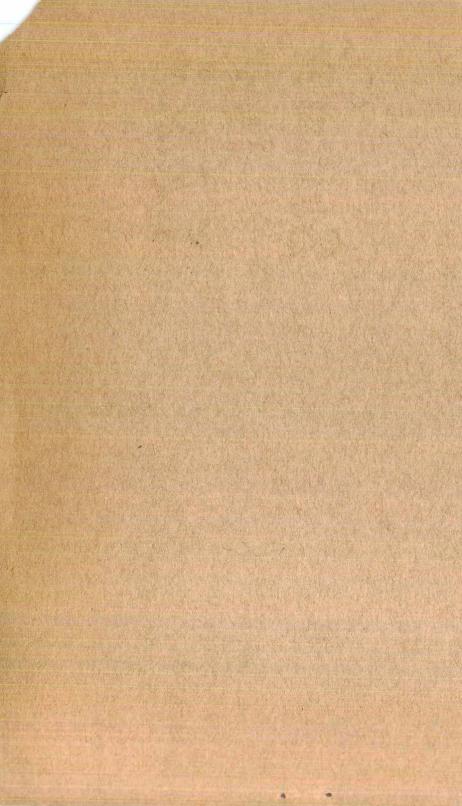
FANEWS

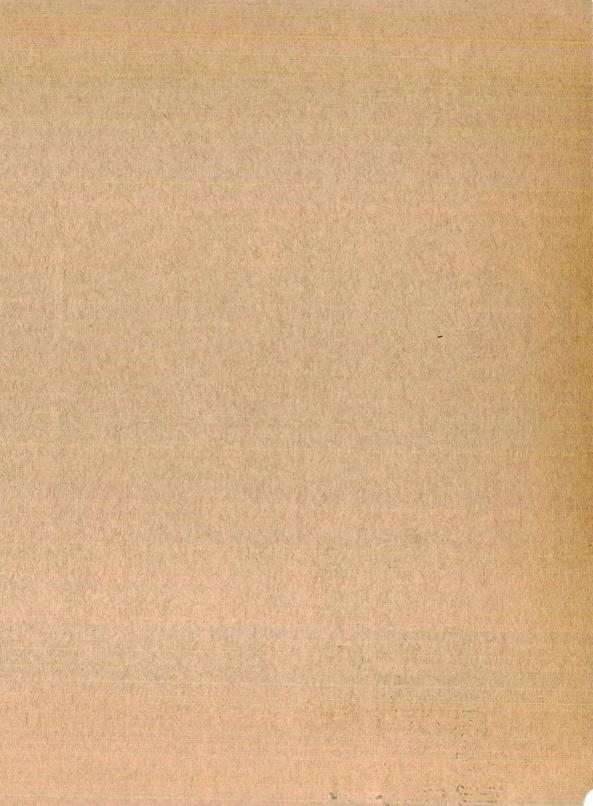
PUBLICATION

Summer 1950

F.A.D.A.

Published by:
Walter Dunkelberger
1443 4th Avenue South
Fargo, North Dakota





FINISAUER SAUTER



Upper left: Night view of Flying Saucer. Upper Right: Pilot lifting cockpit hood before climbing in. Lower Left: Saucer upper right center: Lower Right Another Daytime view of Saucer.

The flying saucer visited Fargo, August 19th and 20th. The model visiting was a one man job but could carry two men, if they were small. It is expected that a larger model will be able to carry two men and 1000# of bombs or pay load.

According to FLYING magazine, circulated as a trade magazine among airport & flying employees, this model is credited with a speed of 1300 to 1400 mph and carrying 500 # of load in addition to a pilot.

Fhoto Credits: The four photos above are the best of 7 taken by FANEWS photographer from 35mm originals obtained in cooperation with FILM CLASSICS.

For those interested, additional prints or enlargements may be obtained from FANEWS PUBLICATIONS at cost, plus postage.

The photos re-

produced here were taken in the Rockies.

一种国际

MINUDA?



Troot lost: Night wiew of FlyIng Jauser. Upper kicht: PiInt Hitting obekpit heed before
alinting in. Lower Loft: Saucer
upper right conter: Lower hicht

The flying marker visited Pargo, August 19th and 20th; its model visited interval a small. Its tray or it tray or it amall. Its interval a small of the value of the small of the small of the start of the small of the small or the land.

Associate and as almost & flying employees, this model is stated with a street of the action to a seed of the action to a seed of 1000 to 1000

page Tredite: the four photes above are the pest of 2 sound by calendary in the first or rather with rilly

TLAL NOS.

For these interpated, adeitional prints or enlargements may be not sized from Salimina Full Contract at sest, plus postes.

From Salimina Full Contract at sest, plus postes.

produced here were taken in the Rockies.

GEORGES GALLET REVIEWS: MICHOMEGA G. MESSAC

A review of an essay on voyages to the infinitely great and the infinitely small.

-0000000000-Editor's Note: The following review was prepared by Georges Gallet for that fabulously ledgendary fanmagazine of Harry Warner, Jr's. THE SPACEWAYS.

-0000c0o0o0c-

On Jan. 28th last, I had the great pleasure of seeing Prof. R.G. Messac's bio-bibliographical notice published in THE SCIENCE FICTION NEWS LETTER.

As it seems that some readers would like to know more about Prof. Messac's essays on scientifiction, I take this opportunity to give a review of one of the most important of these essays: "Micromegas" (published in 1935).

I believe that it is of special interest to American fans for several reasons:

- 1. It has been written by a Frenchman who knows much about the U.S.A., but still a Frenchman in education, thought and even character.
- 2. The author is a professor, Doctor of Letters, who although busy with his classes, his studies and his family, has taken a fancy in scientifiction and more, has thought about it and its evolution.
- 3. It is the first time that such a thorough investigation has been made on the subject.

As practically, every word of the book is of importance the personal part of the reviewer is very small and what follows is more or less an abridged version in English.

-000-

In preliminary considerations, Prof. Messac says:

"The widening of our horizon as much in the sense of the infinitely great than in the sense of the infinitely small is, without any doubt, one of the most surprising phenomena of modern and contemporary history, and one of the biggest in possible consequences. Litterature records this phenomenum as all others and shows us its multiple incidences. But who cares studying these various incidences and their significance?

-)-

CURIVE HAM PERMIT GCTOTTO PANNER DE PARILA DE LA CONTROL DE LA

-although and have a real efficientant and as to the one of the figure

-30363000000

The tolder was propaged by Georges United For a deposit to the deposit to the deposit to the following states of deposy deposit. The total deposit to the following states of deposy deposit.

- >00Cata(m06-

The best

Tend on the ormenoid them and the distribution of the contract of the contract

respect to the state of these transfer and the state of t THE RESERVE OF THE STATE OF

The unit was work of describing labeled to by the plant william.

The north state of the notation with the state of the sta

The state of the s the a professor, Doctor of Leterra, who alshout . and suices this ban th duous adguests the termination ...

that keet to the reviewer it very small and white fellow is not to

40 10

in the Lindburg acquidentions, Prof. Mossac super

The state of the sense of the method of the sense of the

No one within my knowledge ... (I)

"It will be found in this book a collection of texts relating to same the same subject or at least to the same stream of thoughts. This kind of study, sometimes called "thematology", a rather barbarous word, is seldom amde and not at all valued in our beautiful country (France)...

"My collection of facts is necessarily incomplete. The greater part of the texts referred to are neither unpublished (new) nor even little known. Many are on the contrary very well known. I believe nevertheless that their comparison may reveal itself suggestive. Indeed, if these texts are known, it is not by the same people. Those who read Lamartine or Fenelon rather seldom read Jules Lermina or "Amazing Stories", and those who read Meyerson or J.B.S. Haldane may ignore that Fenelon or Lemartine have touched slightly to subjects join the fundamental hypothesises of modern physics.

