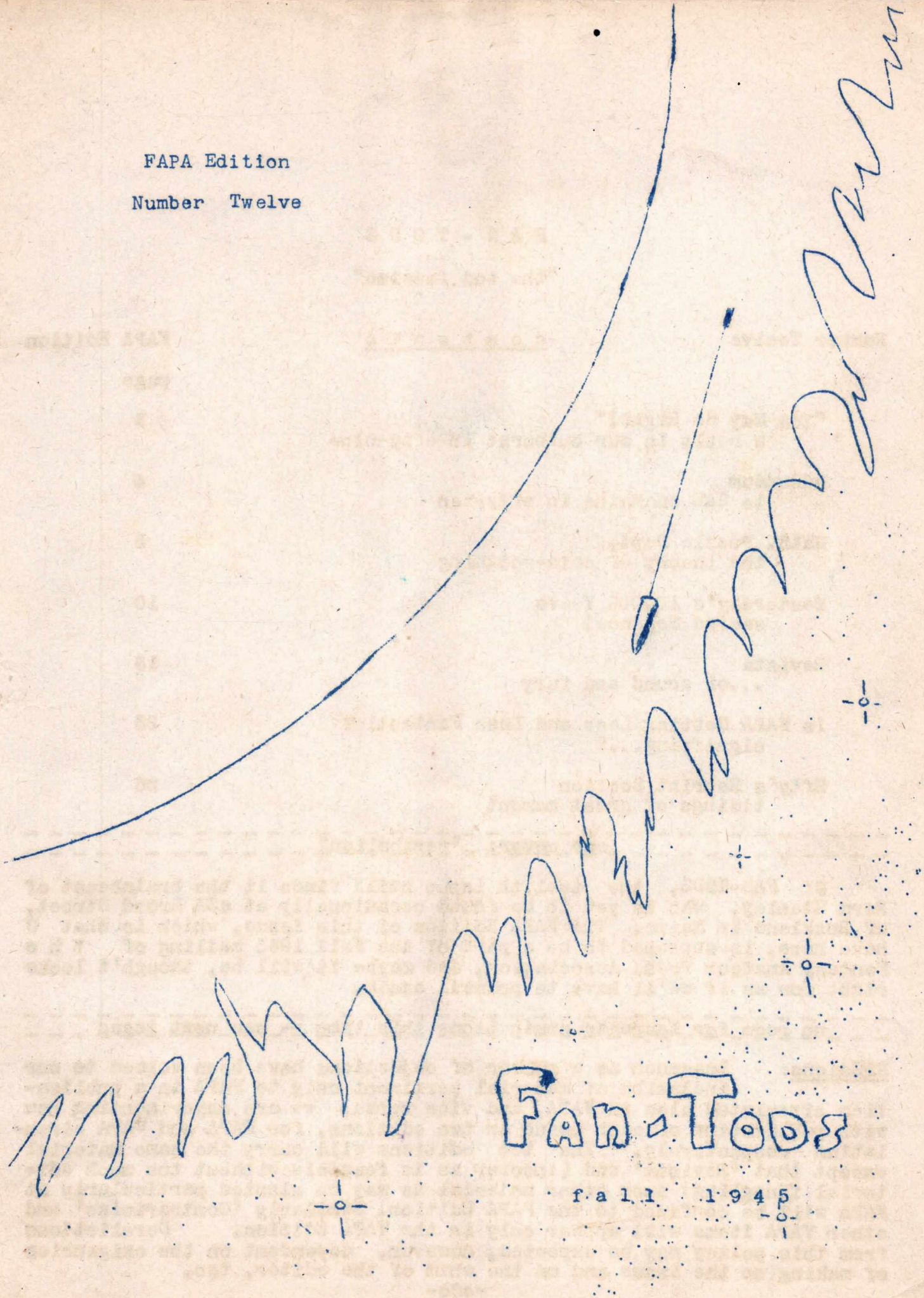
FAPA Edition

Number Twelve



F A N - T O D S

"the tod fanzine"

Number Twelve

c o n t e n t s

FAPA Edition

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"YOU MAY BE RIGHT!"

- Don. A. Channing

Director of Communications, Venus Equilateral

-oOo-

There is an answer to such little arguments and comments as were poured upon the head of my friend George O. Smith by your gang. This answer, valid for both pro and con arguments, is a phrase right out of our engineering department, and has been used for the title of this piece. Another thing, fellers. Venus Equilateral operates on the electromagnetic wave system, and the transmittal of mail and the like is none too regular. Therefore blame the interplanetary mail delivery for the lateness of this reply. I really did not see it until recently. The first one was handed to me by Robert Swisher a month or so ago, whilst the other one was delivered to John W Campbell Jr and forwarded, reaching me about the same time. However late, here it is.

Frankly, as Director of Communications I have had my share of trouble with both Wes Farrell and Walt Franks. This trouble does not compare with the grief brought about by the utter blindness of the Public Relations Department which, as you know, is headed by George O. Smith. He is a nice fellow, but inclined to exaggerate when he is running off a piece that will keep Interplanetary Communications and our relay station on the tip of the public tongue. More often he gets in the public eye.

I have a hunch that the stories about the high dielectric fluid came from a spoken desire for such a matter. It would be a nice item, and darned interesting. The errata mentioned in 'Firing Line' are the same arguments brought about by Fritz Leydorf of the Crosley Corporation when the story was written. Friend George O. Smith and Fritz Leydorf retreated to one of the laboratories and made a few experiments using a bit of Dykanol, which has a dielectric constant of about four. Unfortunately the experiments left us with only theory to play with since we couldn't find an air-capacitor large enough in capacity and small enough in physical size to 1) make charge measurements possible and 2) put in a container and cover with the available amount of Dykanol. And, of course, we did not have umpteen thousand volts to tinker with anyway.

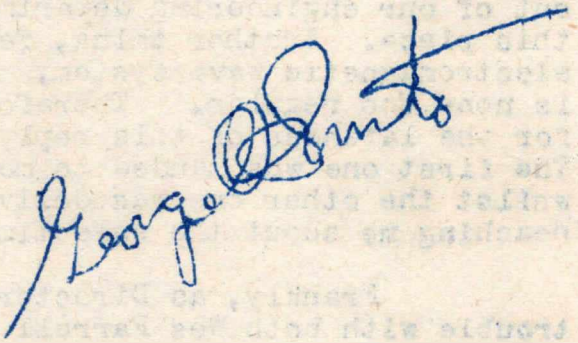
About all I can say in defense of George O Smith is that, despite his inclination to just haul off and write without juggling the slipstick too much, he does keep Venus Equilateral publicized. The fact that I am always mentioned in a very complimentary manner has, of course, nothing to do with my liking for our Director of Public Relations. But remember, he is the same bird who squared the speed of light and thus caused a furore never before equalled, unless it was the storm that followed 'The Irrelevant' (remember?) He also got into trouble

with the Betatron gang in 'Recoil' (Astounding, Nov. '43), the electron-optics boys in 'Off the Beam' (Feb. '44) and a guy who pointed our that the Reverend Thomas Doylen was 'waving' a brick of pure gold, weight about 90 pounds, in 'Pandora's Millions' (June '45). But regardless of such almost unforgiveable blunders I like him and think he is an interesting character.

However, I must be honest. I taxed George O. Smith with your little article, and he didn't even look ashamed. He just grinned at me and blew the dust off the top of a copy of Terman's 'Engineering' and then took out his slide rule and used it as a straight-edge to draw some lines. I believe he is incorrigible and will probably go on making mistakes. There is no hope....

In closing, I'd like to query: What's so amazing about 8,000,000 amperes? "Peanuts!" says Wes Farrell....

But George O. Smith stands corrected!



yeahbutiwent&measuredabrickitwas2¼x3¼x7½"&ifitwereAuwouldweighamere38lb

addendum...

Dear Norm

Under separate cover am sending U a copy of the 4th Annish of Fantasy Mag for a looksee at what I believe to be the only notification to fandom of the death of GAE, outside of probable mention in Argonotes.

