



PURSUIT

Vol. 2, No. 4. October, 1969

ORGANIZATION

The legal and financial affairs of the Society are managed by a Board of Trustees in accordance with the laws of the State of New Jersey. These officers are five in number: a President elected for five years, and four founding members — two Vice-Presidents, a Treasurer, and a Secretary. The names of the present incumbents of these and all other offices are listed in each issue of the Society's quarterly journal PURSUIT.

General policy and administrative matters are handled by a Governing Board which consists of the Trustees and four other officers elected annually. These are: an Administrative Assistant; a Managing Editor; and two Directors for Publicity and Promotion. The First Vice-President is the Administrative Director, and the Second Vice-President is in charge of the physical establishment. The Administrative Assistant is also the Librarian.

Implementation of decisions taken by the Governing Board is then prosecuted by an Executive Board. This is composed of a Standing Committee of nine officers, and an unlimited number of Regional Officers. The former are:

- (1) a Chairman, who also supervises all fieldwork;
- (2) a Deputy Chairman in charge of administration;
- (3) an Executive Secretary who acts as coordinator;
- (4) a Director of Research in Basic Science;
- (5) a Director of Industrial and Technological Relations;
- (6) a Public Relations officer, who also handles press relations;
- (7) a Liaison Officer for governmental and other official relations;
- (8) a Consultant on Scientific and Technical Publications;
- (9) a Supervisor of Regional Officers and Affiliates.

Finally, the Society is counselled by a panel of prominent scientists, which is designated the Scientific Advisory Board.

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Participation in the activities of the Society is solicited. All contributions are tax exempt, pursuant to the United States Internal Revenue Code. Memberships run from the 1st of January to the 31st of December; but those joining after the 1st of October are granted the final quarter of that year gratis. The means of participation are various, as follows: —

- (1) Honorary (including Founding Members) (Free for life)
- (2) Sponsors (\$1000, or more) (Free for life)
- (3) Contributing (\$100, for special privileges) (\$10 p.a. thereafter)
- (4) Corresponding (data withdrawal service) \$10 per annum
- (5) Contracting (for individual projects) (By contract)
- (6) Reciprocating (for other societies) (By exchange)

All of these except No. 5 receive all the Society's publications.

PUBLICATIONS

The Society publishes a quarterly journal entitled PURSUIT. This is both a diary of current events and a commentary and critique of reports on these. It also distributes a quarterly newsletter on Society affairs to members in categories (1), (2), (3), and (4) above. The Society further issues Occasional Papers on certain projects, and special reports in limited quantity on the request of Sponsors or Contributing Members. (Subscription to PURSUIT is \$5 per annum, including postage.)

IMPORTANT NOTICE

The Society is unable to offer or render any services whatsoever to non-members. (This does not, of course, affect private correspondence with Ivan T. Sanderson.) Further, the Society does not hold or express any corporate views, and any opinions expressed by any members in its publications are those of the authors alone. No opinions expressed or statements made by any members by word of mouth or in print may be construed as those of the Society.

Vol. 2, No. 4
October, 1969

PURSUIT

JOURNAL OF THE SOCIETY FOR THE INVESTIGATION OF THE UNEXPLAINED

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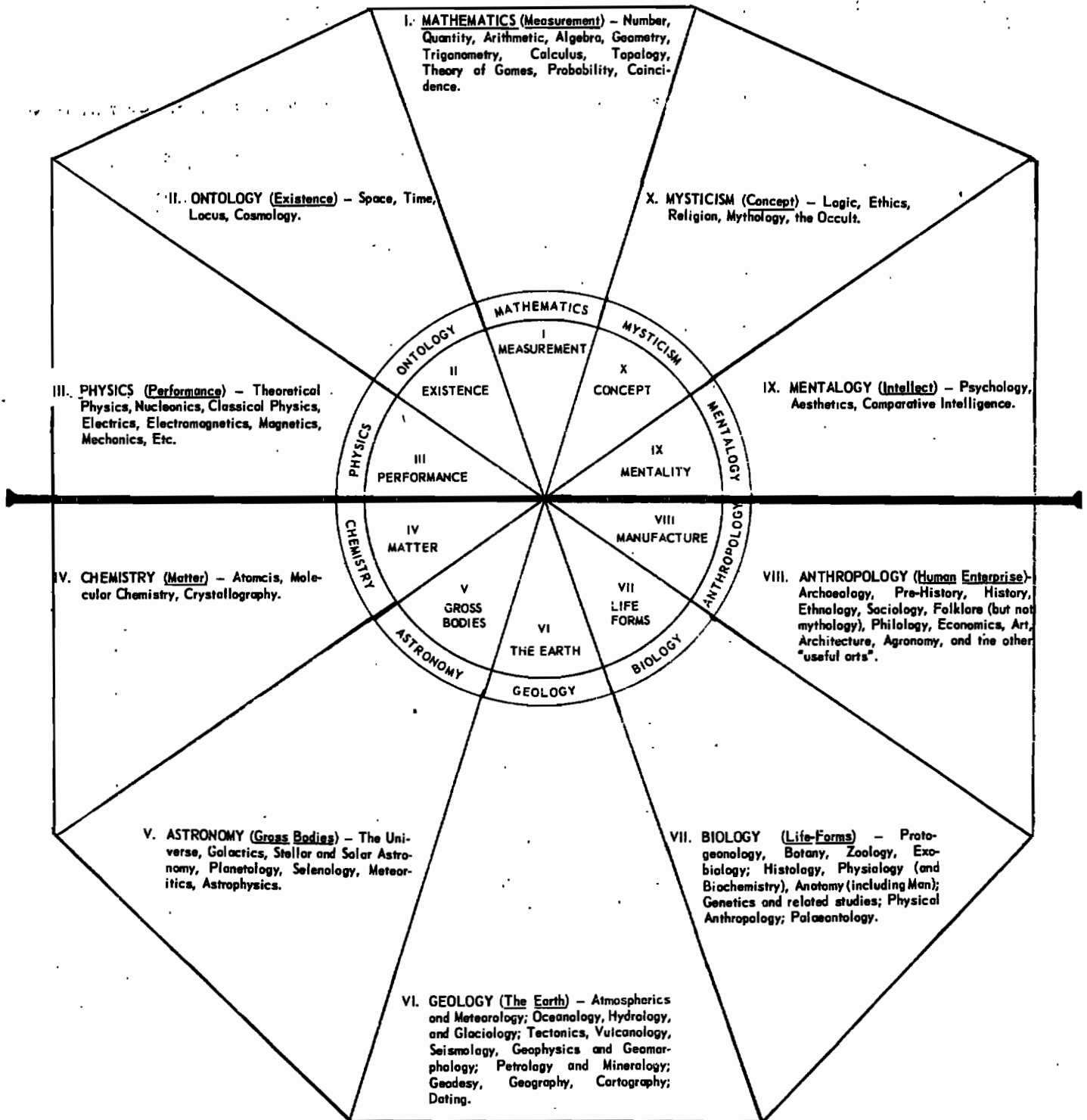
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THE INTANGIBLES



THE TANGIBLES

EDITORIAL

A MATTER OF SEMANTICS?

We had hoped that it would not be necessary to bring this matter up again, but it has become increasingly necessary that we do so. What is more, it looks as if we will have to continue to devote all the space that we can spare to reiterate what we now have to say, and for a long time to come, because, unless this business is straightened out and soon, a lot of people are going to get singed. For politeness sake, we are assuming for the moment that the whole thing is merely a matter of semantics. If it is not, our whole civilization is in an even worse condition than the wildest "protester" has so far suggested. Regrettably, however, there can be no question but that the semantic confusion is due to plain outright lack of education, or mis-education, and much more likely the latter.

We are referring to the absolutely preposterous procedure of classing the forteen aspects of scientific enquiry — namely those segments of knowledge numbered I through VIII on the chart on the opposite page — with Segments IX or, more especially, with X. By the same token, to class anything in the last as "science" displays not just ignorance but distinct indications of chicanery.

To be explicit, to class such forteen aspects of the sciences as; — Mathematical Paradoxes, in I; Coincidence, in II; Quarks, in III; Muonium, in IV; Pulsars, in V; Sky-quakes, in VI; Yetis, in VII; and the Assyrian battery, in VIII, as "occult" or "mystical", displays not only lamentable but deplorable ignorance. The same may be said of those who would class UFOs (per se), poltergeist manifestations, brain control, and other such tangible items in Segment IX. That these matters have aspects referable to the expertises grouped in Segment IX is only too true; but to muddle an UFO with an hallucination, or a poltergeist manifestation with a ghost, or electronic brain control with mind patrol, indicates only an abysmal lack of understanding of the nature of these items.

Everybody is entitled to "think" what they like — at least so far — but as we have constantly pointed out, the Age of Belief is over. Today, in order merely to survive, we just have to know. Facts have replaced beliefs as the basis of survival. Therefore, we had better start, as the old saying goes, "getting our facts straight"; and we had all better begin by learn-

ing the rudiments of the classification of facts and how to separate them from beliefs.

Our Society (S.I.T.U.) was established by a few dozen pragmatists who, through their daily work, had learned this simple fact. There are now five hundred of us. There are many scientists and topnotch technologists with us, most of whom are household names; there are an equal number of professionals in the publishing and mass media fields; and what binds these to us ordinary working stiff, and particularly to that very high percentage of our membership that is under 25 years of age, is just this appreciation of reality.

We, as a Society, do not and have never interfered with, or even criticized any other organization or its policies, though we naturally reserve the right to differ with their objectives and statements. Further, we recommend other organizations strictly upon their own statements of interest. We demand therefore that all others, from government departments to the publishers of kooky "fanzines" treat us — in print and by word of mouth — with similar circumspection. During the past year, however, we have received a steady flow of written (and signed) evidence that other organizations — ranging from some academic establishments who ought to know better, to private outfits which don't know at all — have had the audacity to class us with the "occultists and mystics". These people don't seem to know the laws of their land, and they are hereby advised to acquaint themselves with the terms of reference under which a society such as ours is chartered, and in accord with both Federal and State requirements. This is, in fact, a fair warning.