"I have tried to formulate some thoughts that may be suggested by these texts brought together. There too lacuna will be found. Besides that I have, without any doubt, not found all stories of voyages in the infinitely small: there would be a large investigation to be undertaken to find those who, like Balzac, have slightly touched the idea in a few lines and thereby contributed to diffuse and strengthen certain conceptions inspired by science. And these texts should be enlightened and completed by a paralell investigation on the development of science and the evolution of scientific theories...

"I wish above all - without great hope to be true - that the men of science, the specialists would take interest, from time to time in consequences and even deformations of their discoveries and their theories as they are revealed to us by litterature. Repercussions and deformations which are not without importance or interest, as much to specialists as to the community. The huge majority of the people who make the public and even those, who are called the "elite", the "cultivated people" more often know the last results of scientific research only through the fantastic and fanciful interpretation of writers. And the interpretations of vulgarisators, who besides in some way belong to literature, are but little less fanciful or fantastic. And of science are all that the mass of humans shall know of it. Would it not be good and useful that those who know exactly the truth come sometime to straighten certain extravaganzas or point out what is wrong in certain caricatures?"

-000-

The essay opens by a quotation from Bergson's "Duration and Simultaneity".

"There is no physic, no astronomy, no possible science if one denies to the man of science the right to figure schematically on a sheet of paper the totality of the whole universe. One admits implicitely the possibility of reducing without deforming. One estimates that dimension is not an absolute, that there are only relations between dimensions and that all would happen in the same way in a universe made little at will, if relations between parts were retained.

(I) Note of reviewer: Except stf. authors and fans, of course.

(i) ... mueline de la lidera de

"It will be found in this book a collection of remts relabing over the state at remarker for the same atream of thoughts. Any of abold, almadimes called "themstology", a rater burbarous word, it about the and moves the valued in our beautiful ocuntry (France)...

is to test a related to are necessarily incomplete. The greater ort. I sie test related to are neither unpublished (n.w.) not even it is drew. I show the contrary very well known. I shipst to sorthed as the chair comparison may reveal insulf suggestive. Indeed, if these test is the chair to mean, it is not by the same capile. These who read to the care capile. The saring Stortes to the contrare to the contrare the stortes and objects in the fundamental hypothesis and the contrare the stortes.

I have cristed to formulate some thoughts that may be suggested by these bracks or the seath of these bracks or the seath. Besiden to be seath of the seath of th

in with a low and the without great hope to be true - that the come of reteard, true time to the come of reteard, irea time to the come of their discoveries and their this error to formations of their discoveries and their the error to at the constitution of their discoveries and their constitutions as to the error without importance or interest, as much to according as to the constitution of the conformation of seither the search of the conformation of the conformation of seither the conformation of the conformation of the conformation of the conformation of the truth conformation to conformation of the conformation of the conformation of the conformation of the conformation.

#080m

The notification and description from bergson's Panelion and

remarks of the street of the s

esquoe to reviewer: Except att. authors and fans, of course.

Prof. Messac observes that it is the common practice to work on "models", of small scale in the case of airplanes, locomotives, liners, buildings, theatres and so on, of large scale for microbes (photgraphic enlargements). That is to say images or models brought to the measure of the fingers, arms or eyes of the builder or observer.

This method who answers practical necessities is the basis of science and has a very ancient origin. It corresponds to the tendency expressed in the great axiom: "Man is the measure of everything". It is probable that the notions of greatness or smallness began to precise themselves as to man himself. Giants and dwarfs as can be found in every community led him to imagine extrordinarily great or small beings: super-giants or super-dwarfs.

Traces of this tendency would be easily found in old legends of all countries: Hercules and the pygmies may be a first sketch of Gulliver, not to speak of all medieval legends of giants and dwarfs. (I)

The first writer who, in modern times, has played with the contrasts of great and small is evidently Rabelais. It is true that he writes of giants without opposing them to pygmies but they are so much greater than ordinary men that these look like pygmies besides them and it is enough that the storyteller takes sometimes Pantagruel's point of view and sometimes Panurge's to give us the impression of going to Lilliput or Brobdingnag.

It is quite possible that some episodes of Rabelias inspired Swift but between their times events of incalculable importance come to pass and Gulliver's Travels appeared in an altogether different intellectual atmosphere.

The microscope had been invented in 1590 by Hans and Zacharias Jansen, spectale-makers of Middelburg. Twenty years later Galileo published some microscopical observations. Then, with Athanase Kircher (1646), Robert Hooke (1665) and Swammerdam the microscope came of current use in biological research.

It had a prodigious influence on the development of sciences and modified completely all notions of greatness. A drop of stagnant water became a lake teeming with beings. Everwhere the golden tube was pointed there was life, the whole nature was peopled. Therefore, why the infinitely small could not be infinitely great for another infinitely small and so on ? Speculations on the macrocosmos and the microcosmos, although yet familiar with certain philosophers in the Antiquity, and echoing in the fathers of the church, became more frequent and more convicted from the end of the XVI Century - Pascal's famous page on the infinitely great and the infinitely small is only the result. Father Nicolas Caussin in 1610 is enraptured by the subtility of an ant's organs and in 1641 the author of "Francion" have one of his heroes the pendant Hortensius say: "You must hear of other designs that I have. Know that if the world seems great to us, our body do not seem less so to a louse or a mite. He finds there his countries and his cities. Now there is no body so little that cannot be divided in innumerable parts, so much that is well possible that inside or out a mite there are still other smaller animals that live there as if in a very spacious world, and they may be little men to whom beautiful things happen. Thus, there is no part in the universe where it cannot be imagined that there are little worlds. There is within: plants, small pebbles, and ants. I will

(I) Note: Snow White and the seven dwarfs.

the real things, theatres and so on, of large souls ite devolute the graph to enlargements). That is to say images or today became at

miand only of asidistees a faction quawers one reader about -bast sat or abac serios of migito factors your can bar concret to "wathawareve to emphem only it new" : moths Jacap will he becertifue your is in precisely that the motions of greatness or smallness bount of of the manifest on to man himself. Ginnts and dwarfs on beviewed - two ted time and any vitron broate ontgent of min buf with too years at ter whereaux wo winning-would

Transa of that tendency would be seafly found in the Legender To dealy furth a de year talmage end has a fueral testraturo if the will iver, now be appear of the additional legender of the revenue, and dwarfer (1).

The first wriser who, in modern times, has picyed with but ourstrate of grad and march as evidently Rebellia. It is true that he write of girnts without opposing them to pygmics her the need grantes than ordinary men thus those look like pygmics h acces bleem and to salou a'h asgutada sombannes seskat milletyreta ens abat danen al si vi w and armstines Foundais to give us the impression of Leans to . The second of the second of

being alleger that some apisodes of Rabellan marined swift this between their cines events of inceloulable importance come to -Light Just Tile Telitopoils as at beres on elevant classific the that . en Alymanda Isrdos

The microscord had been invinted in 1530 by Hens and Sachardas will belief retal ersey winewit .gurdlobbil to rate nations, need to . Tomoria usagrast diliv , mani. . encirevresdo Laclecescorpin emos boill. (load), Robert Frake (1665) and Swammerdam the riorescept that of current . der war leelyolold at our

It ind a firety four influence on the development of columns and medical completely the motion of greatness. A drop or election was or because a lake tenting with beings. Everwhere the golden tabe was thinged there was ille, the whole nature was peciled, Therefore, why the Listing the restone not deern yledinital ad con biver line yledinital small with to on a Speculations on the macrocomous and an alors common, sith get and far the certain philosophers in the wallend to die will well had to the thickers of one church, became more frog that the man ald a . . . submat a lacest w wrethed IVE and to bue wit more be alv int mitely great and the infinitely small is only the result. It is in the contribute of a later than the subtility of a later organs and in leat the subject "Francien" have one of the herost the . State 1 18' and the tento to mean feet ways when designs when I have. the that it the world scome great to us, our body do not seen less some : the second of all the selections and the second a werte is no bedress and species and cannot be divided in impresent parties fills ste erand with a suo to shight best oldiego of law it well ber . List was low animals when a live bacre as if in a vory specificular tell. ted they are be little men to when boautiful trings happen. Tate, blat. or the send benigent ad donne at enemy servetur cad at out of an at Iliv I adas ban galddeg fisma gameig inidie i acuif gabiew histil

^{..} black the off the office the seven (1)

write romances of their people; I will sing their loves, their wars, and the revolutions of their empires and principally, I will stop to represent the state where the peoples that inhabit the body of man may be and I will show that it is not without subject that it has been called microcosmos."