Sciencerly

"Ack-Ack"

-o-

GEORGE ALLAN ENGLAND

George Allan England, one of the first great science-fiction authors, died on June 26th, after a long illness. He was born February 9th 1877; was graduated from Harvard in 1902. One year later appeared his first novel, "Underneath the Bough." He received quite a bit of publicity in 1931 when he gave up writing for chicken farming because, he said, "there simply isn't a living in it any more. There is money in chickens. The great American public must continue eating, but reading is going out of fashion." He was the author of about two dozen prominent science-fiction stories.

-- Fantasy Magazine, Sept. 1936

-oOo-

take to the woods, men, here is another

.....

Math. Puzzle Dept.

.....

Chandler Davis, Guest Conductor

.....

With regard to my four original problems which appeared in Blitherings No. 3, I should offer Saari an apology. I told him without thinking that each of them required more ingenuity than bludgeoning computation. Obviously this is not true of the equiangular spiral problem, which Stanley solved in Fan-Tods No. 10; this is a computational affair, I must admit.

Stanley's solution of it seems correct, though I have lost my original solution and cannot check his answer. His answer for the cube-octahedron problem is right, but he missed (apparently) the "ingenious" solution, which I will give on demand. He also missed the ingenious solution for the third problem, which is actually the easiest of the four. Think, Norm!

Norm's isosceles triangle theorem is a beauty. I do not have a single proof covering all cases, but I have three partial proofs, two of which, one covering cases with both base angles less than 72°, the other for cases with both angles greater than 60°, seem together to be adequate. Both are too complex to be worth reproducing. /I will send them on request to any puzzled puzzler. However I can offer two other proofs of the theorem either of which is adequate for all cases. :-nfs/

Russell's coin-weighing will be the main subject of this report. I will use the following notation. G indicates any coin proved good by previous weighing. Other capital letters indicate any coin. + is a heavy coin, - a light coin; thus M+ means "M is heavy." A = B, A > B, A < B would be results of weighings, with =, >, < referring to relative weights. u means "or." First, second, and third weighings are labelled I, II, and III; subscripts to the Roman numerals indicate which possible result is referred to. Thus if the first weighing resulted in possibility I_1, the next weighing might, according to its outcome, be labelled II_{11}, II_{12}, or II_{13}. Then II_{12}, for example, might be followed by III_{121}, III_{122}, or III_{123}.

The first problem: 25 coins, one of which is heavy. Three weighings allowed. Solution:

I_1 A + B + C + D + E + F + H + I = J + K + L + M + N + O + P + Q

II_{11} R + S + T = U + V + W

III_{111} X = Y ∴ Z+

III_{112} X > Y ∴ X+

III_{113} X < Y ∴ Y+

II_{12} R + S + T > U + V + W

III_{121} R = S ∴ T+

III_{122}, III_{123} solved like III_{112}, III_{113}

II_{13} solved like II_{12}

I_2 A + B + C + D + E + F + H + I > J + K + L + M + N + O + P + Q

II_{21} A + B + C = D + E + F

III_{211} H > I ∴ H+

III_{212} H < I ∴ I+

II_{22} A + B + C > D + E + F

III_{221}, III_{222}, III_{223} solved like III_{111}, III_{112}, III_{113}

II_{23} solved like II_{12}

I_3 solved like I_2.

This is easy, of course; but, as Russell says, the other problem is not so easy. Given 12 coins, either one + or one - included. Three weighings allowed. Solution:

I_1 A + B + C + D = E + F + H + I

II_{11} J + K = L + G ∴ M+ u M-

III_{111} M > G ∴ M+

III_{112} M < G ∴ M-

II_{12} J + K > L + G ∴ J+ u K+ u L-

III_{121} J = K ∴ L-

III_{122} J > K ∴ J+

III_{123} J < K ∴ K+

II_{13} solved like II_{12}

I_2 A + B + C + D > E + F + H + I

II_{21} A + E + G = B + F + H ∴ C+ u D+ u I-, solved like II_{12}

II_{22} A + E + G > B + F + H ∴ A+ u F- u H-, solved like II_{12}

II_{23} A + E + G < B + F + H ∴ E- u B+

III_{231} E = G ∴ B+

III_{232} E = G . . E-

I_3 solved like I_2.

Some generalizations can be made. We observe that if before the last weighing there are three possibilities (or less) as to the location and sign of the discrepancy in weight we can solve the problem. This may be possible only by the use of a G. Thus if A+ u B+ u A-, the only solution is to weigh A against G.

We see further that since there are three possible outcomes of any weighing we may regard a weighing as a division of the total possibilities present into three groups. We should make the three as nearly equal as we can in order that, no matter what the outcome of the weighing, we will not have an excessive number of possibilities to reduce in subsequent trials. Thus in problem 1 we had 25 possibilities and divided them (8,8,9). If I indicated the group of 9 was correct, we divided it (3,3,3); and so forth. In problem 2 we had 24 possibilities and divided them (8,8,8). Problem 1 could have given 27 coins, when we would have solved by dividing (9,9,9). But we can't add an extra coin in the other problem; that would give the division (8,8,10), and 10 is obviously too many to solve in two weighings. We can make problem 2 tougher by allowing the possibility that no coin is heavy or light. Indicate this possibility by G. Then II_{11} would leave the possibilities M+ u M- u G, with a possible outcome

III_{113} M = G . . G

and the problem would still be soluble.

Suppose we have n coins, one + or one - among them, and α weighings. For the first weighing we divide n into three parts, two of which are equal and contain $\left[\frac{n+1}{3}\right]$ (that is, the integral part of $\frac{n+1}{3}$) coins. The original 2n possibilities are divided $\left(2\left[\frac{n+1}{3}\right], 2\left[\frac{n+1}{3}\right], 2n-4\left[\frac{n+1}{3}\right]\right)$ In any weighing hereafter we can always divide the p possibilities with which we start into $\left(\left[\frac{p+1}{3}\right], \left[\frac{p+1}{3}\right], p-2\left[\frac{p+1}{3}\right]\right)$, the evenest possible division. For example, say we start with p coins, any of which may be heavy. Put $\left[\frac{p+1}{3}\right]$ on the left scale and $\left[\frac{p+1}{3}\right]$ on the right. Or say we start with at least $\left[\frac{p+1}{3}\right]$ coins which may be heavy and b coins which may be light. Put $\left[\frac{p+1}{3}\right]$ possible + s on the left with $\left[\frac{p+1}{3}\right]$ possible -s; or in case $b \leq \left[\frac{p+1}{3}\right]$, put all the possible -s on the left and $\left[\frac{p+1}{3}\right]-b$ possible +s on the right; and add Gs where needed. Or say we start with $\frac{p}{2}$ coins, any of which may be + or -. Put $\left[\frac{\frac{p}{2}+1}{3}\right]$ on the left, $\frac{p}{2}-2\left[\frac{\frac{p}{2}+1}{3}\right]$ on the right, and one G where (and if) needed. (Notice that putting $\left[\frac{\frac{p}{2}+1}{3}\right]$ on

each scale does not always give the best division of possibilities. If we have 11 coins ($p = 22$) and weigh 4 against 4, the possibilities are divided (8,8,6), instead of (7,7,8), which is achieved by replacing one of the coins on the right with a G in accordance with the rule. Also, with 13 coins our rule gives the division (9,9,8) which is better than (8,8,10) obtained by the more obvious method.) These rules should enable you to weigh any group of coins in the best way available.

You can see that in all weighings beyond the first we can certainly find a weighing which divides the possibilities with maximum equitability. But on the first weighing the division already given is the best and may not be quite so good. Thus if $n = 11$ the best division of possibilities is (8,8,6).

A little thought will now reveal that for each α the maximum n is given by

$$n = 3\left[\frac{3^{\alpha-1}}{2}\right]$$

This result is rather surprising in that for any soluble coin-weighing problem of the type discussed it is possible to allow the possibility of all coins being equal in weight without making the problem insoluble. This was already pointed out for $\alpha = 3$.