Our Society is incorporated and registered as a scientific and literary organization, indulging also in humane works for animals. We are not registered as a religious organization, and we do not concern ourselves with anything in Segment X. For this reason, stating that we do so is actionable. Quite apart from this, those who so glibly state that we are involved in such activities might perhaps consider the following.

This is a free country. The power of the press and other mass media is really extraordinary. People who fail to read our charter and our published objectives should be a little more circumspect.

 Department of Geography

"Everybody, says the knowledgeable Parisian weekly Jeune Afrique, knows the French are poor at geography: 'Ask one where Nouméa is and he'll answer: "Nouméa? I don't know!" That is, unless he had read Figaro on November 22nd. That great daily announced a "snowman" was being sent to New Caledonia as a stunt to promote French tourism. Just think, one of its reporters wrote: "Snow in the heart of Africa!" ' " (!) (ATLAS, Feb. 1969)

I. MATHEMATICS.

As our name implies, we are primarily interested in the unexplained aspects of existence and with particular emphasis on those departments of enquiry which are commonly called the natural sciences. Further, it is our advertised intention to disseminate information on new discoveries in these fields. We are not sure if this bit falls into the category of the natural sciences at all, mathematics being so superior and exclusive, and we are fully aware that it is not a new discovery in any way; nonetheless...

This began when our executive secretary who puts this journal to bed, prepared a chart for ready reference in making line, word, and character counts for a standard page of the text. This is a somewhat irksome task as she (M.L.F.) receives original copy off at least four different typewriters, each having a different typeface and character mileage. From one of these machines the number of characters, after rectification, was 67, so, simply to save endless multiplication, she prepared a chart. This went as shown below.

67	268	469	670	871
134	335	536	737	938
201	402	603	804	1005

Reading across the lines from left to right you will see several regular progressions.

Having observed this, MLF completed the chart for the 60 lines per page in short order and without having to add and multiply for each figure. Delighted with this 'discovery' she appealed to the rest of us for an explanation. This naturally was not forthcom-

ing as our only mathematician (M.R.F.) was still in the Navy, so we transferred a request for enlightenment to our adviser in this most esoteric department of knowledge — Dr. Martin Kruskal. His reply was a delight and is herewith given in full: —

"There's nothing especially remarkable about the number 67, but $3 \times 67 = 201$. So if you add 67 successively and look at every third entry, the two-digit numbers 'on the right' keep increasing by 1. And $67/100$ is very nearly equal to $2/3$, the numbers 'on the left' (obtaining by always ignoring the two rightmost digits) increase by 2 every 3 steps, that is by 1 alternately per step or per two steps. You would find a similar effect by adding 33 successively, since $3 \times 33 = 99 = 100 - 1$, though now the number on the right would decrease by 1 every third step and the number on the left increase by 1 every 3 steps. Or, if you would add 43 successively, because $7 \times 43 = 301$ you would find that every seventh entry increases on the right by 1, while on the left the successive entries increase by 3 every 7 steps, that is by 1 per

1072	1273	1474	1675
1139	1340	1541	1742
1206	1407	1608	1809

two steps, per two steps again, and then per three steps, in rotation. Many other numbers would give more or less similar effects."

Playing with numbers is great fun and may be indulged by anybody who can add. It has been so indulged since man began to count, which apparently started with our ten fingers, proceeded to the use also of our toes, and then usually went on to say things like "more", "lots more" and, as the West Africans say facetiously, "make-'im too too much". All kinds of jolly things emerge from so playing around with numbers and, of course, it was not long before philosophers and other deep thinkers began to wonder what the underlying causes of and for these might be. Hence, mathematics. Result was that these mathematicians had to set up a set of rules to work by, since there were, and still are, all kinds of different ways of adding and dividing, and much of this was done in the early days without the concept of the zero. That this happened to be designated the right "pinky", counting from left to right, was actually quite fortuitous. If we mammals had had six fingers per hand we might well have had a much better system, namely the duodecimal, with zero being our 12, i.e. one, two, three, four, five, six, seven, eight, nine, Unh, Uh-unh, ten. Given such a base-twelve system we could divide into both quarters and thirds precisely, and do away with all this $33 \frac{1}{3}$ rd and 66.6% nonsense.

And anent all this, we reproduce herewith a photograph of a chap who was lucky enough to be born with six perfectly normal fingers on each hand. Could this be the reason for his 'profession'?



Photograph of hands of Gerald Garde of Lyons, France, currently in jail for picking pockets.

II. ONTOLOGY

This fraternity seems to have been considerably piano recently, possibly because the cosmologists appear still to be exhausted by the "big bang" versus the "continuous creation" hypotheses. We don't know if the following qualifies as cosmological but it is certainly cosmic in its implications. We seem to have come full cycle.

(Quotes): "Perhaps the American commentator aboard the USS Princeton had the last word on Apollo 10, as the dizzyingly/sophisticated complexities of modern electronics splashed it down dead on time and place. (i.e. Time and Locus) He said it had all gone like clockwork." (PUNCH, England)

No further comment.

III. PHYSICS

RATS AGAIN

But what are they doing here? Simply that, once again, these pestilential creatures are involved in an aspect of physics that is of the most profound interest to fortians. This report is of particular significance in view of the medium through which it was first publicized. It came to us from Peter Kamitchis. (No. 66), and was published in Column 1, on page 1 of no less than the Wall Street Journal, of the 25th of August of this year, and was headlined: "Life in Lombok - Hunger, Starvation Are Day To Day Worries on Plague-ridden Isle", and datelined Batudjai, Lombok, Indonesia. The essential portions of this report read as follows: -

"On the outskirts of Batudjai, a half dozen farmers are squatting in a ricefield, chipping lazily at the dry earth. The object of their attention is a rat hole. 'Most of the rats have left this field because they have eaten all the rice,' says one elderly man... 'They came six months ago, before the rains stopped', says another farmer. How did they come? 'They fell from the sky'. From the sky? 'Yes, in bunches of seven and then they spread out across the land', the farmer adds matter-of-factly. 'They are led by a great white rat as large as a cat,' says a third farmer. 'The white rat is very smart. It knows when we plan to harvest. If we plan to harvest a field the day after tomorrow the rats will eat the field tomorrow night. If we plan, in secret, to harvest the field tomorrow then the rats will eat it tonight.' A visit to the home of the village chief, the only fat man to be seen in Batudjai ('He is of a higher caste,' explains a villager) repeats the farmers' story. Led by a white 'king of rats as large as a dog' the rats appeared last December, falling from the sky in bunches of seven, he says. As they landed, the rats separated and spread in seven different directions, he says. Some farmers saw this happen, says the chief, and several nearby farmers nod."

The significant statements in this report are italicized by us and they are the more astonishing for having appeared where they did. More power to the Wall Street Journal for even so much as mentioning ITF (i.e. teleportation) and a FAFROTSKY (i.e. a "fall" of something 'unauthorized' from the sky) in

the same paragraph, and on page 1. We certainly never expected to live to see anything like this. But to clear some of the entangled corollary aspects.

First, the biological: namely, what rats? Were they the common Black Rats (Rattus rattus), Brown Rats (Rattus norvegicus), or another of the several hundreds of species now identified? It would be nice to know because the first two have constantly cropped up in alleged cases of ITF. (See PURSUIT, Vol. 1, No. 4, p. 5, etc.) There are some rats, notably the genus Cricetomys of equatorial Africa, that are indeed as large as small cats and dogs but the implication in this story is that the so-called "King" rats were much larger than the others. Also they were white. Albinos occur in all animal species it appears so that the color, or lack of it, of these so-called "kings" is not too odd. However, that they should be so much bigger is very much so. (It must be understood that a so-called "King Rat" is in no way the same as the horrible Rat-Kings which are bunches of huge rats tied together by their tails and maintained by rat colonies.)

Another extraneous item to this report would seem more likely to have a mythological origin and connotation. This is the interjection of the mystical number seven, so anciently ingrained in the animism of the East Indies, and prevalent also in Muslim tradition.

Rats have a habit of appearing suddenly and in what often seems to be a most mysterious way, and to be quite uncanny on occasion. This usually happens when they run out of supplies which, in the case of the house rats, is when people do so. The greatest rat exterminator who ever lived, Mijneer Jean Olischlager of Maastricht, Holland, demonstrated that for every rat you see at night there are nine more in the immediate vicinity. Thus, the sudden appearance of swarms might well prompt the belief that they fell from the sky. We would have thus written off this report if it were not for the constant allegations that caged rats teleport. Besides, the farmers of Lombok are not nearly as superstitious as one might suppose, and they know the ethology of their local animal life very well indeed. The "falling from the sky" is directly contrary to normal behaviour of rats which

pop out of the ground. Thus, this report has a double significance.

It is perfectly permissible for everybody to go on saying that nothing falls from the sky except meteorites and bits and pieces of our rockets, but all manner of other objects and things like blood, flesh, gases, angel-hair and so forth continue so to do. What is more, these items are now being reported in orthodox journals. Isn't it about time that somebody collected the reports on such falls and computerized them with a view to some statistical analysis? And,

to this end we once again herewith urge that Member No. 42, Mr. Ronald Calais, do just this, as he seems to be the best informed person on this matter.

Basic question is: Are what appear to be "falls" an aspect of ITF or instant-transference? If they are, they might well form a most worthwhile approach to the whole matter of teleportation, and this is definitely a purely physical matter, regardless of the items teleported, or whether they "fall from the sky" or just appear. By what physical process do they do so — if they do?