Some time will clapse before modern Hortensiuses achieve these designs. In the meantime these ideas shall not cease to haunt the minds. Cyrano de Bergerac in "Les Estats and Empires de la Lune (States and Empyres of the Moon)writes:

"For, tell me, if you please, is it hard to believe that a louse takes your body for a world, at that, when one of them has traveled from one of your ears to the other its companions say that he has traveled to both ends of the world or that he has run from one to the other pole? Yes, without doubt this little people takes your hair for the forests of his country, the pores full of pituite for fountains, the pimples for lakes and ponds, the apostomes for seas, the swellings for deluges."

Hobbes in his "Elements of Philosophy", Malebranche (1674) in "The Quest for Truth", La Bruyère (1692) in this "Characters", Fénelon in "Telemachus" and his "Treatise on God's Existence", Bernouilli, Leibnitz, Tyssot de Patot the author of a curious book: "Voyages and Adventures of Jacques Masse" (1710), the Cardinal de Polignac in his "Anti-Lucrece" all play in a more or less important way with the ideas of infinitely reat and infinitely small.

Then fomes (1726) Swifts! "Gulliver's Travels" of which English speaking readers know too much for me to deal much with. Its great merit is the realism of affabulation, its "matter of fact" accent.

In 1735/1737 appears a confuse but curious and original story entitled "Lamekis" by le Chevalier de Mouchy.

The hero is carried to the stars by sylps using the laws of gravitation, attracting and repulsing forces as means of travel. He is kidnapped by a monstruous worm-man stronger, more intelligent, more learned than ordinary man.

The crowning of this period is without doubt "Micromegas" by Voltaire.

The inhabitant of Sirius and the dwarf of Saturne are always pleasingly evoked in all episodes of the story:

Micromegas' ordinary step is about 12,000 feet long when the dwarf of Saturne must walk ten steps for one stride of his companion. those are the figures, the precision of science. Crossing what to them was an imperceptible pool "The Mediterranean" and the very small pond we call "The Ocean" the dwarf was only knee deep and the other only wetted his heel (IV). The Saturnian's mistress is a lovely little brunette only six hundred yards high, but who makes up by many charms for the smallness of her stature... Saturne is but 900 times bigger than earth and the citizens of this country are dwarfs if only a thousand yards high or about."

This continuous and skillfully dosed mixture of picturesque precision and familiar arithmetic is what makes Voltaire's tale the type of this kind of story in the eyes of many critics.

or resolves of their popple; I will sing their loves, to ir wars, and the revolves of their papers of their spines and principally, I will love to receive to the their body of man say be exactly to the char to man say be exactly to the char it has been eather.

Some to will clapse before modern derivatuses nobieve there conserved the conservation of the property of the conservation of the street of the Satute and Empires de in iune (So ver and Copyres of the important

ngles very year body for world, at there to believe the tense ing traveled from one of tense ing traveled from one of tense ing traveled from one of your e-re to the other its companions say that he had braveled as both mis of the world or that he had run from one to the other pole of the first pole of the your travels of him for the forest of him for the forest of his countries of the porest full of proute for countries, the parest full of proute for countries tor the larger for the countries tor the larger for the countries tor

Hobber in the contract of Phi Crophy", Milet meho (1674) in the contract of the following the contract of the chief "Cintract of the following the contract of the contract of

Then comes (1720) Bwitter cultiver's To vels" of which English speeding readpart true to deal much with. Its great merit to be realised of all the great merit

To AVER 11937 appears a dontuse but curious and original story anticid "Lameris" by 16 Chevalier de Mouchy.

The here is carried to the stars by syips using the laws of arrivated, attracting and repulsing forces as neans of travel. In is dischapped by ansatruous worm-mu stronger, more intelligent, more littless, more intelligent, more

the exemples of this period is without doubt "Heromegae" by

Voltowird.

· The inchitant of digina and the dwarf of Saturns are always acceptaging average in all extends of the Story:

principles of Coverne must walk ten stype for one a ride of his companion.

The case the figures, the stype for one a ride of his companion was an improve this pool with inditerrance and the very shall pend to other the control was only know deep and the court only we call whe control his inest (IV). The Saturnian's mistrons is a levely little remarks only election that we make up here we charms for the control of her santure. Saturnian's mistrol up here to be saturned for the control of her santure is but soo the time of his other time.

The she mealined of her santure. Saturne is but soo the time time of the court of here the court of the control of here of the courty are dwarfs if only a thought

This continuous and skillfully dosed mixture of passuresque et character of character of character of white white mokes Voltaire's to the type of characters kind of scory in the eyes of many orities.

The central theme is yet susceptible of many variations: in 1795 Francois Felix Nogaret published "La Terre est un animal, ou Conversation d'une courtisane philosophe" (Earth is an animal).

During the first half of the XIXth century, with the progress of science appear many interesting fantasies: Edgar Poe's "The Sphinx" (Arthur's Magazine, Jan. 1846) amongst others.

They are but details and side dishes. It is in 1858 in "The Atlantic Monthly" that appears the work that inaugurates the brillant series of modern stories on the theme of Micromegas, renewed, amplified and enriched: "The Diamond Lens" by Fitz James O'Brien. We enter the time of the technically based romances.

Linly, hero and relater, begins at the age of ten to play with microscopes. Then buys a real one and dreams of making a super-microscope but without practical result. He meets a spiritist Mrs. Vulpes who evokes Leeuwenhoek's shadow, who obligingly, gives him the means to fulfill his dream, a 140 carat diamond, submitted to electro magnetic current for a long period shall sustain an interior arrangement of its atoms and after being bored along its axis will enable him to make the universal microscope.

He commits murder to have the diamond, makes his hypermicroscope. As soon as he can use it, he understands that his sight goes much farther than the usual realm of microbes and bacteriums inside the gaseous molecule. This humid and luminous kingdom is full of fantastic plants and inhabited by sylphs. Our micrograph falls in love with an Animula. This impossible and romantic love ends tragically; Linley inadvertently let the drop of water dry up. The universe of Animula dies of dryness and the well beloved with it. Linley goes mad.

Fitz James O'Brien has realized perfection in the treatment of this theme as it could be conceived in his time. The most pathetic element of his story is the insuperable barrier which separates Linley from his love, so near and yet so far. The romantic author thought impossible even in imagination to cross the abyss between our world and the atomic world.

The Diamond Lens was a success in America but Europe seems to have ignored it. France knew of Poe only on account of Beaudelaire's patient and stubborn efforts (1860/1880).

In "Histoires Incroyables" (1885) (Unbelievable Stories) Jules Lermina tells in "Maison tranquille" (Quiet House) the story of two scientists: Aloysius and Truphemus of Hoboken (N.Y.) that have solved the problem of chemical food. But if they are happy with their meals of C48 H36 Azl6 and so on, Aloysius' wife and his daughter Netty do not. They both decline, Truphemus has an idea: if plants submitted to violet rays grow faster than plants exposed to usual daylight, why not it on the girl? "Girls are flowers". Netty is placed in a crystal house in which only violet rays are filtered and inside a park with violet plants. She is dressed of violet gauze. In three months the little girl of five 4 feet 8 inches, a woman in stature, but still a kid in mind. Aloysius and Truphemus have arguements and Truphemus thinks of perfecting the miracle by an operation. A young traveler, Franz Kerry who has seen Netty in her crystal tower is madly in love with her and asks for her hand.