Let's see what some of the maxima are:

α	n_{max}
1	0
2	3
3	12
4	39
5	120

More complex coin-weighing problems become more messy to analyze. Suppose your sample contains one + and one -. The n_{max} for $\alpha = 3$ is only 4! [That's not a factorial, chums. --nfs] (Do not assume anything about the result of weighing a + and a - against two Gs.) And you must guarantee that both the + and the - are certainly present, or you can't solve even if you start with only four coins. Actual analysis of such problems is tough. (Now that I've said that, Buck or somebody will probably come up with a complete theory.)

Here are some new problems:

(1) Give a solution of the equation

$$\frac{dx}{dr} + \frac{ax}{r} = f(r)$$

which holds for any f(r) satisfying appropriate continuity conditions. Do not use a textbook, please.

(2) If I have a pack of n cards labeled with numbers consecutively 1 through n; if I shuffle till they are in random order; and if I then face them up one by one, calling out "one" as I turn the first,

"two" as I turn the second, and so on; then what is the probability that at least once I call the number that appears on the card turned up? What limit does this probability approach as $n \to \infty$? (Answer to second half: $1 - e^{-1}$)

(3) How many points are there on the surface of an ideal spherical earth such that I can, starting from one of the points, walk one mile south, one mile west (along a parallel of latitude), and one mile north, and return to the point? Where are these points located? Only complete answers accepted.

(4) Suppose I draw, on a piece of paper, four half-lines meeting at a point. What is the condition on the angles between the lines in order that it will be possible to fold the paper along the lines and lay the paper flat?

(5) If there are 20 persons in a room, what is the probability that at least two of them have the same birthday (exclude Feb. 29)? To three decimal places, please.

None of these is original. I solved all but the first, some by myself and some working with another mather.. (1), (3), and (4) require only ingenuity. (2) and (5) manipulative skill as well. Good luck!

-o-

Ron Lane also contributes...

"Do you know the one about the niggers crossing a stream with a group of whites? The niggers are cannibals and will eat the whites if they ever outnumber them. There are six niggers and six whites, and they've all got to cross the stream, there being but one boat and one pair of oars. It's easy to find one solution, but how many more can you find?

"Or - given any straight line AB and its midpoint C and any point X. How do you draw a line through X parallel to AB. You can use only pencil and ruler, with no measurements marked on the latter.

"Or - arrange six matches to form four equilateral triangles, the side of each triangle being equal to one match. Don't look at me!"

- - - - - "Subtend angularly this surd improperly vectorial." - - - - -

NEWS ITEM: Chicago, Aug. 20 - (AP) - Julius Goss, 59, of Chicago, was a steady churchgoer, but not for spiritual reasons. He admitted today in felony court that for the past 48 years he had a fairly steady income from robbing church poor boxes.

"I have been doing it since I was 11 years old," Goss said when he appeared before the court for a hearing, which was continued, on two charges of grand larceny.

He explained that he usually used a pencil with a wad of chewing gum at the end to dip into the poor boxes and draw out the money.

Goss originally was taken into custody on suspicion of setting small fires in three churches in the last two weeks. He denied the charges remarking, "Why, I make my living in churches."

-oOo-

YESTERDAY'S TEN THOUSAND YEARS

- Science Discussions -

"I certainly appreciate the McCann lapse into biology. One would hardly think of bringing any attack against him in his home ground of physics and chemistry. This evolution-of-man stuff should provide plenty of room for nice, high-sounding, unprovable arguments. At least until some biologist strolls in and points out that none of us knows what he's talking about. Even that won't be too bad. We've all admitted it already."

Robert D. Swisher -Astounding Science-Fiction, June 1938

True enough, Mr. McCann apparently soaked up no end of physics and chemistry and practically no biology in the process of becoming an endocrinologist.

-o-

"Capital is concentrated human effort; interest the measure of its return in lightened labor. That is the only way to determine whether a thing is an advancement or a retrogression in Man's evolution."

Arthur McCann -- Astounding Stories, Jan. 1938

Damncapitalist, too!

-o-

"If the smart Frank has any means of showing that his 16-cornered and 24-faced tesseract can be crossed by a fourth line not parallel to one of the 3-dimensional lines, let him flog his brains to it, and keep away from the lake while doing so, for water is a great inducement to the desperate.

"In the meantime my personal animosity for lunatics spouting in public prints grows apace and I am sharpening my false teeth with files. Gr-rr-rr!"

C. B. Loomis -- Astounding Stories, Dec. 1937

Exhibit A.

-o-

"May I mention to D. D. Sharp that it is impossible for two children of the same parents to have the same environment? Child A is a part of the environment of child B and B is a part of the environment of A. As A differs from B, so will A's environment differ from B's environment, and whatever oppositions or assistances the one may offer the other must serve to alter the other. Only a case of identical twins would seem a departure from this rule, but in such case there is no real departure, as one twin is precisely like the other (unless they be of opposite sexes, in which case . . !!!xx??). It's the same old battle."

C. B. Loomis

EC: "Figure This Out!"

-- Astounding Stories, Aug. 1937

Can you? Exhibit B.

-o-

"It [the great pyramid] happens to stand 30° east of Greenwich and at 30° north latitude -- where the lines cross. But this point had no meaning in days when Greenwich did not exist, unless such meaning survived in racial memory to secure the establishment of the meridian at Greenwich as central for world navigators."

Battell Loomis, A Talking Hill,
Astounding Stories, Apr. 1937

Exhibit C.

-o-

"Mr. Loomis states that the Pyramid stands 30° E. of Greenwich and at 30° N. latitude. Later he makes the statement that the sun was directly over the point of the Pyramid at noon of the summer solstice. It's grade-school stuff to see the absurdity in that. The actual N. latitude of the Great Pyramid is 23° 27' 31".68. It might be added in passing that the truth of Mr. Loomis' statement is further belied by the fact that the Great Pyramid never had an apex, except geometrically. It was left by the builders with a flat top. It is true, however, that the sun is directly over it at the summer solstice, but not at 30° N. latitude!"

Sutherland Macklem -- Astounding Stories, June 1937

Exhibit D.

-o-

"May I call Mr. Loomis' attention to an apparent error in The Talking Hill? Unless my atlas is in grievous error, the Great Pyramid of Gizeh is at 31° 8' east long., 29° 59' north lat., which differs considerably from the figures he gave."

William H. Pell --Astounding Stories, Aug. 1937

Exhibit E.

-o-

"Incidentally, here's an odd slant on the question of quantities beyond infinity. Ought not imaginary quantities be considered less than minus infinity? We are told that only positive numbers can have logarithms. Thus the logs of all numbers greater than +1 are positive numbers, the log of +1 is 0, while the logs of numbers between +1 and 0 are negative numbers, down to 0 whose log is minus infinity. However in texts on trigonometry we find the statement, due to Euler, that -1 has a logarithm (to the base e), and that it is equal to $i\pi$ or $\sqrt{-9.8696}$, an imaginary number. Mathematically this is expressed as $e^{i\pi} = -1$ or $\log_e(-1) = i\pi$. $i\pi$ is the log of a number which is less than 0. The log of zero is minus infinity, therefore $i\pi$ is, in a sense, less than minus infinity."

Norman F. Stanley -- Astounding Stories, Feb. 1938

Ulp!

-o-

"As to Mr. Driggers: I admit that numbers beyond infinity are unlikely, but the fallacy is not so obvious as you seem to think. My contention was that zero and infinity were the extremes of concrete quantities; mathematical abstractions were not even mentioned in my premises. I believe that the very fact that there is an infinity beyond zero is proof, of sorts, that there may be a zero beyond infinity. I presume that I have not made myself any clearer; in which case I would be pleased to correspond with you personally."