IV. CHEMISTRY

MUONIUM AND YOUTH

We are well aware that there are those, including even some of our members, who are not clear as to just what the intent of this journal is. They seem to think that they will find in it original technical papers. They won't because we have not yet reached that stage though we aim toward it and will implement it when some more formalities and legalities have been dealt with. Meantime, we profess to be only a journal of commentary, second-hand reportage, and critique; and in the last case verging on the world of protest! Thus, it is more than likely that at least some of our members will have already read of at least one of the items upon which we do so comment. Nonetheless, our major objective is synthesis and the crossing over and passing over of information of a current nature between all fields of interest in the tangibles of the natural sciences and also such items in what we call the intangibles that appear to us to make some sense. We have a modest example here.

The authoritative publication Science News, in its 4th October issue of this year, devoted a page to a most noteworthy report entitled "Muonium Metal". The implication of this 'discovery' will be given in a moment, duly vetted by our adviser on basic chemistry, but we welcome this as an opportunity to air something else which does not normally fall within our purview. This is a frank salute to what is euphemistically called Youth, and more power to Science News and the scientists and others concerned for so plainly stating the facts of this case. In this respect one Dr. D. John Pastine's name ought to go down in history and be enthroned by the upcoming generation. The story goes as follows.

Apparently two years ago a young man, then aged 15, took on a summer job under this most estimable Dr. Pastine in the Naval Ordnance Laboratory in Silver Springs, Maryland, under a National Science Foundation grant. This young man, now 17 years old, tackled the problem set (theoretically) by contemplation of the possibility that certain changes could be made in electrons. This consideration was succinctly expounded by Science News as: "The characteristics of materials depend on the electrons in their atoms

and the forces that bind the electrons to the nucleus. If the electrons could be changed, physical properties — such as boiling point, melting point and density — would change as well. Paul McKenna set out to find exactly what other changes would follow change in the electrons."

Apparently this admirable young scientist figured out the possibilities and then suggested their application to cosmic chemistry. His findings: Starting from the assumption that "the single electron of (the) hydrogen atom (be) replaced by a Mu-Meson, which is 200 times as 'heavy' as an electron," he demonstrated by the appropriate calculations that, should such a substance be able to exist, it could "exist either as a solid or a liquid, provided environmental conditions were right and there was a steady source of muons nearby to replace them as fast as they decayed". The article continues: "Mu Mesons are among the strangest inhabitants of the elementary particle menagerie. Except for their mass they are exactly like electrons, and physicists can see no reason why they should exist at all. They are so ephemeral that, up to now at least, no one thought they had anything to do with stable matter."

"Muonium is hard to make because mu mesons are created only in high-energy experiments and they disappear radioactively in two-millionths of a second.

"Despite terrestrial muonium's tendency to disappear, the theoretical calculation made by McKenna and Dr. Pastine indicates that muonium could exist either as a solid or a liquid, provided environmental conditions were right and there was a steady source of muons nearby to replace them as fast as they decayed. The calculation shows that muonium is highly cohesive and that it would form a solid metal with a melting point of 65,000 degrees K. and a boiling point of 250,000 degrees K. Solid muonium does not exist on earth because it also requires density of hydrogen of 10^{23} atoms per cubic centimeter and a pressure of 2 million times the earth's atmosphere. Muonium is also very dense, 28 million times the one-gram-per-cubic-centimeter density of water. 'If any existed on earth,' says McKenna, 'it would sink right through.' But it could exist on a star, and that, suggest Mc-

Kenna and Dr. Pastine, is where solid or liquid muonium may be found. 'I'm convinced it exists,' says Dr. Pastine.

"Young McKenna is already the senior author of a paper (concerning the Gruneisen parameter for aluminum) published in the JOURNAL OF APPLIED PHYSICS. This grew out of the previous summer's work with Dr. Pastine."

Many of the facts given above are of course considerably too technical for most of us but, as interpreted for us, the whole bit would seem to demonstrate one of the first attempts, however theoretical

it may be, to postulate the reasons for matter in forms other than those known in our tiny spot in the universe. Matter in certain types of stars has been calculated to weigh up to ten thousand tons (by our weighing system) per cubic inch but nobody previously got going on the "how" of this sort of suggestion. We wonder what the "space boys", should any such really exist and be monitoring our efforts, think of such erudition and clear thinking. Maybe we are getting somewhere; and we hope only that this Paul McKenna will not be pensioned off with a Nobel Prize before he stops thinking.

V. ASTRONOMY.

QUOTES OF THE MONTH.

No. 1. "Still, the people of China occasionally manage to steal glimpses of the outside world. In recent weeks, Canton has been swept by rumors that the Americans landed men on the moon. Hardly anyone takes that report seriously, and the authorities are attempting to find out who planted the (dirty) Capitalist Lie." NEWSWEEK, 13 Oct. 1969.

No. 2. "'The whole thing is a fake,' said the banker member of our group as we watched the still-unbelievable moon landing on TV that night of July 20. He was deadly serious. 'It's a government trick. They shot that whole thing out on the Nevada flats last spring and now they're foisting it off on us so they can boost our taxes again without getting any squawks.'" Editorial by Richard Dempewolf in SCIENCE DIGEST, October, 1969.

Well, everybody is entitled to his own opinion, even behind the bamboo, iron, or yashmak curtains, but we must once again point out that the age of "belief" is over. As that jolly little mathematical comedian, Tom Lehrer, sang in one of his profundities a couple of years ago: "To spend two billion dollars to put some clown on the moon"....Well, they did, Maoists and American bankers notwithstanding; and, might we be permitted to say, "Damned good show; what"? However, as we have also pointed out several times, the age of reason dawned with the little incident at Hiroshima and it is about time that all of us stopped braying and got with reality instead of sounding off.

We went through a steady stream of braying about the Moon right up to the time that we landed said poor 'clowns' thereupon and got the first real answers to a number of questions. We're now going through the whole routine again vis-a-vis Mars. Oh yes indeed! It's covered with a four-hundred-foot layer of fine dust; it's crisscrossed by 'canali'; it's got no atmosphere; it's got an atmosphere but there's no Nitrogen in it; the polar caps are pure carbon dioxide; they're only a thin layer of hoarfrost; they're not — they are ski-slopes; the planet's dead; it's alive; it's all flat

desert; it's covered with vast mountain ranges; and so on and on, ad nauseam. Why, oh why, don't these clowns shut up until they get some real answers? Speculation is not only great but it is the very essence of progress in thinking. Without it we would never develop an hypothesis and, lacking that, we would never get a theory; and, without a theory to work on, even the technologists would throw up their hands. So why can't we work on what we have obtained from this really fantastic and competent achievement of landing two poor "clowns" on our sister planet?

As more or less everybody realizes, or has at least been told, it will be a long time yet before the examination of the rocks brought back from the moon is completed. Meantime, however, the matter has become considerably clouded by some unnecessary speculation, so that it is very difficult to ascertain just what we have discovered. We recently inspected an exhibit of some moon rock specimens in the Field Museum in Chicago — a vilely lit display with very small and weak lenses through which to view the samples — but which are surrounded by a large series of magnificent photographic blow-ups. Unfortunately the descriptive labels for these are placed on adjacent panels so that even the petrologist who conducted us around was sometimes hard put to it to know which referred to which. The overall impression gained was that, while the moon has a rock-strewn surface and its crust appears to be what we call solid rock, its composition is basically quite unlike that of our planet.

This brings up a most fundamental question that has already been widely debated; namely, (1) did it originate from our earth and then change radically due to different circumstances, or (2) were we both created at the same time but separately and then went our separate ways physichemically, or (3) was the moon a rogue body that was captured by our solar system and then by our earth? All three are possible though the first is now considered the least likely, and the notion that the Pacific Ocean is the hole it was ripped or blown out of is almost as dead as any theory can be. The second suggestion is possible

but calls for the erection of quite a large number of corollary theories as to the effects of reduced gravity, lack of atmosphere, radiation, and other factors to account for the very basic differences in the composition of the surface of our twin planets. The third suggestion does not call for any such elasticity in theory but, curiously, it has so far been rather deliberately played down.

There is an enormous amount of junk wandering about in the universe, both gaseous and solid and possibly even plasmic and liquid. This would seem to be more concentrated in galaxies, and therein tend to get caught up in solar systems; and, in both cases, because of the enhanced amount of gravitational forces concentrated in them, compared to intergalactic space. Let us not forget that the galaxies are roaring through space themselves like vast brooms, while all the matter within them is likewise rushing headlong around inside them. Within this maelstrom, solar systems are doing likewise on a lesser scale. Given time enough, therefore, the universe will get a pretty good spring-cleaning whether it started with a big bang or keeps creating matter. The chances of capture of planetary-sized rogue bodies by stars is therefore rather high, and that by planets even higher still, especially when it comes to the little stuff. Which brings us to the planetoids (previously and quite erroneously called asteroids) of our solar system.

These constitute a subject for literally endless debate and again with virtually the same three leading suggestions; to wit, (1) that they are remnants of a larger body that blew up, (2) that they were formed at the same time as the rest of the planets but have

not yet coalesced into a single body, or (3) that they have been captured. In their case, however, the last is the least likely because of their disposition in our solar system more or less all swirling along a single path, despite their wide variety of size, and also just where old Bode's Law would place a planet of just about their combined mass.

It has therefore been suggested that rogue bodies that are gathered up by a solar system meet with different ends due mostly to their comparative size. Little ones, from meteoritic dust to the biggest astrobombe short of "moon-size" (according to the size of the planet they approach), get sucked into a planet. The larger ones, according to their speed, inclination, and so forth are captured, and become satellites. Very large ones, or those with great mass, may just pass on through on their appointed courses unless they hit something on the way. (Shades of Velikovsky!) Our moon would seem to be at just about the upper limit for capture by a planet of our size. But the great debate now is just when was it captured?

They are getting on with the laborious process of dating the moon rocks and there have been hints that these are older than the surface rocks of the earth. At the same time, we have to wait for samples of the solid rock below the surface before the overall age of the moon as a whole may be assessed. If it proves to be either notably older or younger than us, it would argue very strongly for its being a captured rogue body from another part of the universe. It would also land a body blow to the big bang theory of creation, but perhaps we will have to wait for Mars-rocks before we can go that far out.