I it to the the substitution of the substituti

Gurang Shariara half of the XIXth neather, with the progress of a section in the progress of the section of the

details the transfer that a rear the work that insurates are trained as the Property of the trained of the property of the trained of the tra

dinity in the contract that the article and the contract of a surface of a surface of a surface of a surface of the contract o

sure to the state of the description of a light process of the form of the state of

te district and at a colored sealized centroline in the presents of the colored sealized sealized of the colored sealized sealized sealized sealized of the colored sealized seal

to the state of the same of the same and the state of the same of

Land to the state of the state

As he discusses with the scientists, Netty unwatched, plays with the electrical gadgets in the laboratory and provokes a catastroph that destroys the "quiet house" and its imhabitants.

The idea of foof is in the air about the same time. Andre Laurie published "Siridon-le Muet" (Spiridon-the-Mute). A physician Aristide Cordat, yachting along the coast of Sardinia discovers in the ruins of an ancient phoenician tower a colony of giant and learned ants. Their king is almost man high. He has a passion for vivisection. He is ready to disect Cordat but the doctor succeeds in wounding and capturing him. They make a pact, Spiridon goes with Cordat to visit men's society. With a mask and various rags he has an almost human appearance and passes for a Japanese Scientist, Baron Tasimoura, mute anddeaf. The adventure ends in the wrong way. Spiridon, deprived of all sense of good and bad commits several murders. Cordat is arrested and Spiridon half killed by the daughter of one of his victims. Nevertheless everything turns well. Spiridon comes back to life but almost unconscient. He passes his time in a garden looking at the ants going to and fro.

(Spiridon's conversation is very instructive, though it is made by a kind of mental telepathy and Cordat learns that his stature is not accidental but the result of an appopriate treatment.)

Anyway, with both these stories we see new possibilities and the theme broadens. Hercule, Pantagruel, the dwarfs of Lilliput and the giants of Brobdingnag were given, ready made, products of nature or of magic, without bothering to explain.

When it was deemed necessary to explain, sight was enough, as for Fitz James O'Brien's hero who observes minute beings but retains his normal height.

From now on we have possibilities of varying the observers! stature.

III

The period between 1880 and 1914 was particularly favourable for the development of the scientific romance. All sorts of possibilities were given by science to the imagination of authors:

William Crookes saying that what we know is so slight that it could be wrong to deny the reality of spiritualistic phenomena or even the possibility of an invisible world. There are proofs of the existence, near us, of an invisible world, the world of the infinitely small. This world, if we considered it attentively, would overturn all our given ideas as do the spiritualistic theories.

To H.G.Wells goes the honour to have been the first to give life to scientifiction (1904) with "Food of the Gods". It is Pantagruel manufactured with the help of science.(I)

In the great French Weekly "L'Illustration" appears in 1909 "Une invasion de Macrobes" (an Invasion of Microbes) by Abdre Couvreur.

(I) Compare with "The Demi-Gods" by Alfred Gordon Bennet (Jarrolds, London 8/6)

- 7 -

And the control of the city and radiate, darly unwaboled, allege with the city of the control of the city of the c

The state of the s

familie of a compute that yeary instructive, the Lie is two in the property of the compute of th

t bine totts fraight was een aw meistels mans one frib , vierili Alt bra to litil le manage des des des parts of the contract of the second to the contract of the contract of the start of the contract of th

the contract of the experience as a second of the contract of

THE WORL AND LANGUAGE TO RELEASE DESCRIPTION OF THE PROPERTY OF

TTT

ar Talleag to whose till and the object the company of the control of the control

the state of the state what we come is accommon to the state of the st

search to the size of the control of the size of the size of the search as a control of the Goda". It is in any such as in the control of the control of the search as in the se

id to true the land (an Investor of Microbes) by Arth Courts at

the compact of a wine is at the design by altred derden dennes (James 187).

The hero is Jean Gerard, laboratory head at the Institut Pasteur, and betrothed to the daughter of Professeur Vernet of this Institution. A bizarre scientist at least half mad, if not altogether: Tornada, is furious beacuse he has been unable to be a member of the Institute and because they have refused to admit the reality of his discovery: the existence of a special microbe special to alcaline mediums, the "micrococcus aspirator". To take revenge he builds, near Mantes, (30 miles from Paris) huge takes where he lets his microbes grow up until they attain, under the influence of orange-red light, enormous proportions: they are thirty meters large and reach to the fourth floor in height. monsters are provided with a gyratory tentacle that serves both as a propulsive and nutritive organ. The macrobe leans on it to walk and jump, and sucks up through this kind of trunk. The whole story, or near so, is devoted to the description of the march: nocturnal terrors, destruction of forests and houses, lone people, groups and then crowds. Paris is surrounded, half destroyed, cellars and sewers are taken as shelters where people fight and starve. The macrobes resist artillery and bombs, they are invulnerable. But mollified by Miss Vernet's supplications, Tornado will destroy them and will blow his head off.

To kill the monsters it only needs an explosive glass bottle charged with acetic acid. And to walk with impunity in their midst, a sponge overal soaked in vinegar. Because these beings, grown in an alcaline medium, are neutralized by acids.

It is very ingenious, but there are still questions: are not microbes monocellular organisms? Have they changed their structure when growing: Or do/divisions we call cells include still other divisions too small to be seen? It seems that the author favors this last solution which he does not try to reconcile with the atomic theory.

In spite of these imperfections and uncertainties much way has been made since "The Diamond Lens". The observer and the observed being are no longer separated by an impassable space. Their dimensions may vary, man becomes giant with Wells; this variation applied to a microbe and it leaves its universe to come to ours. (I) And would it not be possible to turn it the other way round: a human body could vary in the sense of smallness instead of greatness and Linley's desire would be fulfilled, he could go and meet Animula in her fantastic submarine forest.

This new travel will be made with the imagination of modern authors.

(I) Cf. too G. de Pawlowski, "Voyage au pays de la 4ême dimension".

IV

Not without comebacks and detours.

Some stories of which it must be spoken are not based upon modern atomic theories but upon the archaic conceptions of Cyrano and Francois Felix Nogaret: "Le Meurtrier du Globe" (Globe's Murderer) by Commandant de Wailly (about 1910).

Claude Rolland, his sister and a multimillionaire, Williamson, look for the lysterious "Old Sinker" whose real name is Lobanief and who has sworn to kill the globe. After a thousand vicissitudes, chased by Jonathan Loeb, president of the Globe Defenders' League, who has a personal hate against Lobanief they all find Old Sinker in Japan where he

The across to tear detard, associatory head at the institutions of translations of translations of translations of translations of translations of the second product in the second product in the second product in the second product in the second product of the institute and relations of the production of the matter of the institute and existence of appeals in the second product of the mission of appeals of the second product in the mission of the mission of appeals in the second product in the second production of the second of the second production in the second production of the second second production in the second second production of the second second production of the second second production of the second production in the second the second production of the second production in the second the second production of the second production in the second producti

To kill the monsters it only needs an explosive glass bottle charged with heat to acid. And to walk with impunity in their midet, a specific everal contest in vinegar. Because these botnes, grown in an alialine medium, are noutralized by acids.

It is very invenious, but there are still questions; are not, vicyobes noncoefficier segunishs? Have they changed their secureture when grewings; or dofdivisions so call colls include still other divisions to a small to be vice when the the author favors this last solution which he does not try to resonable with the atomic theory.

In spite of the Digmond Lense. The observer and the ebserved being and interpreted being made same the particular of the Digmond Lense. The observer and the ebserved being and except the enterpreted of t

This new bravel will be made with the imagination of modern

(1) of too of de Pavlowski, "Voyage au pays de la deme descriph".

VI

Not without semebacks and detours.

Edwarden observed of thich it must be spoken are not based upon and states the atomic conceptions of Cyrano and Espirota Felix Messacets "La Haurt ster du Globe" (Clobets harderer) by Comandant de Wallly (about 1910).