Elton Andrews -- Astounding Stories, Jan. 1937

-o-

"In fact, I wish to recommend the following to any one who wants to talk with authority about relativity. Go to a good college, study Optics, Mechanics, Thermodynamics, Electricity, Radioactivity, Spectroscopy, Atomic Theory, X-Rays, Trigonometry, Analytic Geometry, Differential and Integral Calculus, Differential Equations, Theory of Functions

of a Real Variable, Theory of Functions of a Complex Variable, and at the conclusion of all that, you may then be ready to begin to study the mathematics of Riemannian and other non-Euclidean geometries which you must know to understand the first thing about realtivity and modern physics in general.

"All these books that pretend to explain relativity in words are plain fakes. Tehy can't do it because relativity and all modern physics can be expressed only in mathematical symbols, n o t in words. All they can do is explain the relativity of motion--the least important part of the special theory of relativity. When they try to explain the 'separation' of events, they begin to totter. When they get into general relativity and the curvature of space and the bending of light they fall flat on their faces."

John James Logue -- Astounding Stories, Feb. 1938

-o-

"At Earth-normal temperatures, iodine is a solid forming steely, flat crystals, but having quite a high vapor pressure. Like a number of other substances--camphor, solid carbon dioxide, and other less well-known substances--iodine cannot exist in the liquid state under Earth-normal conditions."

John W. Campbell, Jr. -- Astounding Stories, Jan. 1937

G'arn!

-o-

"I am willing to eat my shoes on the fact that man will not use liquid oxygen and hydrogen for commercial fuels in the near future. It seems to me that the expenditure of 4,380 tons of fuel to go to the Moon and back is mighty wasteful on our air supply. The above figure is confirmed in P. E. Cleator's book, 'Rockets Through Space.' How long do you think our air supply is going to last at that rate? B u t that's only to the Moon. To go to Mars would require a bit more fuel. I don't think the Martians (if any) would care, though. Even with a rocket ship coming every week inside of a year there would be a perceptible rise in the oxygen content of their atmosphere. And soon they might be able to live on the surface, instead of finding a living in some deep underground city because of the almost nil surface atmosphere. They probably got that way, too, by foolishly wasting their air on some fool planet 50,000,000 miles away."

Mark Reinsberg -- Astounding Stories, Sept. 1937

Of course Midwest Marky couldn't foresee that there'd be a war to thrust scientific advances, like V-2 and shoe rationing, on us.

-o-

"The only kick I have to make is in the atomic-powered machines your authors have invented. What power?

"We know, if they used that little wheel we see in jewelry windows -- one side white and one black, revolving by light pressure in a vacuum -- we have power. Or, take the thermo couple, give it heat at its junction and you have power.

"This is as hertzian waves once were, but will some day be developed to wireless, then to radio and finally to television or radion television.

"No scientist has as yet got any power of any sort from any atom, so w h y bring that up, when we have two other sources of undeveloped power?"

M. J. Lyons -- Astounding Stories, Jan. 1937

-o-

"Atomic power, impossible dream in the days of charged particle bombardment, does not seem distant with neutron explosions."

John W. Campbell, Jr. -- Astounding Stories, Nov. 1937

-o0o-

thocks on the thirty-second mailing.....

FANTASTICONGLOMERATION: (10%) Do you realize, folks, the odds are 3×10^{10} to one the guy's in love? . . . . . The fanciful figurine looks as though she were shod for the hundred yardash, or something.

EN GARDE!: (18%) With all due respect to Captain Donn's tentmate, I think he's a little stiff-necked. Surely anyone who condemns a magazine as "Funny book stuff!" just because the first sentence he reads contains the word, thanx, needs to loosen his collar a mite. The word's intelligible and is in fairly common usage. Too, Donn is slightly out of date regarding the one-time fad in fandom for meaningless words. It's been on the wane for a year or more. As for the blast at simplified spelling, don't forget that "The Literary Digest" used a rather drastic version for years, and thrived. No, I can't get worried over "hamburger words".

Looking up things like Lawsonomy is an interesting and amusing hobby. Ever hear of Miff M. Butler and the esoteric (you should read his treatise!) science of "Geomath", Al? Or of Carl Krafft and the mechanistic autonomy of nature and the new vortex atom?

Your "National Fanographic Section" well-nigh proved the ruination of me. At least there seems more than coincidence to the fact that I was carted off to the hospital with a busted appendix directly after reading the account of the New Jersey lepidoptera! The stones depicted under "Tourist Suggestions" look suspiciously like the Cromlech of Connere, which is found in Maine, France. What Fanographer Ashley doesn't know, I'll bet, is that a similar dolmen exists in Maine, USA, too. I'll photograph it for you next time I'm on High Island, Al.

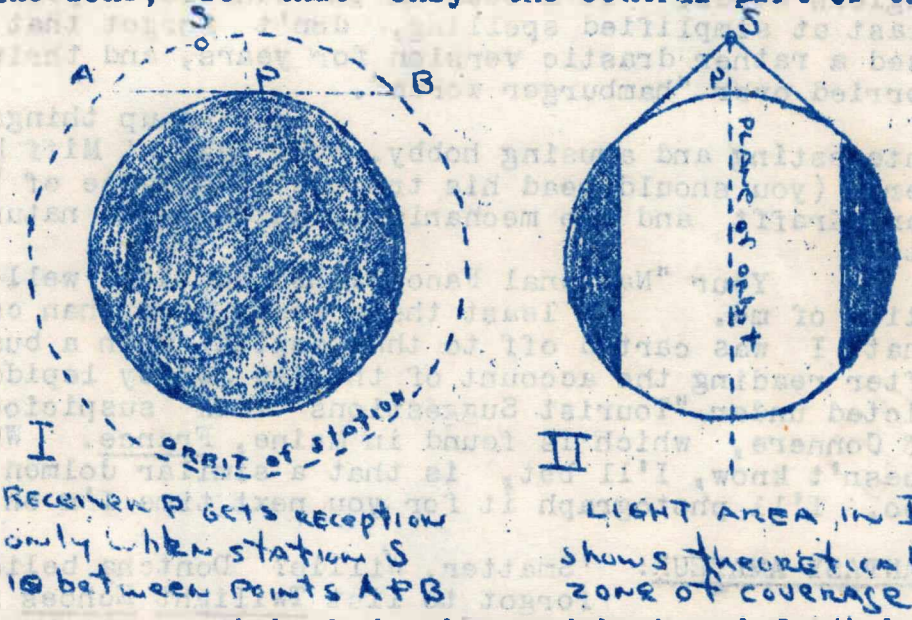
FANTASY AMATEUR: 'Smatter, Willie? Dontcha believe in brains? You forgot to list Twilight Echoes in the Mailing index, too.

LIGHT: (25%) Out from under that bushel at last! "Meteor" is a fairish bit of fan fiction which would've been better if rewritten. More of an atmospheric element would help inasmuch as the plot offers nothing novel. The scientific jargon could stand polishing, too. The tortletwitch thing isn't quite as funny as the tale of t h e same title which appeared in Spaceways for April 1940.

The system you use for the FAPA Dept. is rather awkward. Separate publications are really better for them ez wants to put out a fanzine for general circulation and join in the FAPA discussions, too. . . . . Thanx (oops!) for the advice on record playing equipment. More on this via personal-

(16lb. paper from here on—beam-throne, chums!)

etter. You're right, no doubt, on the advantage of relay stations over coaxial cables. I had thought the latter could transmit many different frequencies at the same time, something like the "wired wireless" they use for communication over power transmission lines, but I guess it's an altogether different animal. I dunno, my 20-hour evening course in industrial electronics didn't teach me much about such things. Anyhow there seem to be a lot of possibilities to the relay stations,what with the expectation that such stations may soon be set up in high-altitude planes, each of which, cruising over a given spot, will provide vastly wider line-of-sight coverage than a ground station. And with s p a c e flight maybe not so far in the future we may even see stations located in orbits outside the atmosphere, as Dunkelberger suggested in a recent Fanews. There would have to be a string of such satellite stations, following one another in the same orbit, though, as the stations would be revolving around the earth. A station 500 miles up would make a complete circuit of its orbit about the earth in only an hour and a half. For any point on the surface directly below the orbit it would be above the horizon for only 14 minutes out of this time. Thus it may be seen that at least seven such stations, equally spaced along the same orbit, would be needed to have one above the horizon at all times to provide uninterrupted service. While a station in this orbit would come above the horizon for all points within a zone extending 1900 miles to each side of the great circle lying directly beneath the orbit, the time between its rising and setting would become increasingly brief as one approached the edge of the zone, so that only the central part of the zone could be served unless a very large number of stations were placed in the orbit. Probably other factors, such as attenuation of the signals with distance, would also narrow the zone of practical coverage. The ground stations for relaying the broadcasts to the satellite stations would, of course, be situated along the great circle beneath the orbit. A broadcast could, conceivably, be relayed around the earth by being bounced back and forth between ground and sky stations. Practically, though, this would not be done, as ground stations would not be needed to relay to stations in those parts of the orbit which would cover only ocean or uninhabited areas.