VI. GEOLOGY.

MUCH ABOUT MUCK.

In a fine report on a highly informative talk given by a Mr. E. M. Benson, Vice-President of the North American Producing Division of the Atlantic Richfield Oil Company, to the Long Beach Petroleum Club of California on the new oilfield in northern Alaska, there appeared a rather noteworthy quote. This read: — "Drilling down through the 1000-foot thick frozen earth can produce some surprises. One of our wells brought up an 18-inch long chunk of tree trunk from almost 1,000 feet below the surface. It wasn't petrified — just frozen", the oil company executive said. The reason this statement is noteworthy is not because the reporter seems to have been impressed but rather that a man of Mr. Benson's experience — and he started as a worker in the fields — should use the word "surprise" in this case.

We are going to hear a lot about this frozen earth

or 'muck' from now on because of this vast oil strike on the Arctic shores of the Alaskan peninsula. It is indeed full of surprises but a tree trunk in it, and even at a depth of a thousand feet, is not at all surprising. What surprise there was on this occasion was probably due to the fact that it came to light in an area devoid of trees today and hundreds of miles from any forest growth. The nature of muck is not generally understood, and the theories on its origin are even less widely known.

Frozen soil, as diametrically opposed to ice on the one hand and rock on the other, constitutes one of the greatest mysteries on our earth's surface. What is more it covers no less than one seventh of the land surface of the earth, and all of it encircles the Arctic Ocean and lies within the Arctic circle at what we consider the top side of our planet. Actually, it is a form of 'rock', despite its very mixed composi-

tion, at least to the extent that a tillite or pudding-stone may be. The reason for stating this is that the material that binds it is water, and water in its solid form as ice is also technically a rock and behaves as such. When this frozen soil melts it results in an appalling and often stinking sort of soup composed of goo with silt, sand, pebbles, and boulders, often with masses of preserved, semi-decayed, or fully decayed vegetable and animal matter. This is what is called "Muck".

A world map of the distribution of this frozen soil and muck reveals several very interesting things, the most outstanding aspect being that it lies on low, level plains or tablelands. Unless it was caused by some cosmic forces that we have not yet detected, it would appear to be a subaerial deposit derived from massive erosion of higher grounds and with steeper slopes. However, its depth in some places, and over enormous areas, has always caused even the most open-minded geologists to boggle. The Russians, who own the major land areas covered by this substance, have conducted prolonged studies on it for half a century and have in some places drilled down to over 4000 feet but still without reaching solid rock. The conundrum is, of course, how do you get that thickness of what is manifestly surface-derived material if it is the result of mere run-off? To this there would appear to be but one answer.

First, the lands now blanketed with this material must at one time have been much higher above sea-level, so that stuff could be deposited upon them, rather than running on beyond and out into the sea. Alternatively, the sea level would have to have been much below that of today; but in this case are we asked to suppose that universal sealevel was not too long ago, geologically speaking, more than 4000 feet lower? If neither of these situations pertained when the first, and lowest layers of this muck were laid down, just what were the conditions, since no such strata could be laid down even under shallow, tranquil coastal seas? To suggest that the uplands from which this stuff came were much once higher and had a steeper run-off is begging the question, and doesn't help at all. Yet, there is the bloody muck lying all over the lot and to enormous depths. It has to be accounted for.

Let us next turn back to Mr. Benson's remark. This was to the effect that finding a section of a fair-sized tree trunk a thousand feet down in this frozen muck was a 'surprise'. It may indeed be to the average person who has not had cause to investigate or read about this incredible natural phenomenon, but it comes as no surprise at all to geologists who have specialized in the surface constitution of the Arctic regions. A mere section of tree trunk is a mild relief compared to some of the things that the muck has yielded. In the New Siberian Islands, for instance,

whole trees have turned up; and trees of the family that includes the plums; and with their leaves and fruits. No such hardwood trees grow today anywhere within two thousand miles of those islands. Therefore the climate must have been very much different when they got buried; and, please note, they could not have been buried in frozen muck which is rock-hard, nor could they have retained their foliage if they were washed far north by currents from warmer climes. They must have grown thereabouts, and the climate must have been not only warm enough but have had a long enough growing period of summer sunlight for them to have leafed and fruited.

Ergo, either what is now the Arctic was at the time as warm as Oregon, or the land that now lies therein was at that time elsewhere. Geophysicists don't go for an overall warming of this planet to allow such growth at 72 degrees north; otherwise everything in the tropics would have boiled! Thus, we are left with the notion that either the whole earth's crust has shifted, or bits of it have drifted about. But then comes another problem — the Time Factor.

Along with the plum trees, and other non-arctic vegetation there are found associated animal remains of many kinds. One of these is the famous mammoth. Now, everybody has somehow got the totally erroneous idea that these great hairy beasts are found in ice. Not one has ever been found in ice: they are all in this frozen earth or muck. Then, just because of their layer of fat and their covering of long hair everybody likewise thinks that they were arctic types. A moment's consideration will disclose just how ridiculous an idea this is. A large elephantine needs some half a ton minimum of fresh green food a day to maintain itself, and there were apparently (at least according to the number of their bones and bodies that have been found in the muck) hundreds of thousands of them up till only a few thousand years ago. For a minimum of eight months out of the year there is nothing for such large animals to eat north of the tree line in the Arctic, though some Barren Ground Caribou and a few Muskox get along by scratching through the shallow snow to get at tundra moss and lichens. Therefore these elephants must have migrated far south for the winter or the climate must have been much milder than it is today, or the lands they lived in were elsewhere.

But not even this pinpoints the reason for the muck or explains just how all the junk that is found in it, even down to thousands of feet, got there. Mr. Benson's tree trunk may not have been a surprise but it is still a mystery in one way. And we should contemplate the many aspects of this mystery in order to be ready for the many more enigmas that we are going to be told about as our technicians slice into the far north.

NOBODY DOES ANYTHING

As the old saw has it: Everybody complains about the weather but nobody does anything about it. Well, we are at least trying to do something about it now what with cloud seeding and huracan chasing but we still have to make a real concerted attack upon the Climate. The British never even attempted to do anything about the former; how could they, poor souls, in view of the latter into which they were born. Today, they just grumble in a mildly philosophical kind of way and hope for next summer's three days of sunshine. (The westcoast Norwegians, incidentally, don't even bother to grumble. How could they with an average of 350 days of rain per annum in places like Bergen?)

Nevertheless, the vagaries of the weather have been duly noted by those inhabiting the western fringe of Europe throughout the centuries; and, apparently, noted with considerable complacency. We stumbled across a delightful example of such phlegm in the latest issue of, no less than, the Journal of the Royal Geographical Society of London (Vol. 135, June, 1969). This appeared in a review of a book entitled London Weather, by J. H. Brazell, published by H. M. Stationery Office, in 1968, written by none less than Dr. J. R. V. Brooks. As quoted by this reviewer, this book stated blandly that: "There are three sets of appendices. The first reads like a chronicle and catalogues historically-recorded weather in London pre-1841. The observations that, in A.D. 4, 'a rain of blood lasting five hours' and in A.D. 131 'The Thames dried up for two days', suggest that the peculiarities of London weather are not confined to the twentieth century. It is also interesting to note that no fogs are recorded anywhere before 1663". This book, incidentally, displays statistics on "all agents of weather from A.D. 4. to 1964".

Accustomed as we are in this Society to being confronted with the unusual, unexpected, unexplained, and often seemingly inexplicable, we must admit to being wellnigh flummoxed not just by this quote but by its three quite separate implications. Let us take these one at a time.

(1) So it rained blood for five hours? How very jolly. Rains of blood are old-hat to fortune-tellers and have been recorded throughout history and from all over the world. Naturally anywhere within a thousand miles of a desert these incidents are immediately laid to "desert sand" borne by rainstorms. In western Europe it is the Sahara that is naturally picked as the culprit but nobody has ever yet found a sufficiently substantial area of red sand anywhere in that vast region; nobody has pinned down a single wind blowing from anywhere in it northwest and thus contrary to all prevalent and local winds at all levels; and nobody has ever identified the red material in said

falls. In fact the whole notion is rubbish. On the other hand several rains of a gooey red substance have been properly investigated and analyzed in a modern laboratory — notably in Italy — and proved to be organic (not sand) and to contain red corpuscles that looked most likely mammalian. (They had a red rain in England last year.)

(2) The Thames dried up for two days, did it? Well, now really! This river is admittedly a rather dreary little trickle when it is compared with the average river throughout the world, and it is quite hard even to find on a world map but, as it passes through London, it is quite substantial for the size of the country. Further, it is really rather deep. Also, it is tidal. Thus, in order to "dry it up" you would not only have to cut off all flow from the hinterland, which by the way has a very high rainfall throughout the year, but somehow stem the high tides of the Channel and hold back all the water pressure of the North Atlantic! We don't quite see how both such necessities could have been accomplished in A.D. 131 but, if the British said that the result recorded happened, who are we to say them nay? Perhaps the whole London Basin rose up for a couple of days and then sagged again. There have been some very upsetting seismological upheavals in Britain even in recent years and they have been typically 'soft-sell' efforts, hardly appreciated even by the locals until they woke up to find that the sea had just taken a day off, off-coast-wise. Well; that is that report.

(3) So we come to this really astonishing statement that there were no fogs recorded until 1663 with the pertinent rider "anywhere". Just what does this mean? Anywhere in London or just plain anywhere in England, or the world, or just what? Very intriguing. And how, pray, could such a thing be? Does it mean that until the burning of coal became the thing the oceanic mists that customarily roll in over the London basin from the southwest throughout most of the year just rolled on as mist? Was it the coal dust and other home and industrial wastes belched into the air that gave London its famous "peasoup fog"? Or did the climate change, circa A. D. 1663? We have not found any reference to such anywhere else in half a century of browsing both through literature and said fogs. Very bizarre.