Clabelland, Milland, Mis dister and a multimilition ine, williands, dept the leatest of Sinker whose real name a Lebenief and we had serve the leatest take the interesting a character of the Defenders' League, who has a personal hate dealest league, who has a personal hate dealest the Character that hate have here he

is boring a gigantic mine shaft near a volcano. Old Sinker believes the earth to be a huge beast and hates it because his wife and children have been killed in the Chicago earthquake. But Old Sinker instead of stabbing the earth with his "bistoury" at a vital point to kill it, only prevokes an eruption and dies. "It was not an artery or an organ, sadly whispers Rose of the Snows. It was a tumor or an abcess. The master, giving his life, wanted to wound mortally the monster... may be, he only relieved it".

Later even, Conan Doyle took again this idea rather poorly in "When The World Screamed".

)

0 0

About the same time many stories about mystericus pygmies appeared. All this was not too new and it seems that authors had little of giving a new interest to such worn out theories. But on account of a serious medical and physiological documentation Marcel Berger succeeded in giving an air of newness to the old idea of the human body being microcosmos in "Quarante de Fievre" (40 degrees C. Fever). The central figure is a woman who has not even a name. Her body is the scene of the She has fever after child birth, because she found a letter from another woman in her husband's pocket. She wants to die and lets the sickness grow then gets better of it when she has seen her shild and recovers. In alternate chapters the author shows the episodes of the fight, now on the level of conscience and then on the level of cellular life. In this last case he takes for a hero sometimes a leucocythe: Great Pale, Sometimes the hematic No 2.274.349.632 or even epithelial cells. is fighting between the white globules and the "monsters" that are infections bacteries, voyages to the "central vortex" (the heart) and to the "parks of wind and fire" (the lungs). Colloidal gold particles brought in by the physian intervene and the battlefield of the fixation abcess is depicted.

This tempting idea has since many times been rewritten in American scientifiction magazine. "The White Army" by Dr. Daniel Dressler (Amazing Stories Sept. 1929) amongst others. These do not ade much to Berger's story. But in Benson Herbert's dyptic "The World Within" (Wonder Stories - Feb. 1931) and "The World Without" (id. Aug. 1931) more skill and more pleasure are found although they are but modernized Rabelias.

0

0 0

To "The Diamond Lens" is directly related Ray Curnings' very American adventure story, "The Girl in the Golden Atom" (Harper & Pro., N.Y. 1923 maybe in a magazine in 1919). ((Ed's Note: Reprinted by early FANTASIC NOVELS)).

It is nearly nearly a fairy tale - an almost unavoidable defect inthis kind of story -, but still leads us to ask questions with more precision that had been done until then. The problems of space and time, for instance, although the scientific information of the author is insufficient. Later other American authors have tried to solve this problem with curious consequences as will be shown.

Nevertheless it is a happy thing to be able to find in such stories something of the charm of actual fairy tales because we are too

is berieve a giranti with anaft near a volcano. Did Sinker believes the series of the real outlined have the califord in the case and hates it because his wife and outlined have the califord in the case of stantlar anaft, with his colory at a vital point to kill it, only provided the case of a series and the case of a series which it acts a series artery or an artery whispers and a series when a series and the case of the master, which his case of a case of the case of

ister tyon, thing loyle took again this idea rather pointly in

in the second

with address; and along atoms pairods year old was old Listi but threate shad to some the transfer of the case the ising a revitationest to Just warm out theories. But on or unterior relicing the real to and payed thereast decumentables mental to a condet I think in Ir Benedices to the old idea of the himan ear mains said to rend to remarkation Flavre" [40 degraes d. Pavers. . to sentral Wight on a mean who and une even a name. Her body is the read of the the care where has sover after abit birth, teause she tound a letter fra signification of the continuation police is also wants to die and total the -of his bilife work ness and his modw of to wooded about note weap-peakers. " Here is a second of the second of the second of the second of the first i, 'imalevel at constitutes and then on the level of selduler lift, . d. g. chi in . serween the white globules and the "Arnsters" thet are inof bas (trees wit) "refrev larther" oil of topray, v .coingstor.gar ing Starkag traing are fire! (the lungs). Collected weld particles to we see the transportant intervenue and the bat vieriald of the firstion at sees

the state of the companies and a since many times rean rewritten in where the maje saighting teams inc. The White Arrys by it is anded I consider the said of the

The state of the s

reconstruction of the second

La Marin & Great Phil

m C

Hate the common diseas is directly belated may four local verse of the standard may four local verse of the colors of the first of the

in the company of the still heads us to sek questing with more in a company to the company of the company of the company of space and the company of the company of the sector is in the company of the sector of the company of the c

levertiernes it da a sappy thing to be able to Tine in cost

often offered poor and scholarly imitations.

For instance Marcel Morel's "Petite Jungle" (Little Jungle 1928).

Doctor Gambrinus, professor of natural sciences at the University of Grenoble (S.E. of France) discovers during one of his walks a black spider of a new genus that he calls Satan's Spider. Stinged by it, he falls in lethargy. When he awakes after some months, he is inside a cocoon and considerably smaller. His advantures are more comic than tragic. He is adopted by ants, fights with a caterpillar that he kills with a thorn, lives in a cavern between two pebbles near a streamlet of water, is the host of a bee, goes into an attic where he fights bugs and flies from a louse, comes back to his former ant-heap where he reigns in reward of his cleverness in a battle with other ants. But the use of power speils him, he becomes tyranical and unbeamble and the ants leave him alone. Luckily, he awakes, recovers, and finds his normal height. From now on he will live for his family, and shall not worry insects for the love of an idel science.

The author ignores the technique of credibility elaborated by Poe under the influence of science; this story is rather a setback.

Cthers are standstills, second or third grinding of Wells' ideas. In the sudden flourishing in the United States about 1927 of scientifiction magazines: Amazing, Wonder, Astounding Stories, Weird, etc....it is easy to find examples. "The Hollister Experiment" (by Walter Kately, Amazing Quarterly Winter 1929) "The Day of the Beast" (by D.D.Sharp Wonder Stories, May 1930) "The Tragedy of Spider's Island" (by Captain S.P.Meek, Wonder Stories Sept.1930) "The Island of Giants" (by Rowley Hilliard, Wonder Stories Aug. 1931) "The Thousandth Frog" (by Wynant Davis Hubbard, Blackie & Son, London 1935) - even in France "La Revolte des Monstres" (Monster's Revolt) by Norbert Sevestre, etc.

Two stories of this kind are worth more commentaries "The World of Giant Ants" by A. Hyatt Verril (Amazing Quarterly 1928) rather long but well done in accordance with Poe's technique. By a patient accumulation of details, the author succeeds in creating an atmosphere of wonder around his heroes; an astonishing likelyness in spite of length.

More daring and with freer run to his imagination the writer who signed Horner Eon Flint "The Nth Man" (Amazing Quarterly Spring 1928) did not flinch in front of the most formidable difficulties.

His Brobdingnagian Giant calls for some remarks - could it live? (without speaking of the inherent difficulties of its creation) Two miles high when he stands he must find up there an air too rarefied for his huge lungs and what if he climbs mountains?

The human form is conditioned by a certain medium: the "bio-sphere". If by its dimensions, the human organism outgrows his medium limits, it ceases thereby to find living conditions that are necessary or favorable. It has every chance of dying.

It shows that the possibilities of increase or reduction of living organisms are strictly limited.

In regard of increase a French author has taken the reduction angle: Octave Beliard in "Les Petits Hommes de la Pinere" (The Little Men In The Pine Wood).

tion . Prince to and seed arty intravious.