Gor blimey, but these here Canadian fen all seem to be misnamed! There's this guy, Les, who, judging from his photograph, should've been called "More". And now here's a Lamb who appears to be anything but lamb-like in disposition. Norm's belch is illustrative of several misconceptions concerning FAPA which seem to be prevalent among those outsiders who haven't bothered to learn much about us. Foremost is the notion that one must be a top or advanced fan to get in. That is not so. I submit that we have had as FAPA members at one time or another

some of the most confirmed drools in fandom. Our admission requirements stipulate nothing about the applicant's reputation or standing in fandom. We require only that the would-be fap have had material in at least two fanzines, published in different cities, or else activity as a fanzine publisher or editor during the twelvemonth preceding his admission to membership. Easy enough, ain't it? And these requirements aren't to keep little fen from joining our merrie crewe, they're just to assure that those who do join are ones likely to have an active interest in our doings. Indeed, they have many times been interpreted rather more liberally than constitutionally, and most members have politely looked the other way.

It shouldn't be hard to see why FAPA is limited to 65 members. Our original limit of 50 was based on the limitations of the hectograph, then much in use. With the almost universal use of the mimeograph this no longer was necessary and so a boost of the membership to 65 was approved. But while the mimeo permits the reproduction of hundreds or even thousands of copies, the number at which the job ceases to be fun and becomes hard work is far smaller. This, plus the cost and scarcity of decent paper stock and ink, have caused proposals for a further increase in membership to be received without enthusiasm. Consider what it would mean. Some of the younger members without regular incomes would find FAPA too expensive a hobby and be forced to curtail their activity or even drop out. Other, older, members whose contributions are of great merit but, because of the demands that their work or family obligations impose on their time, are unable to contribute prolifically would drop out once the hobby became too much a task. With a greatly increased membership, such as would likely be had if membership were granted to anyone with a dollar for dues, the mailings would increase in bulk, but don't you think the size and quality of the individual publications would suffer? How would you have FAPA? Like the mundane apas in which the unrestricted membership runs into hundreds but the bulk of the production consists of leaflets, not magazines, and in which many of them and most of the more worthwhile ones are not circulated generally but go only to selected groups within the membership? Or the FAPA plan with its smaller membership but with a relatively larger proportion of good-sized publications, copies of which are supplied to all the members?

Of course the filled membership quota makes it necessary for the applicant to wait a while for a vacancy to turn up. But with the present state of the Waiting List this wait is seldom more than a year. I don't believe that anyone with insufficient patience to wait this length of time can have had much interest in FAPA to begin with.

And come now, Les, you know as well as I do that we already require at least eight pages per year from each member. If we all fulfilled only this minimum we'd have 520 pages a year, which is a pretty big dollar's worth. As it is we get much more than the minimum. And it seems to me that we've been getting rid of our deadheads fairly rapidly. There shouldn't be many lingering on now that the new activity requirement is just beginning to be applied to renewals.

It's understandable that Lamb, on glancing through an isolated fapazine or mailing, might find much of the commentary uninteresting. But surely he will perceive that this is in part at least due to the difference in viewpoint between the FAPA member and the nonmember? Remember that fapazines, by and large, are written for the people to whom they're sent, the FAPA members. In our set-up, where everyone is familiar with everyone else's magazine, one gets to think not so much in terms of what

is published in this fapazine or that fapazine as in terms of what he reads in the mailings. Naturally the outsider, who doesn't get the complete picture, finds items about stuff he has never seen rather dull. I daresay if Norm were in FAPA a while he'd find that many of the seemingly inane remarks in fapublications would take on a great deal of meaning when seen in their "context", so to speak. Whether he would then be interested in our editorial give and take and bullfesting is, of course, a matter of personal taste. It cannot influence the fact that much of the material introduced by way of enlargement or dissection of topics brought up by others is just as "original" as if it were introduced in a complete-in-itself article. FAPA member Lamb would be quite justified in asking for more bibliographical material, and in working for it in any way that would not interfere with the rights of his fellow members to work for what they want. FAPAfen have many interests and FAPA is elastic enough to take care of them all. The way to get what you want with us is not to decry the other fellow's likes but to plug your own. That is the reason, incidentally, why the FAPA constitution places no restrictions, other than mailability, on publications.

I think too that the above paragraph also disposes of Les' argument for more subscription-type magazines. The fanzine edited for general circulation is at no great disadvantage in FAPA and is often a welcome addition to the mailing. But unless a fapazine is also to be circulated extinsively outside the organization (few of them are), what reason is there for editing it to fit an audience it will never reach?

THE VOICE: (48%) A good idea. I agree that FAPA talk is out of place in Light. It's interesting, though, to find that Les, despite his exhortations to drop nonfantastic topics and turn to fantasy, still seems interested enough in the former to devote nearly half his new magazine to the nf stuff. The plug for more fan fiction takes it for granted that fan fiction would be popular. Actually this does not seem to be the case, particularly, either within FAPA or without. For almost as long as I've been in contact with fandom, I've had the impression that fiction was considered the poor relation of fan publishing, suffering, apparently, from odious comparison with the professional output. So often one hears the patronizing "Although I don't care for fan fiction as a rule, I found Joe Fann's 'World of Blog' fairly amusing." There's much to be said for the publication of amateur attempts at fiction writing, yet the above attitude is with us, and seems to be quite permanent.

Who's been picking on the Salvation Army? True enough, though, the organization has many good points, not the least of which is the practice of recruiting and training personnel selected from the sections of the populace among whom it works.

Lemuria may be a hoax, but not for fandom's particular benefit. Shux, Les, we isn't important enough. Palmer's out for bigger game, obviously, and, what's more, even if a campaign to kid fandom were a minor motive behind it, the fact seems to be that practically none of the fen have swallowed the bait.

Nevertheless Marconi did start with a laboratory toy and got it to work on a commercial scale. He made no basic invention, but certainly must be credited with a good part of the early technical development of the art. Of course if he hadn't somebody else would have done it instead. But that is true of a great many inventions. After all, who invented the incandescent lamp, Edison or Swan? There isn't much of Marconi in present-day applications of radio; equally, about

all of the original Edison carbon-filament lamp you'll find in its modern descendants is the screw base.

Your recipes are all awesome feats of construction, but what does one do with them then? Surely they're not intended to be eaten?!

BEYOND: (3%) Blame Dr. Penwise's seedy appearance on my stylus work.

CRY IN THE NIGHT: (100%) A Tower reprint of the original edition. Unexpurgated, though!

CANADIAN FANDOM: (8%) "Votary of Destruction" is outstanding fan fiction. Karden is about the smoothest writer in this field.

Fred Hurter's ramblings top even their usual high level of interest. This is the sort of stuff I like, the discussion of all manner of things as related to science-fiction. I like the idea of a wooden space ship; how would it fare, though, in effecting atmospheric braking maneuvers? Metal could stand moderate heating through atmospheric friction, but wood is such a poor heat conductor that it would be apt to char and abrade away very rapidly. Then, too, solar radiation must be considered. Might not prolonged exposure to unfiltered solar ultraviolet prove detrimental to thw wood? How would glued construction be for holding air in a vacuum? You might get a lot of slow leaks, hard to detect. And of course you couldn't permit any knotholes! A wormy oak space ship would hardly be the thing, either. And even worse than the situation you suggest would be to find you had termites while still in space, six months out from earth.