Seems that somebody did do something about the bloody weather about that date but got his coordinates mixed.

VORTIGINOUS VORTICES

Member No. 286, of South Amboy, New Jersey, dropped us a modest note last July which packed the proverbial wallop and has prompted many of us to spend a very great deal of time following up his suggestions. His observations stemmed from our publicizing the matter of vortiginous areas of anomaly that appear to girdle the earth in two layers equally

north and south of the equator. What causes these is not yet known but within their apparently lozenge-shaped confines all manner of strange things happen, like the total disappearance of planes, ships, and subs. The most famous is the so-called "Bermuda Triangle" (which of course it isn't) which hit the news, and quite wrongly as it happened, when the U. S. nuclear sub, the SCORPION was lost. What this correspondent wanted to know was as follows.

Do these vast, vile vortices that cover tens of thousands of square miles have anything to do with the little things that have become equally if not more famous in inshore waters and even on land, like the tidal maelstroms of the Farøe Islands and the coast of Norway, and more especially the now really very well-known "Oregon Vortex". This raises a number of questions.

The whole business of vortices, in gases, liquids, or solids, is complex to say the least and we advise any specifically interested and who are not engineers and so have not had cause to study the mechanics of these dynamics, to obtain a book entitled, SENSITIVE CHAOS by Theodor Schwenk. This gives a very fine exposition of the mechanics of vortices and applies its principles to both inanimate and animate life. Unfortunately however, the author is some kind of mystic and wanders off into esoteric speculation of the most advanced order by way of explanation of his thesis. Nevertheless, that thesis itself is well documented and accompanied by numerous valid photographs, charts, and diagrams of vortiginous motion and patterns as found in nature. From this it will be seen that the vortex does indeed play a very cogent part in nature and that, despite its apparent chaos as the title of this book implies, it actually follows some very precise rules.

It appears that there are innumerable vortices and patterns of vortices covering the whole surface of the earth, and others within it. Also, the solar system, the galaxies, and possibly our universe itself may be nothing more than vortices. In fact, the whole bloody shooting-match may indeed be based on the principle of the vortex: and don't forget that a spiral (as in chromosomal chains) are but vortices stretched out like springs at a right angle. Thus, there may well be little vortiginous anomalies of all manner of kinds like this troublesome "Oregon Vortex".

This is an item that we will have to take up in greater detail at another time, so suffice it to say for now that the owners (and thus legitimately pro-

motors) of this place have got several different matters mixed up in their presentation. Some of these are truly related, and some others may be, but the major premise appears to be erroneous. The one valid explanation of this local phenomenon was published fifteen years ago both in scientific journals and some better popular magazines. Copies of these papers and articles used to be posted behind glass screens along one side of the walkway into this exhibit. Despite this, everybody has persisted in ignoring this proper work that was done at this place, and parroting the old cliches about "vortices", "magic circles", "the place where gravity does not work", and so forth. People, it seems, prefer sensational and whacky theories to what is known, and even if the latter is even more weird and extraordinary.

The truth of the matter is that this Oregon Vortex does not display any gravitic anomalies, and people, houses, and so forth do not lean inwards as advertised. These are all optical illusions such as may be seen in two dozen other advertised road-stops all the way from southern California to the Canadian border. But what is odd about this Oregon place is just as stated in the scientific papers and magazine articles that the owners display. This is that for some reason light appears to be 'bent' as it passes through it and, what is more, only when passing through in certain directions. Such bending, it is also suggested in said articles, might well account for all or a lot of the optical illusions everybody seems to encounter therein. But then something else cropped up: and in an article in FORTUNE Magazine.

This described the alleged discovery of what were called "magnetic stripes" underlying the region in which this exhibit lies. These were said to run parallel to the coastal mountain chains of Oregon and the offshore, undersea ridges. Their singularity is that each "stripe" or strip of the basaltic rocks of which the parallel ridges are composed have alternating polarity. Could this cause light to bend at certain nodal points? So help us, but we do wish Professor Einstein had not passed on, as we wish that this suggestion might have been brought to his attention before he did so. If light dissemination can be 'bent' by the gravitational forces of the sun, could it be likewise affected by any field as weak as earth magnetism?

But, above all, why and how did this phenomenon ever get called a vortex, and why has that name stuck?

BIOLOGY — Subsection PHYSICAL ANTHROPOLOGY.

ISTANBUL, Turkey, 31st July (Reuters) — "California elevator operator John Libi, 69, has broken off his fourth attempt to find Noah's Ark on Mount Ararat because of bad weather, ice, and a stone-throwing bear."

No animals other than humans, and possibly other hominids, can "throw" things, least of all bears. However, there have been persistent reports of just such other hominids in this general area for centuries.

VII. BIOLOGY.

ANOTHER MATTER OF SEMANTICS.

A subscriber dropped us a really very flattering letter but asked that we devote more space to straight reporting and less to twitting the working press and the 'expert' spokesmen for scientific enterprise. Fair enough, but as we are an expressedly for-teen outfit, our primary duty is just such twitting because a very high percentage of the new discoveries in the natural sciences and, we suspect in other departments of enquiry, get lost due primarily to misinterpretation by these media. As we have repeatedly said, we hope that most of this divarication is caused only by semantic confusion but even this may result in the most appalling misconceptions. Then, there is of course within the multiple and diverse anglosaxon dialects today the most awful foul-up. For instance, the same species of one kind of fish is called a "Bass" on one side of the Florida peninsula and a "Bess" on the other; while two different species of another kind of fish are called Porgies on both sides.

Therefore, with due apologies to that lady, we have to comment upon a report on a 'finding' of the crew aboard the research submarine, the Ben Franklin, that drifted for 30 days up the Gulf Stream last summer. This read as follows: —

SAVANNAH, Ga. (AP). SUB SPOTS HUGE FISH. Size believed 10 times normal. "Marine creatures 10 times their normal size have been spotted twice by the crew of the research submarine Ben Franklin on her 30-day underwater mission to explore 1,200 miles of the Gulf Stream. The six men aboard reported to their surface support ship via sonar telephone Tuesday that they had seen 'eight blackfish 30 feet long.' Walter Muench, director of the Ben Franklin mission for the Grumman Aerospace Corp., said at his West Palm Beach, Fla., headquarters, 'We still find it hard to believe, but they say those fish were 30 feet long. We hope the underwater photos confirm this sighting when they surface.' Earlier in the mission, the men aboard the sub said they saw a medussa (sic) with tentacles 30 feet long and four inches thick."

Needless to say this report was neither repeated nor commented upon, but some of our non-zoological members may have seen it and become either confused or even somewhat excited, so let us give the outcome.

The Blackfish is not a fish but a species of Cetacean ('whale' to you, if you are so semantically inclined) of the family of Delphinidae, which is to say that of the Dolphins which does NOT include the Porpoises which are anatomically quite distinct and constitute the family of cetaceans known as the Phocaenidae. (The creatures that jump through hoops

and so forth are Bottle-nosed Dolphins and in no way porpoises which are smaller, comparatively less agile, and placid fish-eaters that inhabit coastal cooler waters.) The Blackfish grows when adult to an average of 30 feet in length. It is very common in the North Atlantic and is the animal that every so often comes ashore in schools much to the amazement of the public, the incomprehension of the biologists, the fury of the city councils of resort and other coastal townships. It is the second largest of the Delphinids, being beaten in bulk only by the largest Killer "Whales": and please note this further semantic nonsense.

Just a final note on the easy-to-make typo of "medussa" (meaning an Arabic story-teller) for a Medusa which is the name given to the free-swimming form of the marine Coelenterates of the group that includes the Hydras, and which are more commonly called simply "Jellyfish". The largest of these known is named Cyanea arctica which has been weighed in at over a ton and amply fits the specimen observed from the Ben Franklin.

THAT DAMNED BONE.

In September of this year there was a colossal outburst in the U. K. that was noted in the U. S. and had repercussions throughout the world. This was caused by the announcement that two businessmen, who did not want their names publicized for fear of ridicule, had found an enormous bone on the shore of the famous Loch Ness. As this story went, they had been fishing from the shore and pulled what they thought was a log up the beach to sit on. They then noticed, they reported, that it was very light in weight and appeared to be hollow. When they cleaned it off a bit and looked closer, they found that it was porous and, on slicing through it found that it was a part of an enormous bone. Having released this statement the press went off like one of Dr. Wernher von Braun's better efforts, spraying speculation all over the earth.

The story then began to build as such stories usually do. Within days the 'Experts' were in the act, and that arch promoter of the wild, the DAILY MAIL of London picked up the theme and, it would now seem, the tab. Their first effusion was date-lined Loch Ness and started off: — "Loch Ness today gave up a gargantuan thigh bone — if not Nessie's, then perhaps from one of her prehistoric cousins. — The bone, found by Daily Mail readers and reported to us by them, still lacks sure identification. But at first sight an expert on sea mammals said it could be half the thigh bone of a vertebrate animal not known to science today — a beast that could have stood 30 feet high. The bone provided the minor sensation of the first day of the two-week monster hunt in which the Daily Mail is taking part. Today I saw the bone

on the shore of the loch at the spot where our readers, who want to remain anonymous, found it during a fishing trip last May. I lifted it with difficulty. It weighs more than 200 lb., measures 4 ft. 2 in. from tip to tip, 31 in. across the bulbous 'knuckle' end and 22 in. across the marrow end. The marrow hole running clean through it was so big that I could bury my forearm in it. David Taylor, a vet, who is Director of Whales and Dolphins at Flamingo Park Zoo, Yorkshire, said: 'It looks like the upper half of the femur of an animal that doesn't exist today.' This expert then went on: —

"It has many features of the thigh bone of a vertebrate animal. It must have stood 20 or 30 ft. high, depending on whether it walked on two or four legs. It would have been bigger than anything we know today — bigger than an elephant, for example. It could have been an aquatic mammal, but it is not possible to say exactly what it is without chemical and histological examination."