Bur instance Marcel Morel's "Petite Jungle (Linkla inngle letty)

Protein satisficients, professor of natural sciences at the University of Concerns (S.E. of France) discovers during one of the walks a line sight of a new reduce that he calls Satan's Spider. Stinged by the fields in latherry, when he awakes after some menting in the instance of confessor and sealth and confessor and the safe. His advantures are normally satisfied that the caption of a safe of the view of a safe of the safe. It can be safe of the safe, the safe of the safe, and the safe, from the safe. Safe of the safe, the safe of the safe, the safe of t

The distance is the technique of ereliability elaborated by

There are standered, as second or third criming of wills' of the 's the 's the criming of wills' at the 's the criming to the 's the 's the states about 1927 of an individual of the constant ing worder, astrone ing ut rise, actrd, of the case of the constant ing actrical winter 1929) "The Hollister Experiment" (Ly of the case of

Lite aborder of this kind are worth more commentaries "The Larld Tiene Antin' is A. Hydtt Verril (Amaxing quarterly 1912) rather iong the will denote in asterorance with Posta technique. By a patent assurable first of defaile, the suther succeeds in creating an atmosfure of sense. As the first her succeeds in creating an atmosfure of sense. As the first her succeeds likelyness in spite of length.

ins dering the driver of with from run to his imagination the writer of the dering level of the dering level of the high the lift than the difficulties.

Al di bloom - avenum some for alle for some remarks - nould it l'affected by the constant of its crustics) we mile the color of the crustics of its crustics of the mile the color of the colors of the color

find side for an formal is conditioned by a certain medium: the "rice" of the find organism outgrows his med we starte, is obtained by the hunden organism outgrows his med we starte, is obtained by the lind living conditions that are necessary of the test of the organism of the startest of the organism of the startest of the organism of the startest of the organism of the organis

To not replan to experted to settiliding of this each of this of a set (0.5% of this)

in regard of indrease a French author has taken the reduction design design in "Les Petits Hommes de la Pinere" (The Little Hommes de la Pinere" (The Little

The story is based upon biology. It is known that all living forms derive from a cell called egg. After fecundation this cell divides in two, then in four, in eight, and so on. The agglomeration of these cells forms a tissue that doubles by involution and becomes an embryo. In certain animals, killing one of the primitive cells immediately after bipartition, the other cell remains uninjured and living out well. In this case, the growth process nevertheless carries on and it gives a complete individual, but one which shall only have half the normal size and weight. If the same operation is done after the second bipartition the individual shall be reduced to a fourth. After the third bipartition, to an eighth. That is the proceedure followed by Dr. Dofre the hero of the "Little Men" but its originality consists only in that, instead of operating inferior animals he practices his experiences his experiences on human embryos. He thereby obtains a race of homounculuses that he lets grow and multiply in a vast abandoned pine wood, carefully cut from the rest of the rest of the world. The life of these more-than-pygmies is as short as their size and Dofre and his assistant Dr. Morane, see generations follow one another without interruption. The little men form tribes, then peoples, invent arts, found religions. One religion, chiefly, and it is Dr. Dofre that plays the Eternal Father's part for them as he is in fact their Creator. But he will have his contemptors, too, as all gods. And there will be theological discussions, then factions and revolutions. It is all human history in short. And there is felt the influence of sociological progress. It is not the individual idyll studied through a microscope as in "The Diamond Lens", as when psychology reigned without claim on literature, but social movements. The true hero is the crowd, the whole people of the little men. That is a way to renovate a literary theme that seemed exhausted: Ideas and theories are under the microscope. (I)

> ິບ ນິດ

Nevertheless, we are far from having reached human imagination's limits and it is wondered why life could not be placed upon the atomplanet? It is true that Ray Cummings tried and almost failed as his story is full of unlikely things. But it can be done again and several authors will try.

M. Maurice Renard seems to have been the first in 1928 to exhaust the subject with all possible developments in "Un Homme Chez Les Microbes" (A Man with the Microbes). An inaccurate title, that shows how insufficient is the ordinary vocabulary for such new speculations.

It is not with Microbes that M. Renard's hero goes but with beings to whom our microbes would be cosmic leviathans.

Flechameau, a barrister, friend of Doctor Pons is in love with Mademoiselle Olga Monempoix. But the Monempoix refuse to give their daughter to Flechambeau as he is 1 meter 96 tall, when charming Olga is but 1 meter 55. They think this union ill assorted. Flechambeau despairs. His friend Pons, to comfort him undertakes to find a drug to make him smaller. The house-cat, Mary Stuart, is brought back to kitten proportions. Flechambeau enthusiastically swallows two reddish pills and in a few days stands only 1 m 76. He asks for Olga's hand and is accepted. The event is solemnized by a bethrothal dinner. But during the feast Flechambeau finds with terror that he walks on his trousers lower ends. He is still reducing. He flees, despairing again and in

(I) Cf. Minimum Man by Andrew Marvel, Gollancz 8/6 London.

The steery is based upon biclogy. It is known that all living forms comive from a cold called ogg. After fedundation this opli divid-The swy, the four, in eight, and so on. The aggleser than or etally unlike forming their the their dougless in clution and septembe and in esses or lie force a tissue that dou lead; in clution and accesses an expense of the extinitive cells imaginately interest, in the extense of the extinctive cells imaginately allowed that it is not sold, the extense of the extense the mean model of build, and those the hereby obtains a wace, of buseare divising that defilets grow and durt, ply in what abandoned time render e saledly and drun the rest of the cost od the westld. The lafe or chare a complete of the crubic state of the cost of the saled of the The straight of the straight o individual ideal applied barrugh a microscope as in who Dianond Lekste we wish to the result of without elaim on liberature, but sonia and selection of the rature. in the responsible to the standard of the court of the beamed articulated and the standard of (I) ..equecentli add petro ors todayist

All Little the College of the erection from aving reached human inside ton's intendent in it is de wondered why life could not be placed upon the aremplanet ? It is wondered why time could not be placed upth the atom-planet ? It is true that Ray Cummings tried and almost frilled as his story is fall of prijkely things. But it can be done exain and reversi-

pitted at tagetee Rength seems to have been the first in 1928 to exten handstary nations with all possible developments in "Un Urmme thez Lea : "Ebbled" (Art at whit bac diarches), An inaccurate title, that shows how insperiented on the the ordinary vocabulary for such new apeculations.

is who we so dot which Midrahos that M. Renardis hero goes but with the cast gray with the country of the configuration we gld to country leviations.

Pleakagega, a barrister, iriond of Doutar Pous is in love.with. Sagonalis (4) 38 Mandardix, Pho Maneapaix, refuse.t. sive their conflict to the beath east as he is I meter 96 tall, when charming Mer is

the second of the second and the second seco

Activity (New Committee) and the production of the committee of the commit

spite of Pons' efforts the reducing process goes on relentlessly Flechambeauquickly has the size of a doll, then of an insect. Soon he must be seen with a lens. At last Pons must place him on his microscopess objective. But it is certain that Flechambeau will rapidly go out of visibility's range and disappear in the infinitely small. Flechambeau on the polished surface of the objective that is rough, rocky and cavernous to him, sees an hideous whitish monster coming bristling with prickles and legs with suckers: a "mange sarcopt", which has got away from Pons' entomological collections. Happily, the Doctor intervenes - all-powerful demiged, and destroys without delay the formidable beast, though smaller than the most derisive flea.

Already an ultra-violet ray hypermicroscope must be used giving 40,000 diameter magnifying power, soon it is not even enough. Flexhambeau becomes molecular and then atomic.

After a period of insensibility due to the cold intermolecular spaces he lands on a planet called Ourra. The inhabitants, will tell him later that they have seen in their sky a prodigious mass appearing from far away and shrinking on the way.

This planet is inhabited by learned "mandarins" that succeed where Pons failed. They stop Flechambeau's shrinking...He is like Micromegas a being fallen from the sky.

Sub-atomic planet Ourrh is a place of wonders. Of small size, lighted by twin sunstars, one yellow, the other violet, when one sets, the other rises: there is no night on Ourrh but alternate violet and yellow days. Either there is a night but artifical as the inhabitants have learned the blessings of darkness and have built dark rays generating towers and at fixed times the "light the night".