A metal space ship hull wouldn't cool to a very low temperature if the ship were rotated so as to expose all parts to the sun. Indeed, it would be necessary, probably, to put spin on the ship for the very opposite reason, namely to keep the sunward side from getting too hot. It has also been suggested that one side of the ship be silvered and the other side blackened. The ship could be warmed by turning the black side toward the sun and cooled by turning the shiny side that way. Intermediate positions would give intermediate temperatures.

I'm hoping to hear more of the Canadian Rocket Society. Does it plan a publication? I'm much interested in rocket mechanics and have been doing a bit of math. research on the subject, which I hope to inflict on some unwary math. or physical journal before too much longer.

a: (0%) Looks like DAW will hafta share with RDS the credit for showing FAPA the true score about itself. Thanx, DAW. Thanx, RDS.

TWILIGHT ECHOES: (24%) Corporal Joe's philosophy, such of it as is visible, is a nice one, but the proposition that it necessarily derives from fantasy is not adequately demonstrated. I think one could find many people with substantially the same outlook, yet without any appreciable background of fantasy reading.

I agree with you most of the way on ERBurroughs. I remember the adventuresome doings in the Valley Dor and the caverns of the Therns, in "The Gods of Mars", my first acquaintance with ERB, as pretty wonderful stuff. It still is entertaining fare to me, despite numerous rereadings. The Mars stories benefit much, I believe, from being written in the first person. Burroughs wrote one episode ("John Carter and the Giant of Mars") in third

person, and the result of Burroughs' telling the story instead of John Carter was sad indeed. I maintain that JC is a much better authority on Mars, and withal a better story-teller, than ERB will ever be! The only way, in my opinion, to read Burroughs' fantasies is completely non-critically. Then they are pure entertainment of the most delightful sort. But dissect them and they fall apart into an unbroken string (this is one for Koenig!) of impossibilities, inconsistencies, and an infinite series of miraculous escapes from hopelessly desperate situations. It is only the inimitable wit (John Carter does not deprecate his mervelous exploits, but leavens them with a certain drily grim humor, be it noted) of the master spinner of yarns enlarging (undoubtedly) on his own alleged experiences that can charm the reader into summoning enough credulity to assimilate such an outrageous fabric. Withdrawn into the third person, John Carter's personality disappears and he becomes just another impossible superman.

As a specific example of the basically improbable nature of these stories, how about that episode of the rotating tower which wound up "The Gods of Mars"? Logically considered, a little tinkering with the tower's mechanism (presumably it had a mechanism) or maybe brute force -- some Martian dynamite, perhaps -- should have resolved the situation with rather more dispatch than would passively sitting around the long Martian year waiting for matters to take their course. But apparently JC has become more of a Martian than he realizes and has fallen prey to the pressure of age-old custom and superstition in so meekly accepting his honey chile's dubious fate as quite inexorable. And so skilfully drawn is the atmosphere of the story that the mundane reader likewise accepts it without a murmur.

The Woji cover cartoon is one of the funniest I've seen in a long time.

THE MAG WITHOUT A NAME: (0%) I was horrified at the suggestion that Efty was stilted. Mighod, not that!!!

THE SCIENCE-FICTION SAVANT: (20%) What kind of a bat is Mary Helen's story about? It's not an account of one of the Floricons, I hope?!

A TALE OF THE 'EVANS: (42%) "Ol' Man Evans" by Old Man Mull...oops!.. Evans, is downright clever. Neatwist, that last paragraph. Your points on the psychological aspects of immortality are well taken. It seems obvious that a brain of limited, even though considerable, complexity cannot go on soaking up sense impressions indefinitely. Whether an approach to the saturation point would be automatically held off by a gradual process of forgetting, as you postulate, or whether it would eventually be reached and result in a Struldbruggish state of mental stagnation, is purely speculative, I guess. The forgetting process seems natural, but would it obviate the saturation? That is, do we ever really forget anything in the sense that the impressions are completely erased from the brain? Is forgetting an erasing or a covering-up process? Then, too, there's the fascinating consideration of just how much the human mind is able to assimilate and handle. Of course my viewpoint is hopelessly subjective, but I'd say 500 years' experiences at the least. At any rate I'd judge this period as the least in which I could get an adequate understanding of a few of the things I'm interested in. Immortality may be a curse, b u t by golly I'd like to try it out for a few centuries before passing judgment (if I were still mentally capable of passing said judgment at the expiration of the centuries!)

THE TIMEBINDER: (100%) The expression, "All men are created equal", isn't equivalent to "All men are entitled to equal opportunities", which is what you really mean and with which I'm substantially in agreement.

HORIZONS: (27%) The new system seems almost like the old in the reading. I suggest you stick to whichever form is easiest to turn out. . . . . .No, fortunately I have never witnessed an episode of "Zorro's Black Whip". What was the suspicious reference?

What can the proposed Fanuscript Cooperative do that the NFFF can't do as well or better? Your plan is to reimburse costs of worthy fan publications after they are completed. The NFFF is ready to do the financing from the manuscript on, or even to provide manual assistance for the publishing. Projects require only the approval of the Board of Directors to go ahead.

From what Swisher has told me, censorship has caused Campbell to come through the war much more grey-headed than he was at the start. The Office of Censorship has been giving science-fiction and Astounding in particular plenty of attention. Why do you think JWCjr's been giving us so much outright fantasy these last few years?

Three-dimensional movies, employing the system you mention, have been exhibited. I recall a showing of one in a local theater well over twenty years ago. B u t they have never seemed to catch on; the people who buy the tickets just don't seem to care to sit through a long program with colored glasses perched on their noses.

Ah, more epic japoetry. Raym bees genius! Let's have more Marianas Modicums (Modica?), too.

CPIves is out, I see, to belabor the 'human nature' hardy perennial yet more. Of course we haven't changed much biologically since the dawn of history, but our environment has changed and drastically in many ways. It's absurd to suppose that our ideas on such things as ethics are quite unconditioned by the society we live in. And I suspect that any biologist could p u t plenty of holes in the mouse vs. man argument.

PLAINTIVE NUMBERS: (88%) Much better than Take-Off. Particularly liked and in order of preference are 'The Realist', 'Epicuria', and 'Christmas Song--1944'.

DECIMAL CLASSIFICATION FOR STEF: (0%) I'm glad I got a copy of the original printing.

SUSTAINING PROGRAM, summer/f44: (26%) "A state is not a person." Wilhoyt repeated the ritual mechanically and bowed low before the Anarch. . . . . Yesterday's Ten Thousand Years was taken from memory from a stefnal source (de Camp, I think), not the tentmaker. I can't find the original so dunno whether the fault was there or in my memory by confusion with the Japanese "Banzai!" which somebody once told me translated as "ten thousand years". Does it, DeeBee? . . . . . I wonder, though, if there is a lowest layer for our statements of natural laws to touch. . . . . .For some reason the little book on theory of logic I read once dealt at great length with the syllogism but did not mention the sorites at all. Blush me, I thought sorites must be the plural of sorite, so that my query was like that of the lady who inquired, "What are Brahms?". . . . . The speed of light from a moving object is 186,000 mps regardless of the object's speed and regardless of the motion of the observer.

SUSTAINING PROGRAM, spring/f45: (19%) Being unable to determine whether or not 'B Pyehrm Hvlpxnkt' is admissibly fantastic, I'm ignoring it in computing the nf ratio for this issue. Avroint thee, B Pyehrm! . . . . . That five-story spherical steel structure with the portholes must be that special hospital where they keep the patients under a high atmospheric pressure... Yes, by gar, here's the clipping I pasted in my scrapbook fifteen years ago, and it sez it's in Cleveland. The thing looks for all the world like the Skylark. . . . . That's a remarkably good facial expression you put on the starveling ghoul. . . . . The use of condemned criminals for revivification experiments is a worthy suggestion, but one can imagine what a stink would be raised if some were brought back with damaged brains. . . . . As for the robot servants, Mr. Liberal, you know as well as I that they're equipped at the factory with Jeeves III personalities which make them all gentlemen's gentlerobots who'd be unhappy and inefficient in any other station. Degrading? Fout! Don't they draw their basic dividend and get to vote in the referenda, same as you and I?