"Only experts can tell. And the bone's owners, guarding their investment, are uncertain how to proceed. Should the bone prove to have no connection with Nessie's family . . . should it turn out, for example, to be that of a prehistoric monster, it will, none the less, be a valuable property. Said Mr. Taylor: 'I know people who would pay thousands for it.' Presumably we should apologize to our subscriber once again, but this one is really too much."

Similar and related newspaper reports continued to stream out of the U. K. on this story and most of them were amiably reflected in both wire service and U. S. columns. The whole thing sounded so whacky that we picked up the telephone and rang David James, the initiator and spark-plug of Loch Ness Phenomena Investigations Bureau Ltd. to find out just what the heck was going on. David was away on the moors after the Loch Morar incident (a similar beastie had been reported from that body of water earlier in the year) but we got an old personal friend, Clem Lister-Skelton at the Investigations headquarters by the Ness, who was in charge. "What's the story?" we asked. "All balls" he replied. "So, please give" we shouted: and he did, forsooth. The truth.....

The bone was the back four feet lopped off the lefthand ramus, or side, of the lower jaw of a large Blue Whale that had been dug up on the east coast of England. It had been "acquired (rented?) by two persons acting on behalf of a sponsor" from a small local museum in that area, with distinct implications that it had come from at least the area in which the Flamingo Park Zoo is located! Ends story but for comment.

A lot of monster stories end up like this, but this one has very distinct undertones of outright skull-duggery. Who was this sponsor, and how could a veterinarian, who jolly well has to be an expert if he is going to earn a living, make the rabid statements attributed to him; and by name at that? A vet at least ought to know the difference between the

jawbone of an ass and the upper end of its femur, and as to mistaking a whale jaw for a part of a leg of some 30-foot tall "prehistoric monster" passeth all understanding. In fact, it's virtually impossible, so the whole thing must have been a plant; and a particularly virulent one at that. Of course money was probably at the bottom of the whole exercise but we are wondering just when the press will wake up to the fact that not only is the public not quite so gullible as it still seems to think but that fortune-tellers like the Loch Ness Investigative outfit are pretty bright. Even if a vet, a museum official, or any other kind of "expert" is incapable of identifying a large mammalian bone, there are an awful lot of people who can do so — and even without any biological training or even having taken a course in zoology. Could this obvious "plant" therefore be a deliberate attempt to denigrate the investigators of the Loch Ness and other freshwater monsters? We must admit to having the gravest suspicions on this score, especially as we are also in the news business.

GIANT SNAILS IN FLORIDA

There is a perfectly terrifying thing afoot, the real significance of which is apparently being missed while the story, although duly published in the N. Y. TIMES, probably passed unnoticed even by our more biologically inclined members. For this reason alone we report it in some detail. But there is much more to it than even this straightforward account might indicate. As of the Sunday, 28th of September issue of the TIMES, the situation was as follows: —

MIAMI, Florida, Sept. 27 (AP) — FIST-SIZED SNAILS INFEST AREA IN MIAMI. "A lush area in north Miami is infested with fist-sized snails that are eating about everything in sight — even the paint on houses. 'They're giant African snails,' said Art Calvert, area administrator for the Florida Agriculture Department. He estimated that there were 20,000 of them in a 13-square-block area. He said that the snails thrived on foliage and calcium and presented a threat to south Florida's cash crops if they were not contained. Mr. Calvert and a dozen agriculture experts visited the area Thursday in the Miami Shores section and collected hundreds of the large, brownish snails. 'I saw some shells bigger than my fist,' Mr. Calvert said. 'Inside, the snails were almost a foot long.' He said the snails were introduced to the neighborhood three years ago by a boy returning from a trip to Hawaii. 'He brought three of them as a present to his grandmother. Now there are thousands out there,' he said. The snails, capable of producing 600 offspring each year, eat the lush foliage and paint from the houses to get calcium. 'We found them on roofs, clinging to walls and hiding beneath eaves,' Mr. Calvert said. 'They were everywhere.' He said that the snails could not be sprayed from a plane because they were in a populated area. 'So we're going to put a granular substance on the lawns,' he said. 'Conventional poisons don't bother them.' Then he added: 'One solution could be to eat them.' "

The Giant Snail concerned is properly called Achatina and did in fact originate from the east coastal regions of Africa. It has a very remarkable history since it first was exported — inadvertently it seems — from there by Arabic dhows first to some of the Indian Oceanic islands at the end of the last century. It multiplied on some islands literally "like mad" and in some cases actually ate the whole place into oblivion — including itself! It then cropped up in Ceylon in its baby form among vegetables and immediately went to work munching up everything vegetative in sight, but was contained because it was soon discovered to be highly edible to both human beings and many other animals. In fact, it seems to have been more or less eradicated in that country but not before it had been transported to some islands off the south coast of Sumatra. The writer encountered it there in 1927 on one of the smaller Mentawi Islands, come wars and charging elephants, we have never encountered anything quite so terrifying. Being conducted along the beach by some locals with whom we could not talk in any mutually understood language we became aware of a rumbling noise like an approaching earthquake but continuous and persistent. In due course we saw the jungle trees crashing to the ground just back from the bushes fronting the beach just as if giant bulldozers were pushing them over. We cut into the bush and there were trillions of these enormous snails just eating, and their combined weight bringing huge branches to the ground every few minutes within our limited view, while the smaller trees toppled over in toto. We left that place and two weeks later the last human inhabitant left the other end of the island.

The Achatina hit many more Indonesian islands

but it was not until the Japanese arrived in World War II that they made their next leap eastward. When things got sticky for the widely deployed Japanese troops and the American counter-offensive got into gear, supplies ran short in outlying posts. The snails, which are very fast growing were therefore carried to some south Pacific islands and released for food. And they went to work with a vengeance. But when the Japanese troops were withdrawn they once again got out of hand. Then some of the local seafarers inadvertently transported some of them in various vegetable products to other islands, and ever eastward until they hit Hawaii and our west coast. Containment was again the order of the day and happily some parasites turned up to aid us in our efforts. Things did not get out of hand there but now, due to a bizarre present to a loving grandmother, they have burst out again; and don't think that this isn't a really serious plague.

Achatina is worse even than the Floridian conservations seem to realize. Not only is it a horribly fast grower and willing to eat everything but it has apparently stepped up its proliferation every time it hits certain climatic and ecological conditions within a certain belt north and south of the equator. This is not latitudinal but vegetational. It will surely get out of its present 13 blocks in the form of eggs or its initially tiny progeny. What happens then remains to be seen after a winter. If it survives this, just about the only hope would be to burn the whole place, bulldoze the leftovers, spray the lot and mount a guard around the area. Achatina eggs can survive emersion in some horribly potent liquids and the immature can move an awful long way in a night. However, they do make very fine chowder and they are healthy.

VIII. ARCHAEOLOGY

ANCIENT EGYPTIAN TV?

We promised in our last issue to give the results of examination by various experts in various fields of the fresco from the Temple of Dendera which we illustrated on p. 56, showing two figures holding objects on pedestals that look like giant light-bulbs. The whole endeavour has become extremely complicated due to — shall we call them — more or less extraneous concerns. This was not unexpected, because a quarter of a century of experience has taught us that the average fortune item, however tangible, is a pain in the neck to everybody but fortune-tellers. Nonetheless, we did get somewhere in two departments.

The first is a proper translation of the caption under the illustration in Ivan Troenig's Kulturer Före Istiden (Culture Before the Ice-Age), published by Nybloms, Uppsala, Sweden, in 1964. It reads: —

"This picture from Hall 5 of the Dendera Temple obviously shows electric lamps held up by high-tension insulators. The temple is actually a sort of

museum. Technology in Egypt was considerably more advanced..."

The text on the page opposite goes: — "A variant of this symbolic vignette (referring to another item mentioned previously in this book — Ed.) is found in the Egyptian Dendera Temple.... this temple may be regarded as a museum, since objects of historical and technical interest were gathered together there. There are several reliefs (i.e. wall paintings) which without a doubt describe (i.e. depict) some type of enormous electric lamps — probably of an urladdningstyp nature* — that is some sort of construction similar to our (electrical) lamps."

At least we have got this bit straight but it ran us into the matter of this Temple of Dendera. This we will come back to in a moment.

*The best translation of this is 'radio or tv discharging tube', the word urladdning meaning "discharging".

The other piece of common sense that we have so far received came from the engineers (No. 15 et alii). His assessment reads as follows: —

"Certain elements, especially the cables, are virtually an exact copy of engineering illustrations as currently used. The cable is shown as very heavy, and striated — indicating a bundle of many (multi-purpose) conductors, rather than a single high-voltage cable. As a matter of fact, a single (high-voltage) cable would be much thinner; if the insulation was required to be that heavy for extreme high voltages, or moderately high voltages at high currents, rest assured that no technician would be holding the associated device. Corona leakage would 'get' him most swiftly. The supporting stands would be much taller and heavier, to withstand such voltages.

"It is much more likely that the cable is, as stated, a multi-conductor, wrapped and insulated with an outer jacket. If this were a 'light bulb', the maximum size of both would be explainable by heavy current demands; but high-voltage insulators of such large size would not be required. It would seem to follow that moderately high voltages are in use; a connector is obviously employed; some type of supporting base to glass seal seems apparent. However, the two 'bulbs' are not identical, as shown by the designs on their sides, and the base stands. I do not think that they are transparent, as the 'technician's' body is not visible through the device; it would seem more obvious that these are identifying markings, or codings (as a type number on a TV camera tube); probably indicating use of the device.

"Since the cables seem to originate at the 'altar', one wonders if this is a manually controlled setup, or remotely controlled. Further, with both devices set at an angle, and shown aimed at the wall, could they not be the ancient equivalent of the modern TV projection system?

"One should also note that the two 'technicians,' especially the one on the left, seem to be wearing a mask device (eye shield?) — and unless the drawing is badly reproduced, both have some type of apparatus in their ears, suggesting the equivalent of modern TV cameramen, complete with radio receiver and/or earphones for direct instruction during a 'show'."