The Ourrheans are almost like men very intelligent, highly learned, rather tired men: that is why our traveler calls them "mandarins" They have senses unknown to men. One has a kind of flesh tuff on the top of the head as its organ, it enables them to communicate by a form of telepathy, therefore their language is very rudimentary. Nevertheless they have a very active social life, especially so, as it is their custem to marry by threes, instead of couples. Every woman has two mates, the "husband" for serious things and a "cherub" for pleasures. Notwhithstand -ing, under the polished and brilliant surface of this society, there are deep anxieties. The mandarins have had to fight in the past perrible enemies. The Hons a species of giant mushrooms that reproduce with terrific speed. These have been wiped out but seeds are kept as samples in a museum. If they should grow again, would the mandarins be able to resist? They have almost lost all their fighting ardour.

Agathos, Flechambeau's scientist friend works to find a product that will enable the terrestrial to grow again and come back to his native size. He succeeds after sixty years (Ourrhian years of course). Hardly has he done it, that by accident, the Hon' seed falls on favorable ground and spreads with dizzing speed. The giant mushrooms rise, grow, cover a large space under their toadstools and then burst with a thunderous noise shooting far away their spawn which begins to develop and growlike mushrooms. Nothing can be done against this menace. The mandarins are condemned. Flechambeau can do nothing but swallow his pill and fly to the infinitely great. He grows quicker than the fungi and finds himself under Pons' microscope, small enough to walk out from under the glass cover that protects the instrument and completes his growth in

colore of Reast alforer the reducing process goes on relentiosaly flecherlanderly las the rine of a dell, then of an insect. Such has so he seed with a least At last Prasmust place him on his higherscopels obtality. But it is carred that the there an will repidly yo out of vislocality a renge and dissipant in the infinitely meal. Plechantess of the political curface of soc objective that is rough, rocky and caverness to him, sees an bideous whitish menater coming triatling with prickles and local with aurests a beange care opth, which has got away irrarroad the local collections. Happilly, the Doctor intervence - all-powerful designs, and east-ray withdur telly the forter heast, the ugh analyst

already as altra-visibt may hypermintescope nest to used giving \$90,000 diameter magnifying power, soon it is not even energy. Flesham-teak becomes makeular and then atomic...

Autor a period of insensibility due to the cold intervolectian states by lands on a pistet relied form. The interbitants, will tell in a later that they have deen in their sky a predigious mass appearing three as a stay and caring on the way.

This planet in inhabited by learned "manderins" that sucress where Frau failed. They step block mboauts thrinking... He is like Microwayts thrinking... He is like Microwayts thrinking...

Sub-atemit pienet furth is a piace of wonders. Of small aile, access by twin smattare, one yellow, the other violet, when one acts, the other violet, when one acts, the other violet when one acts, the expense there are hight on Ourth but alternate violet and yellow doys. Bitmer the theory is a night but artifical action inhabitants have learned the blowstuge of darkness and have built dark rays generative towers and at fixed theorems.

The Durnheans skept is also of the men very intelligent, highly learned, rather vired ment to any our traveler calls then "handaridation for each some intenderal to any our traveler calls then "handaridation for body for each call of the same is the same of the body as the cream teach of the retry of the retry and the life. especially so, as it is their custed to early by there as the couples. Every winds has the custed to early by the each of couples. Every winds has the custed the relations of the each transment the polithes and a "hierward for pleasures. We which was they and each the polithes and the polithes are called to the each and the polithes are called to the call of the politic same of the politic and are called to the each the portion with the analogy. There is a success to each the mandarity is the transment of the politic and the mandarity is the transment of the pandarity is the transment of the pandarity is the transment.

Agather. Missessate to grow again and works to find a graduet case will ematic the beguerical to grow again and ourse been to his head of so disc. He consected alther sixty years (Ourrhian years of course). Heading to a lone it, what by delicate the host send falls of favorable grades at agrees with disain grades. The host send rainces rise, grow a large space under chair goadstools and then ourst with a theolose read grow as a large space and a large of the chair space with begins to develop and crow and arise are analysis of first and a consequent file and an action of the first or and an action that the first out of the file and all and the first of the file of the f

Pons' room. But he ends it a shaky old man. His sixty Ourrhians years still bear heavily on him and it is a finished man that Pons' finds in his bed when he comes back.

It must be said that the author uses to the full and very clevorly all resources offered to him by scientists and philosophs' speculations.

But even with his cleverness and his brilliant talent, M. Renard has not avoided all the snares in which had fallen his predecessors. Especially as regards time relativity Flechambeau aged sixty years (during the time a few weeks elapsed in earth time. The difference in vital rythm is better than in Cummings' story but still too insufficient. The number of revolutions of atomic planet Ourrh must be compared in a given time to earth's? It is easy to guess the result...

D(?). F. Starzl has foreseen this objection in his brief and very suggestive tale: "Out of the sub universe" (Amazing Stories quarterly, summer 1928).

... But there are still many questions left unanswered, of course, it is too easy to criticize these "fantasies" and we do not wish to belittle the authors' talent but rather to thank them to have lead us to ask such questions.

It is almost the end of the journey: some stories are worth mentioning as particularly interesting variations on the theme.

"In Two Worlds" by Edward E. Chappelow (Science Wonder Stories Oct. 1929) - More original still is "Into the Green Prism" (Amazing Stories - March 1929) by A. Hyatt Verrill (I)

As knowledge increases, universe appears more complex and speculations on other worlds are familiar to French readers with J.H. Rosny Aine's works and to English readers with Olaf Stapledon's.

For instance, there are still difficulties which our authors do not seem to have seen: for instance, if the mass of the reduced bodies remains the same. they must acquire an enormouse density which should be the source of astonishing phenomena (Cf. D.D.Sharp's "The Eternal Man Revives", Wonder Stories Quarterly, summer 1930). These remarks prove that the subject is far from exhausted and still keeps surprises in store.

V

Professor Messac then tries to draw conclusions - provisional conclusions for the time being - from the examination of these stories.

First of all a remark must be made that the theme is incompletely covered: no one has ever tried to explore the super-universe.

Of course there are many stories of space travel most of them are dull. Still they only show us stars and galaxies but not the hyperuniverse of which they may be a minute composing particle.

(I) Cf. Also "The Green Man of Graypec" (Wonder Stories) published in England under the title: "The Green Man of Kilsona" by Festus Pragnell.

- It is ends it a short and all sixty but the sixty burding and at the formation and the season of the state of the state of the season don one adams to the

-vels true to the the author uses to the fine of term st--elepech 'ant a l'de has assidantes ye min of hearing a compensor i 1

then the states their training and has passed that the training the states and the states are the states and the states are th -with arthur and the bems assimed all vitviteles are there we have your ity. W. or a winter the earth time. The differ was in winter st tack the man bot flits but grote 'small to and when the The second second of the second secon ment on the design on at some the complete the complete to the

I'm i Jones gara foregon this objection in the site and - T CTEAP RAIN OF THE BANK THE THE WATER OF THE OFFICE OF THE PARTY TO . (a st remain st . .

id . See a consum of the contractions to the traction of the contraction of the contracti wars, it is to easy on eritfully these "Taptaries" and with not war to he design the same to the test of the test to the test of the t

- am day, we as asignous error : yourney; and the home and its will be roles as core spicery interpeting variations on the bilar

enjunce that a compact) weinggaio . I brown by the think and the ont age of the analysis ability is "into the Green Fried (age into treasy - sques (eas) by A. Hyabs Ventille (1)

in a whide terreses, universe squests more in quex and sperthe car i or walks are familiar to French readers with it. . wanty bett were and to hagilan readons with Olaf Staploanni.

there due to delike satisfed file at a stord , seneral with the time and seem to was seen; for instance, if the mass of the proceed that termina the mary, blog mass arguine an enormouse density at the shring to the state of pot state of the numera (of. D.D. charp's "the essental line. Reflect to the starterly, summer 1930). There a many provention of the provention is far from extended and at 1th bases sum times in entra-

50 to 10 11 10 8:6

I series a leasan time bries to draw conclusions - revision and the state of the size of the the examination of there as them. The state of the s

thigmpont at mastr att that share on door American to the training

are doil. It was not stored to explore the super-universe.

