I have one objection— and it's not really an objection but rather, a prediction.—

—I predict that soon, very soon, Mr Hubbard will be criticized for being too conservative. Conservative to the point of dishonesty. And I'd like the chance to prove my prediction. And I will, if you readers invite me me to, in the very next issue.

—Clarence Rutherford

NOTE

The foregoing is a testimony by a man who has studied and practiced dianetics since its release to the public, a man who is a college graduate, a member of ESFA, and whom, we are glad, found time from family, job and auditing to write his personal evaluation of dianetics. [The item just came in and as a matter of fact, typesetting for these two items began at 8-16 P. M. the night before Christmas and thus provides an appropriate final for this eighth issue (counting the fifth issue which was lost in a lithography shop which issue former editor Fraser refused to forget or re-do).]

Folks, it's been a long hard grind and the staff does wish to do other things this vacation so... Rew




poor L'L PRESS...

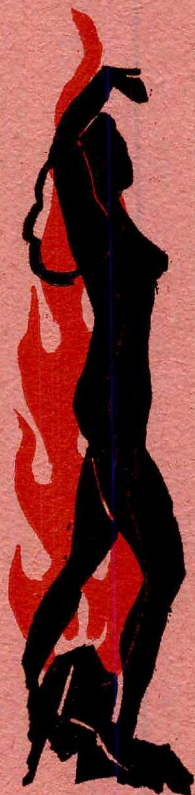
don't know

*where it's gonna' go
to war
to bed
to*

*BUT send your print
Jobs along
we will at least
take your dough...*

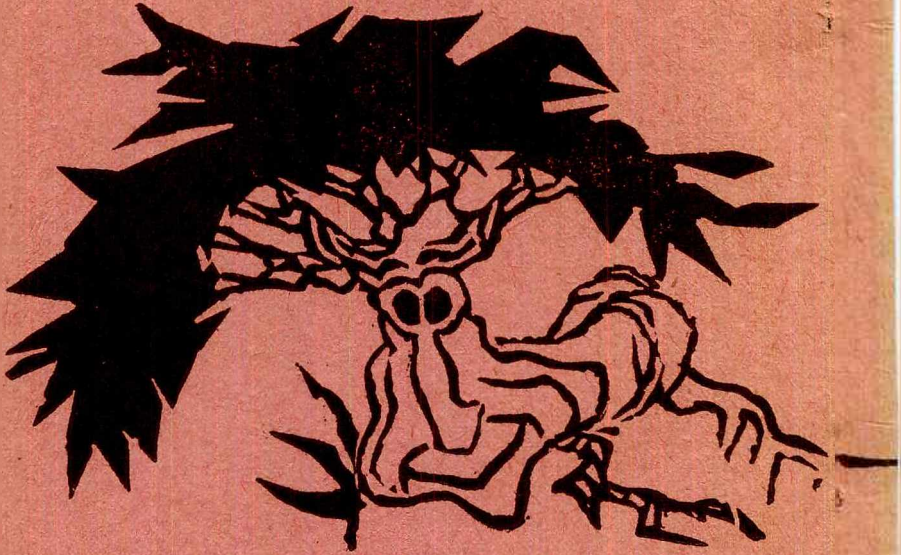
at 146 e. 12 Eugene





Hebrews, 13:8

and a tardy



MARY X-MAS

TO YOU

from the MUGWUMP TREE

WHO

kibitized when the stars were made!