Engineers are wonderful, especially when they contemplate matters outside their strict regimen. There was a rider to the above from this fraternity that stated: — "It should be noted in passing that the priesthood(s) of old were past masters at 'putting on a show' to impress the local natives. And what could be more convincing of their 'magical' abilities than a mysteriously appearing (and disappearing) image on a temple wall? After all, the best way to impress the natives is to scare them half to death."

The replies so far received from the archaeologists and historians, and notably Egyptologists, have been in marked contrast to these pragmatic comments.

Several to whom we applied have not even answered; one said he could not translate the hieroglyphs shown in the depiction, and another said he would not! When it came to the business of trying to identify this Temple of Dendera, we ran into some pretty obvious chicanery. Everybody seems to transliterate Ancient Egyptian names in their own ways — we have Denduras, Dendaras, Dhenduras, and on and on — but the most popular form of our temple among these savants seems to be the little one-room temple of Dendur that has now been acquired by the Metropolitan Museum of New York and which is being re-erected under a special dome in New York's Central Park. This is, of course, the safest path to follow because it has only one Hall and no such depiction in it. So devious, in fact, have been the responses of the Egyptologists that we have applied directly to Egypt. So once again, we must ask you to wait.

SOUTH AMERICAN CIRCUITRY?

Designs On Chimu Pottery.

Also in our last issue we mentioned that Barney Nashold (No. 87) had been collecting tracings of a number of odd designs on Chimu and other ancient South American pottery, and that we would be reporting further on this. Once again, we are frankly not ready. Barney Nashold has given us some photographic reproductions of these weird designs with accompanying commentary but, so complex are old Amerindian depictions, that these would mean nothing unless accompanied by diagrams with all points mentioned clearly marked by arrows. We are working on this by means of large "blow-ups" which, when so annotated, will be reproduced for publication. One in particular is taken from a plate in ANCIENT CIVILIZATIONS OF THE ANDES by Philip A. Means.

We would very much like to publish Nashold's suggestions forthwith but, without a proper reproduction of this amazingly complex depiction, it would mean nothing. The point at issue is, however, that all the funny animals, and little people, and squiggly lines depicted on these ceramics, could be symbolic representations of something like our carded transistor circuitries or, as Nashold remarks and not altogether facetiously, something "like a combination solar-storage battery".

The rhyme and/or reason for so much Amerindian pictorial and plastic art has always been so obscure that the average archaeologist has frankly given up on it, and fallen back upon preconceived notions of what might be what from the purely European point of view. The Amerinds, and notably the more ancient ones, just do not today think the way Europeans do, and they never did. An European wanting to get a solar battery working would draw a blueprint with ruler, set-square, and compass; an Ancient Egyptian, it seems, would paint a realistic, two-dimensional representation on a plaster wall for posterity; but an Amerind would seem to favour equating batteries with

centipedes, leads from the tongues of little idols, and plugs in the form of tiny dragons' heads. Then they linked up the whole mess with these squiggly lines, using one color for the positive and another for the negative. Neat?

As with the Egyptian tubes, we have put the engineers to work on this esoteric suggestion. Let us be patient and see what they come up with this time.

A MODEST UNPLEASANTNESS

"Mystery Hill", N. H.

We have more than once advocated contacting a most excellent organization named The New England Antiquities Research Association, (or N.E.A.R.A. for short) of 4 Smith St., Milford, N. H. 03055. This society publishes a very interesting and sound quarterly which is full of worthwhile material, most of it new to the average person and even to archaeologists. This society's interests range over the whole field of pre-colonial North American culture and with particular reference to what is rapidly appearing to be evidence of a Pre-Amerindian, stone-age, megalithic culture here. The president of this society, Mr. Robert Stone (a mild coincidence perhaps!), happens also to be the proprietor of one of the most remarkable megalithic monuments in this country. This has been known for generations but for the most part ignored. It is called "Mystery Hill", is located near North Salem, New Hampshire, and is open to inspection by the public.

Many people have excavated in and around this strange complex of low and sunken chambers, with drains and other rather sophisticated adjuncts, for many years; but, unfortunately, many who did so were what professional archaeologists — i.e. those permanently employed as such by established institutions — so scathingly call 'amateurs', so that their findings were ignored. Admittedly, there were also over the years others who really were amateurs, or even outright vandals. None of this helped the proper diagnosis of the origin of this remarkable complex, but there were some approved scientists who also dug and delved on this site, and some of the things that they brought to light gave pause for most serious thought. However, it was generally preferred that this whole site be dubbed some sort of old "colonial" construction for the storage of potatoes and/or the purifying of maple syrup, or some such. There was, it must be admitted, evidence that a lot of the stones had been moved around, removed altogether, or used for later buildings nearby. Nevertheless, the basic structures remained enigmatic to say the least.

When NEARA took over the site, Bob Stone initiated a policy of inviting professionals to inspect it and to dig. For some years he was not encouraged by the results of this offer but last year some professionals whose findings could not be ignored accepted the offer and brought to light some material

from appropriate levels that gave valid radiocarbon datings. This material, unearthed by James P. Whittall Jr., came out (repeatedly) at 1000 B.C. (plus or minus a small overlap). Then the fun began. This was kicked off by the press and was best stated, in our opinion, by the NEWARK SUNDAY NEWS, for the the 7th September, 1969. This read in part: —

NORTH SALEM, N. H. (ex: UPI): "Artifacts found at the large complex of stone chambers, including tools and pieces of pottery, indicate the structures were built by a culture similar to those which inhabited the Mediterranean from about 3000 B. C. to 500 B. C., and Whittall's theory is that the chambers and shaping of the stones are strikingly similar to the megalithic culture known to have existed on the Iberian Peninsula (Spain and Portugal). Some experts even feel they may be of Phoenician origin, or perhaps occupied by Phoenicians after they were built. Many archaeologists have felt Phoenicians and other Bronze Age sea adventurers of that time may have crossed the Atlantic Ocean using the prevailing winds and sea currents which would sweep them southwesterly and then up the American East Coast."

Need it be said that this situation did not meet with the approval of the orthodox, though the outright dissenters were strangely pauc for once. You cannot have Bronze Age Mediterraneans running around New England a thousand years before Christ, building little beehive stone igloos. It is, and we have to admit this, almost indecent. It was bad enough when the Ancient Monuments Board of the U.K. agreed that just such people brought a Mycaenean culture to Britain in time to build Stonehenge III. But, in North America! What about our poor, beloved, so-called "Indians"? Dear, dear, dear! We can't have this sort of thing let loose on the champions of poor old Cristoforo Colombo, or even Leifr Eiriksson. Phoenicians, indeed!

Nonetheless, go and have a look at Mystery Hill if you happen to be in the Northeast. It is well worth a visit anyway — (and this is not a paid advertisement or even a solicitation) — and now that we do have these datings, the whole mysterious place takes on quite a new ambiente. And, given this, you may take a somewhat different view of the dozens of other megalithic monuments that dot the whole of this continent — and South America; and probably Centromerica if only we could find them among the overlay of early Amerindian monuments, walls, causeways, hydroponic tanks, and so forth. Get in touch with N.E.A.R.A.

A REAL UNPLEASANTNESS

Our La Brea Tarpit.

An absolute classic of misinformation appeared in a California newspaper on the 12th of June last. We don't name the paper, and we have deliberately

dropped the identity of the "expert" named in this report because the whole thing must have gotten completely muddled somewhere along the line, and it is more than likely that both said expert and the reporter have been misquoted. Nonetheless, here it is for what it is worth to people who want to get the real facts about matters of this ilk: —

"Saw-marks on 15,000-year-old animal bones — believed to be the oldest evidence of man yet found in the Western Hemisphere — were reported Thursday by the Los Angeles County Museum of Natural History. A paleontologist there said the bones, taken from La Brea Tar Pits, which previously yielded bones of prehistoric sloths and tigers, have been analyzed over the past three years. He said the cuts, apparently by primitive stone tools, were made in bones of animals that died about the time the cuts were made. The cuts were made in the leg bones of animals, including sabertooth tigers (sic), giant California lions, giant ground sloths, camels, horses and bison.

"The same expert said the oldest previous evidence of human artifacts in North and South America dates back only about 10,000 years, but evidence of man's works goes back 50,000 years or more in Asia, Europe and Africa."

This whole statement is, substantially, pure rubbish. First, Dr. Helmuth de Terra brought to light not only artifacts but even statuettes in bone and ivory from the central Mexican plateau more than two decades ago and these were dated as of over 20,000 years B.P.. Then, none less than Dr. George F.

Carter of John Hopkins, mooted a date of 300,000 for some not too primitive stone tools found in gravel pits in Oklahoma somewhat later; and, only recently, the remains found in a rock-shelter in Washington have been repeatedly dated at 30,000 B.P. Even some of Dr. Orr's dates for charcoal found in association with human detritus and pigmy elephantine remains on the Californian islands antedate the La Brea items. What is more, evidence of man's works goes back some million years now in the Old World. Where have these boys been in the past two decades?

But the thing that does interest us is this business of 'saw' marks. We have for quite some time wondered about this Californian 'La Brea' tar-pit. Why should it, alone among all the tar-pits all over the world and even the La Brea pit in Trinidad, be stuffed full of animal bones, while all the others are completely sterile? The idea of little animals, let alone big ones, meandering into a tar-pit and getting stuck, and then bogged down, and finally engulfed, is actually quite ridiculous. This might have happened if said "pit" was covered with shallow water and surrounded by normal-looking vegetation but, frankly, we doubt it. Large animals just do not march headlong into tar or any other goo: they are far too sensitive to the ground beneath them. But: if they were driven into such a 'trap', and then slaughtered by human hunters, we might well have an explanation for their otherwise inexplicable behaviour and presence.