SUSTAINING PROGRAM, summer/f45: (10%) I still think that 'sense of humor' or '..fantasy' describes them more closely than 'taste for...' Reason is that humor produces a very distinct type of pleasurable sensation. For example, it's not much like the pleasurable sensation I get on arriving home to find the latest FAPA mailing awaiting me. I question if those with scant sense of humor get much, if any, of this sensation, even though they may comprehend clearly, for example, how the humor in the Charles Addams cartoon arises from the incongruity of the single set of ski tracks passing on both sides of a large tree. Perhaps it's because I remember the girl in high school who would sit straight-faced through a recitation of the most obvious jokes. She was intelligent and would appreciate the point of a joke upon explanation, but it still would not seem funny to her. I think much the same case can be made out for fantasy. At least there seems to be a distinct type of pleasure in the consideration of the fantastic. And what I'm interested in is not the obvious fact that fen like fantasy, but in the nature of the sensations evoked by fantasy, and why they are pleasurable, and why (if such is the case) some people get them strongly and others do not. Offhand, this sounds like a tall order, much like the question of musical appreciation which Chan Davis finds puzzling. But humor has been fairly convincingly elucidated, and perhaps we can do as much for fantasy. Or am I obscuring the issue?

It's a common enough pastime, the derogation of the caliber of our Congressmen. I wonder, though, how much justification there really is for it, considering the paths by which they get into the position to be elected to office? As for your 'tail wagging the dog' objection, the presidency is to be an appointive rather than an elective office. There would be no provision requiring that a reappointment or replacement of the executive occur every four years, or with each new Congress. Such a review and possible shake-up of the administration and its policy would be the aftermath of a Congressional election only if the Opposition element in the new Congress were powerful enough to get a resolution, authorizing it, through committee. That is as it should be, and while the Congressman would no doubt go into office with a pro- or anti-administration commitment, it would seem unlikely that an incompetent or nonentity could ride into office on this basis alone, since a subsequent shake-up of the administration would by no means be a foregone

conclusion, and even if it did occur might not be powerful enough to touch the president himself, but might consist in curbing his powers or rescinding earlier Congressional approval of executive appointees, or merely be a blunt admonishment to the executive branch to get more in line with popular sentiment.

I can't recall any reference in Efty to C^2 except for an item in Yesterday's Years, some time after the Brass Tacks furore had subsided. As a matter of fact, I swallowed Smith's C^2 and Long's C^e without a protest on reading the stories.

MATTERS OF OPINION, #18: (89%) Has anyone yet had to wait two years to get into FAPA? I think about a year is average time, and, as I observed above, don't consider that period long enough to discourage anyone who's genuinely interested in joining. Wilsey I don't think offers a fair example. His interest has fallen off all along the line this past year. Felix has pined away, apparently, and Russell's activity in VAPA has been nil, except for some stuff through Shaw in the first mailing. Sinn's discouragement over the long line ahead is unfortunate, though, especially as it seems to be the same thing that's deterring Charles Tanner and no doubt other potential members of quality from signing up. These cases, as well as the attitude expressed by Lamb in the Winter Light, indicate that FAPA needs a little publicity aimed at correction of these misapprehensions loose among the outer fen. It should be pointed out that FAPA is not an ultra-exclusive bunch of snots; that for the seriously interested fan it's easy to fulfil admission requirements, and that though some waiting for a vacancy is necessary, this is not a matter of years, and; indeed, the waiting list situation is apt to improve, if anything, as the 1943-4 rush to join has moderated while the increased activity requirements just taking effect will keep the organization clear of deadheads and free their places for newcomers. If FAPA is getting an undeserved reputation for snootiness as it is, I fear that the establishment of waiting-list priorities will but confirm the notion.

Of more merit is your suggestion that activity (or for that matter any other requirement) be made waivable for just cause in individual cases. Only don't you think this can be safely and more simply left to a vote among the officers? Requirement of publication of the officers' decision along with a brief statement of the merits of the case should discourage misuse of the power. The trouble with the ten-member procedure is that the distressed brother would probably be turned out before an instrument of relief could go around. Write us an amendment on this for next election, Jack.

MATTERS OF OPINION, #19: (70%) What the choleric Mr. Watson forgot to mention, apparently, was that the FAPA Surplustock was not in his possession, Shaw having sent it instead to Ashley, for some unrevealed reason. . . . . The point about abstractions and collectives is well taken, though the upholstered chair still worries me summat. . . . . Does the epiphenomenalism question refer to the superimposed paragraphs? If so, I don't think they say anything that's incompatible with the doctrine, if that's what you're getting at. Don't be so damned subtle! And use more ink, nextime, too. . . . . For benefit of those puzzled by my standards for evaluating a fapazine's nf ratio, be it noted that I rate 'The World That's Fit to Live In' as admissably fantasy-referrent. A very good and thought-provoking essay, too, and a viewpoint with which I'm in considerable agreement. But is it not rather probable that an earth-type planet would have a series of glacial epochs due to variation of the carbon dioxide content of the

atmosphere, as Arrhenius hypothesized? And these epochs are long enough so that a life form capable of developing intelligence ought to have ample time and environmental pressure to develop it into an intelligent, scientifically-minded life-form. You and I and James Watt and t h e people who developed atomic power may be the result of an accident, but it looks like that type of accident is highly likely to happen in this type of world.

FAN-TODS: (18%) π This is the pi I accidentally left out on page 8, now thoughtfully provided for any who wish to put i t in the space I left for it there.

WALT'S WRAMBLINGS: (47%) I might enjoy a cantor, if he were in good voice, but not too early in the morning, please. The pirated AP item elsewhere this issue is an example of what titillates my oogy sensayuma. Should I see a psychiatrist, quick?

BLITHERINGS: (69%) Very fine cover. How has it been established beyond doubt that living organisms exist on Venus?

John W. Campbell, Jr. in one article of his series on the solar system (Astounding, 19, v (July 1937)) proposed that Pluto would be of value as a source of extreme cold for low-temperature chemical reactions, and even suggested, rather fancifully methinks, that synthetic life might be developed from studies of sensitive reactions slowed down to manageability under such conditions. While Pluto would provide ideal conditions for low-temperature work, it's to be wondered whether for much, if not most, of such work, more accessible bodies, or even a station in space might not suffice. Willy Ley mentions the idea, too, a coupla times in "Rockets". I don't think it would pay to go to the outer planets for liquid hydrogen and oxygen. Pluto is too far away, even if it has much hydrogen and oxygen, which is dubious. And too much rocket fuel would be required to astrogate in and out of the gravitational fields of the major planets. In fact, if hydrogen and oxygen were the standard rocket fuels trips to the outer planets would be practically impossible, anyway. And what else would we want large quantities of liquid H_2 and O_2 for, if not rocket fuel?

You've found your listening pleasure enhanced since your studies have taught you to follow in the music a composer's technique. Do you find that this detracts in any way from the enjoyment of compositions you may have enjoyed when musically untrained but find yourself unable to follow technically now that you've learned to listen that way?

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gibt now a very dull article entitled...

Is FAPA Getting Less and Less Fantastic?

H. C. Koenig, writing in the April issue of The Reader and Collector, takes exception once again to the long-standing FAPA policy of imposing no restriction on the circulation, in the official mailings, of material bearing no discernible relationship to fantasy. He points out how such a policy if pressed to its ultimate conclusion could lead to our organization's becoming altogether a nonfantasy amateur press association. In view of the fact that this potentially dangerous policy has been in effect now some nine years, or since the inception of FAPA, it has occurred to this writer that we should now make a survey to determine, if possible, to what extent the nonfantasy element has encroached upon our fantasy amateur press association, and whether there exists at present any serious trend of the organization away from fantasy.