If evidence of tampering with the bones of such trapped animals has been found, in the form of these so-called "saw-marks", we might have some reasonable explanation of the whole crazy business.

"PAIR RESCUED FROM MONSTER. Purley, England (UPI) — The 'monster' banged against the door with its hard white head, waking Mrs. Marion Faulder, and then scuttled off into the dark. 'It looked like something from outer space. My husband took a quick look at it, but he wouldn't go near it', she said. The police rescued the Faulders from a hedge-hog with a yogurt carton jammed over his mouth and eyes."

XX. CHAOS AND CONFUSION.

FROWSY LITTLE THING.

Charles Fort, though trained as a zoologist, was never a taxonomist. Perhaps that is why both his eye and his imagination were able to rove so widely. This in turn made him a very real philosopher and a true scientist, for he was the first great "cross-over" boy since Pliny, always seeking links between the various departments of enquiry. In other words he was always on the lookout for things that didn't fit into any neat pigeonhole; and he once remarked in his classic style: "Look out, frowsy little thing coming up now". One such appeared in August this year that would have delighted him. Quotes: —

SWEDISH SHIP FINDS KOREAN RIDING TURTLE. MALMÖ, Sweden (UPI); 27 August, 1969: "A Swedish ship is headed for Los Angeles carrying a Korean who had clung to the shell of a giant turtle for 15 hours before being rescued from the Pacific Ocean. The bizarre incident was reported by radio from Capt. Horst Werder, skipper of the Swedish motor ship Citadell, to the shipowners, Per Liljegren of Landskrona, north of Malmö. Werder said the unidentified Korean tumbled off the Liberian freighter Pedelara about 113 miles off the coast of Nicaragua Friday. The Korean spotted a giant turtle nearby, climbed on its back and clung desperately for 15 hours. A look-out saw a man's head bobbing on the surface when

the Citadell was steaming northwards in the Pacific. 'We were shocked to see it was a live man on the back of a giant animal', Werder said. 'We managed to get him aboard and he fell unconscious on the deck'. The Korean recovered quickly and was in good condition, Werder said."

There will doubtless be those who don't see anything particularly fortan in this but then they need not have had any particular interest in marine biology. Unfortunately it is in just this department that we as neo-fortans and with a mania for taxonomy would like a lot more specific detail. The first question we ask is what kind of turtle? There are three True Turtles, all of them marine animals having four paddles. (We in America have got our metaphors mixed and persist in calling water-tortoises turtles). These are the Green, which we eat, the Loggerhead from which we get out best "tortoise (so help us) shell", and the Hawksbill. There is also a distantly related beast known as the Leathery Turtle or Luth, which grows to a really surprising size: six foot in body length and weighing over half a ton, though specimens twice that size have been stated to have been captured.

All these animals live for the most part in the surface layers of the seas and oceans, mucking about in tropical lagoons and coastal shallows, and coming ashore once a year to lay their eggs. Almost everybody resident on tropical coasts rides a turtle sooner or later, but when it comes to citizens of Korea doing so in the open ocean for fifteen hours we become, as Fort would say, "open to a new expression". You see, marine turtles spend 99% of their time under water, not cruising about on its surface. Perhaps it was a language barrier between the Swedes and the Korean concerned that prompted UPI to state flatly that he had been so cruising on said turtle for 15 hours. Frankly we think it much more likely that the poor boy fell off his ship some 15 hours before he was picked up and just happened to have climbed aboard a Luth in a hurry when at the point of ultimate exhaustion and shortly before so being spotted. If this is a misinterpretation, the chap has certainly

created a record of some kind and enormously contributed to our knowledge of the ethology of marine turtles at large.

FIVE-DAY WORK-WEEK.

We have always been strong advocates of such common-sense moves as transferring from the decimal to the duodecimal system, standardizing the size of typing paper, getting rid of things like gills and furkins, and even changing to a 13-month year with four seven-day weeks in each and one left over to recover after the New Year bash. But now comes a suggestion of which, frankly, we had not previously heard: and Py Jinkoa (as the Basques say, and which incidentally is the origin of our old-fashioned expression 'By Jingo') makes more sense than any of these. It stems from the now almost universally expressed wish — from Maoists to Wall Street — for a five-day week. It goes as follows: —

There being 365 days in the standard year, a five-day week would give us 73 weeks per annum. Staying with our twelve months p.a. we would get 6 weeks per month ($73 \div 12$) and 5 days or one week left over — 6 days in a leap year. This left-over week would constitute a national holiday, and just when this would be inserted into the calendar would be left up to each individual nation because the most advantageous time for such an annual lay-off and bash differs by latitude, climate, custom and tradition. It would not interfere with all the other traditional holidays including presidential birthdays and so forth.

We think this is a perfectly splendid idea. Places of worship would get a 3:2 enhanced permit to solicit; everybody working would be delighted; liquor laws could be adjusted to everybody's advantage; accountants and just about everybody else would stand up and cheer. Only would the manufacturers of computers and other accounting machines devised specifically to work out monthly (as of now) matters like wages have to go through a period of chaos and confusion. Hum! A week off at full pay? Maybe the Vietnamese have got something with their "Tet".

UFOLOGY

AN OPEN LETTER TO ALL PARTIES

Since the publication of the Condon Committee's report, and the book "UFOs? Yes!" by Dr. David R. Saunders and R. Roger Harkins, we have received a mounting flood of requests from radio and TV talk programs throughout the nation and Canada for interviews with our members on the current status of ufology. We have logged 27 handled directly from our headquarters since February, and we have referred twice as many to interested members outside the northeastern area. In addition, there have been many

long-distance beeper interviews, the exact number of which we cannot keep track of as they crisscross the continent from out-stations to members recommended by us directly elsewhere. As a considerable percentage of these interviews have been on the larger network shows and leading local programs, we have hit a very large and wide audience.

The response as analyzed from mail transferred from the stations and by reports from the program producers is exceedingly interesting because it falls,

and almost to the letter, into two clearly opposed camps. The composition of these has come as a considerable surprise and, we may say, as a shock to a lot of people, though it was not altogether unexpected by us. It transpires, in fact, that there is a clear-cut break and even antagonism between the buffs (of all people) and all the way from the old-guard ufologists to the wildest saucerians on the one hand, and the general public on the other. The former are almost a hundred percent infuriated with our stance in this matter; the latter are literally ebullient in their agreement with our attitude.

We believe that we have stumbled across the explanation of this seeming paradox. Once again, it seems to be basically a matter of semantics but, in this case, bolstered by a simple lack of knowledge of the facts. In the case of the general public this is due to a lack of real information on the subject, augmented by the flood of misinformation that has been poured out by officialdom and "sciencedom", the press, and even more so by the buffs themselves. Even those who have not been specifically interested have become sickened with this folderol and so have given a prolonged and concerted cheer at being given the opportunity to listen to a little common sense.

The buffs, on the other hand, and most notably those who set themselves up as being "scientific" in their procedure and approach, appear one and all to be hooked on some particular pet theme; not to have any training in true scientific methodology; and not to have acquainted themselves with the facts as published. And this is where the matter of semantics comes in.

It was pointed out to us by a visiting member doing research into quite another matter, that the buffs in his field cannot tolerate our approach to it. The reason? That we are "so diffuse". Upon enquiring what this might mean, we learned that buffs are not interested in the overall picture of their speciality, or its "How" and "Why". Further, they believe that science should be wholly concerned only with

the collection of data (i.e. the "What"), which alone they call facts. This is exceedingly interesting and probably true. Moreover, it might explain why not only the buffs but those scientists who have taken a serious interest in ufology have got precisely nowhere.

Data collection is a pleasant pastime, and the essential primary basis for scientific investigation, but it should not be an end in itself. In a subject such as ufology, moreover, if it is pursued to the exclusion of speculation, hypothesis, and theory, it is wellnigh worthless. Even if you analyze by computer roomful of "reports" on funny lights and other things in the sky, what have you got? Maybe evidence of temporal or spatial incidence, shape, color, behaviour (alleged), and suchlike, but the whole exercise is useless unless you have at least some theory as to how such statistics should or might be interpreted. None of the buffs have any real theories except some of the older organizations that insist all UFOs are machines — but deny that they could contain living entities, we should note! — and the "contactees" who express themselves as convinced that they are all manifestations of glorious "space people". No wonder our opinions do not find favour with any of them.

We therefore suggest to the buffs that they might profitably read the books that we recommend, since the opinions expressed in these are going to continue to be offered to the general public through the mass media, and on a massive scale, by us. Further, these opinions are open to discussion and criticism by everybody, including scientists, technologists, ufologists, saucerians, and all other interested parties both private and public. Those wishing to indulge such debate had, however, better do their homework and get their facts straight before criticizing those whose works we have recommended. This is something the buffs have persistently refused to attempt but the general public has apparently made a valiant effort to do — an effort that has so far, unfortunately for them, proved futile and frustrating.

From the Spokane Daily Chronicle, 18th April, 1969. (Seattle, AP)

"A member of the Condon Committee on Unidentified Flying Objects said Thursday three UFO's sighted by astronauts in space never have been explained. Dr. Franklin E. Roach, a visiting professor at the University of Washington and consultant with the Battelle-Northwest Laboratory, said one object was sighted by James McDivitt during the Gemini 4 flight. It had antenna-like extensions from both ends. Roach said, 'Our first interpretation was that it was another satellite, but on checking we couldn't come up with any known satellite with an orbit that would take it near Gemini.' Another unexplained sighting was by Frank Borman in Gemini 7 who reported sighting a spark-surrounded object traveling in a polar orbit, Roach said."

Watch out for a paper to be read to the annual meeting of the AAAS on the 26th to 27th December next, and which will in due course be published. This is entitled: — "Unidentified Flying Objects. Arranged by Thornton Page (NASA Manned Spacecraft Center, Houston), Philip Morrison (M.I.T.), Walter Orr Roberts (University Corporation for Atmospheric Research, Boulder), and Carl Sagan (Cornell University)."

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