The present article is an attempt at such a survey. Inasmuch as the task, if it is to be done adequately, is one of considerable magnitude, what follows here is not to be taken as a complete analysis nor are the conclusions drawn to be regarded as final; it is rather in the nature of a ground-breaking. In future issues of Efty I hope to go on evaluating the percentage of nonfantasy in each preceding mailing, and, time and space permitting, to rate the mailings thus in comparison with the mailings of past years, until we have a fairly complete set of data from which to conclude conclusively.

The method I am using to obtain my quantitative data is not elaborate. I simply go through each publication and measure the number of column-centimeters of text, with column width based on our more-or-less standard 8½-inch single-column page. Cover illustrations and interior dittos are included in the measure; covers carrying title but no illustration and contents pages carrying none of the body text of the publication are omitted. Verse is considered as occupying the full column width. This linear measurement, while not as precise as a word-count, has the advantage of rapidity, and, since the error introduced tends to cancel out somewhat in computing the percentage of nonfantasy, it is deemed suitable for the purpose at hand.

The columnage is then divided into that which is admissibly fantasy-referrent and that which is not. Discussions of organizational matters and of fandom in general are considered admissible since they are obviously pertinent to the pursuit of the fantasy hobby, even though without direct reference to the fantasy literature. Discussions of mundane subjects are rated admissible if they contain references to the literature or concepts of fantasy or if developed from the speculative-extrapolative viewpoint typical of science-fiction. No attempt is made to divide the discussion or article into admissible and inadmissible sections, since the relation of the fantastic to the mundane is both appropriate and desirable in our writings.

From the data thus obtained I compute the ratio of nonfantasy to total columnage in each publication. This ratio is the percentage

you find appended to each title reviewed in 'Revista' this time. Similarly the ratios for the mailing as a whole and for various breakdowns of the mailing are computed.

There follows, then, my report on the thirty-second mailing. To show how it works, I'm exhibiting the data for each publication in detail this time.

Thirty-second Mailing - Summer 1945

Publication	Total columnage cm.	Nonfantasy columnage cm.	Ratio of nonfantasy to total %
The Timebinder	483	483	100
Cry in the Night	26	26	100
Plaintive Numbers	230	201	88
Matters of Opinion, #19	164	114	70
Blitherings	125	86	64
The Voice	120	57	48
Walt's Wramblings	121	57	47
A Tale of the 'Evans	144	60	42
Horizons	300	80	27
Light	925	232	25
Twilight Echoes	264	63	24
The Science-Fiction Savant	46	9	20
Fan-Tods	539	95	18
En Garde!	446	79	18
Sustaining Program, summer/f45	456	45	10
Fantasticonglomeration	144	14	10
Canadian Fandom	550	44	8
Beyond	343	11	3
a	200	0	0
Decimal Classification for Stef	85	0	0
The Mag Without a Name	50	0	0
21 publications in mailing	5761	1766	31
19 publications under 100%	5252	1257	24
18 " " 75%	5022	1056	21
16 " " 50%	4733	856	18
13 " " 31% (average)	4348	682	16
8 " " 31%	1413	1084	77

Now let us examine further how the total and the nonfantasy columnage of the mailing is distributed among the above groups:

	Percentage of total columnage	Percentage of nonfantasy columnage
19 publications under 100%	91	71
18 " " 75%	87	60
16 " " 50%	82	48
13 " " 31% (av.)	75	39

The Fantasy Amateur and the FAPA Ballot, being devoted entirely to FAPA official business, have been omitted from the above tabulation, as have also Suspros for summer/f44 and spring/f45 and Matters of Opinion, #18, since these latter obviously belong in the mailings for which they were originally intended.

For comparison, to see if there is any evidence of a long-time trend away from fantasy, I have rated the twentieth mailing, of three years ago, in the same way as the thirty-second.

Twentieth Mailing - Summer 1942

Publication	Total columnage cm.	Nonfantasy columnage cm.	Ratio of nonfantasy to total %
Rochester-American Patriot	216	186	86
Sardonyx	515	314	61
Ramblings	184	111	60
Milty's Mag	138	74	54
Phanny	113	52	46
Guteto	38	17	45
Yhos	225	98	44
Agenbite of Inwit	100	35	35
Jinx	188	46	24
Sustaining Program	293	61	21
Ephemeron	25	5	20
Fanzine Digest	168	27	16
Horizons	259	28	11
(un)Illustrated Nycon Review	576	0	0
A Tale of the 'Evans	288	0	0
En Garde!	250	0	0
Reader and Collector	230	0	0
Scientifan	221	0	0
Science-Fiction Echo	92	0	0
The Madman of Mars	60	0	0
Inspiration	46	0	0
Walt's Wramblings	43	0	0
The FAPA Fan	20	0	0
23 publications in mailing	4288	1054	25
22 publications under 75%	4072	868	21
19 " " 50%	3235	369	11
15 " " 25% (average)	2759	167	6
8 " over 25%	1529	887	58

	Percentage of total columnage	Percentage of nonfantasy columnage
22 publications under 75%	95	82
19 " " 50%	75	35
15 " " 25% (av.)	64	16

Again FA and the FAPA Ballot are omitted. Also omitted are Fan-Damn, Fandomania, and Sci-Fic Variety, which I'd like to rate but cannot onaccounta I never received them. Included is the photographless Nycon Review which I hate to rate onaccounta it's a one-shot throw-in which is not at all typical of fapublications and is so huge it throws the rating for the mailing 'way off and makes the situation look worse than it may be. Its omission would raise the nf ratio of the mailing from 25% to 28%.

The 6% increase in the nf ratio for the summer 1945 mailing over the summer 1942 mailing makes it look as though there has been a trend to nonfantasy during the past three years, which if allowed to continue at its present apparent pace could conceivably bring us to Heck's 100% nonfantasy amateur press association within thirty-five years. The 11% increase in the percentage of the total columnage of the mailing which is found in those publications of lower than average nf ratio, despite the large number of 0%s in the 1942 mailing,and the 23% increase in the percentage of the nonfantasy columnage, indicates a tendency of the publications to be more alike in the amount of nonfantasy material included. But the ratings of only two mailings by themselves are insufficient to indicate any significant trends, since a single bulky, unrepresentative publication can change the mailing nf ratio by several per cent. In efty-next I hope to have ratings for all the mailings in between these two, though when I think of those 50-zine bundles we put out last year and of all that cosmic circle stuff I quail! What we need, though, is ratings for all the mailings since the beginning, but that is a job for someone whose file goes back that far. Don't all speak at once, please!

"Those damned, damned A-urians!"

- Efty's Reprint Section -

From Cosmic Digest, a Cosmic Circle Publication, Vol. 1 No. 1 p. 6.....

Man is still evolving toward a higher form of life. A new figure is climbing upon the Stage. Homo Cosmens, the COSMIC MAN, will appear. We believe that we are mutations of that species -- we; and all others who think and believe as we do, be they near or far. . . . .we are convinced that there are a considerable number of people like ourselves on this planet, if only we could locate and get in touch with them. Someday we will find most of them, and then we will do great things together.

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From Amazing Stories, Sept. 1945, p. 166.....

There are certain people who believe that something is about to happen on this old earth which is so stupendous that it is almost beyond imagination. . . . . And indications are that when all these people are united they will make an organization which not only will have an expert on every subject, trade, and profession, but that their pooled knowledge will be FAR IN ADVANCE OF ANYTHING THAT HAS BEEN DEVELOPED ON EARTH TO THE PRESENT DAY! Thus, we urge every reader who has such convictions within him, who believes there is a mystery connected with his purpose here on earth, who believes he has a work of some far-reaching scope to perform, who believes he is part of a great plan, and who is convinced that he knows things today unknown to science,to write to your editor, WHO IS ONE OF THOSE PEOPLE! THE TIME HAS COME FOR ACTION!

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