The state of the state of Gregotto" (monder Stories) continued in the first and religion for the first property of the state of the sta - the second of In this world so far away that it dominates and contains us; the island universes, of which our Milky Way is but a sample, may be the molecules of an organic substance or of a mineral. And the whole of this universe out of which we can only guess blind darkness; this universe of which Einstein has shown the curvature and the limits, may be a micro-organism sunk in the superior universe: a microbe swimming in the virus of some best; or, on the contrary, a white or red globule in the blood of some animal: may be an intelligent being that dreams of us and wonders who we may be in the infinitely small.

It is not easy even in thought ...

00

In a much simpler case, for instance, the giant ants of A. Hyatt Verrill. He seems to take for granted that such insects would be proportionately powerful.

This reasoning is seducing but false. If something living or inert grows a thousand times in length, if proportions are retained, must grow a tousand times in breadth and height. That is to say that if its lineal measurements are multiplied by 1000 its surface shall be multiplied by the square of 1000 and its volume by the cube of 1000. One cube centimeter of water weighs one gram; if its dimensions are multiplied by 100, it is a cubic meter weighing exactly a metric ton. It will be approximately the same for the insect of length enlarged to one meter length. Only if its muscular energy is increased in enormous proportions (and one wonders why and how?) the beast would be crushed by its own wieght.

J.B.S. Haldane has studied these problems in a remarkable essay: "On being the right size" and shows that the increase in dimensions carries necessarily change in shape (form). Their breathing system, for instance, prohibits insects the size of man. The muscles of insects may contract more rapidly than man's but are inferior in performance (with man's performance a flea or a grasshopper should jump six feet high).

The same goes for men. If his heighth was multiplied by ten, his weight would be multiplied by a thousand and the thickness of his bones would only be multiplied by a hundred. A twenty meter giant could not stand up without breaking his thigh bones.

For the same fundemental reasons the decrease in size of human form or any known living form would meet as much obstacles for instance warm blood animals are in contact with the air (or the water) generally cooler with the whole surface of their skin. If size decreases the radiating surface will become much greater relatively to the wight of the animal. It will be difficult for the animal to keep his temperature and it will compel him to a greater expense of energy for that object. That is why small animals connot live in cold countries and migrates in winter to warmer lands. Insects die, it is only their eggs that resist the cold.

Further certain well known physic phenomena negligible with our size would be awful, for instance: superficial tension.

It makes us wonder whether the laws of nature would not be absolutely different when passing from one step of the universe to another.

It is not printered, of which our, wilky Way is tut a many is, may the sale of printered, of which our, wilky Way is tut a many is, may the malaral, and the whole of molecules of an organic Substanta or of a minaral, and the whole of the sale of

it is he's easy even in thought

.a le suus aralu edt jenesant not jase telgris ite a si si rimenstreent ista take for granted that such inserts namid te

need and a second of the second por false. If sentending the second of lights or states.

It is a second to the and times in tempte, if the properties and consider.

It is a light to destroy at a property and height. That is to say that is a light to say that is a light to say that is a light to say the say it is a light to say the say is a say the say the say is and the say it is a light to say the say is an analy a say in the say the say is an analy a say in the say the say is an analy a say it and the say it is an an analy a say it and the say it and the say it is an an analy and the say it and the say

The and food for men. If his beighth was multiplied by ben.
The weight would be colding to the stormend and the thickness of the
runs would now Me auditipated by a hundred. A twenty return place which
has been recent cracking his thigh bones.

or the sure tundemental reasons the decrease in size of trunt or sure of the sure of the sure of an all the sure of the sure of an artists are in critical with the sure of the water) assers, and the sure of the

aur nile aldigipen anaconell biblio mons alow in other as the

The street will be the standard of the law of the world not be the standard with the auction.

In this case the extrapolations of our authors would not only be impossible, unpracticable but perfectly absurd too.

Prof. Messac is sorry to feel drawn to this conclusion following Maurice Maeterlink, Emil Meyerson and W. Wernadsky.

... Good bye, their beautiful dream of travels to atoms, good bye, explorations of electronic planets with twin suns. Too bad, so bad even that he feels like trying to hold on to a last hope. For even if we must admit the discontinuous structure of universe still analogies and ressemblances may be found from one step to another and perhaps, the possibility of going from one to the other may be conseived.

But even this hope must be abandonned, ressemblances between atomic worlds and ours are, less and less certain, not to say that they vanish altogether as science goes on (Cf. Eddington).

The likeness between the atom and a planetary system between contestable and is contested. Various hypothesises have been brought forward (Shröding's atom energy bundle was nearly adopted but rejected for mathematical reasons if not to avoid disheartening our imagination). It seems almost sure that inside the atom the concept of matter vanishes or at least is subject to revision. The seemingly evident dogma of impenetrability of matter is opposed by the fact that two or more electric fields can be superposed completely and continuously, that is to say: compenetrate. That gose far, even shakes the very foundation of logic and opens the way to new forms of reasoning.

VI

If it has been often repeated that the ordinary laws of physics were not valid in the interatomic world: one of the effects or relativity shows that the same goes with superuniverse, ordinary laws do not apply. Famous experiences on the speed of light and astronomical observation confirm it (Cf. Eddington's comments on the fact that dimensions and masses of stars do not vary much from a certain mean value). Relativity leads us to conceive a closed universe, a kind of bubble lost in the infinite and the unknown.

So, many trials to fathom the mysteries of the infinitely great or the infinitely small end in a blind alley.

As much from an artistic than from a scientific point of view it is not very much encouraging. But we must not abandon all hope. Even if observation deforms or destroys in part the observed object, it does not prevent science's progress. Now comes the Electronic Microscope, which will show what even light leaves in shadow new inventions shall come to puch back the frontiers of the infinitely great and the infinitely small. It is already spoken of an electronic telescope (Henriiotaux's invention).

Authors will assimilate new concepts and write new fantasies. Who knows what surprises the electronic microscope holds in store for us? It may discover a world full of wonders which may revive the enthusiasm of the first micrographs of Leeuwenhoek or Spallanzani and a new stream of imagination shall follow to give us new and better stories beside which, those of today will look as old as Wright's plane beside our round the world record breakers.

the transfer of a section of authors we also be a larger than a section of the larger of the section of the sec the latter of the territorial control in the second little The track is norty by feat tracks and the track of cert of the eng, engle delegant to means litition of the second of the

areowici manne preiser à les mote est manuel con est le manuel newtot maune, mistered a les moto est masses.

The destroy lave total serion agreched by the company of the serion of the company property of the company of

Friedly to apply the alternatives . The death became you meeting above the little and the apply the are the apply the apply the are the apply the are the apply the appl The least problem of the surgramming of the surgram

in the first of the first and as a second of the second of the second of the first neighbors and and and an enter the contraction.

The first of the second of the first of the

and any of the bon adjoint bon adjoint to the line of the The second property of the property and while the contract of Professor Messac concludes:

With science's spectacles we see the world more easily and we moasure more easily our powerlessness and the impossibility to raise us even in imagination, to the part of the All-Powerful. But the show is fascinating and we do not get tired of looking. It broadens, moreover it amplifies and it diversifies itself without ceasing. Let us be assured that many new perspectives yet undreamed of shall still come to vary and imbellish it.

0

Of course, in this short "resume" of Prof. Messac's work, I have only given the titles of the American Stories as the American fans know them even better than I do. The synopsises of French books are given for reference and comparison.

I have only added very few supplementary notes.

Furthermore my satisfaction would be immense if some fans would find time to point out to me other books or stories that may have been overlooked or are unknown to Professor Messac and me.

But most important is the gist of Professor Messac's careful survey of a vast theme and I hope to have been able to give you an honest rendering of his thought with all due apologies in case of unvoluntary treason.

My aim is fulfilled if you have read this long article with interest and realize that on both sides of the Herring Pond people of all age and condition take pleasure and interest in such stories that some judge childish with undue haste.

---000---

Editor's Note: This article has been set up exactly as sent to us by Harry Warner, Jr. Editor of the now defunct but fabulous SPACEWAYS. We do not know when it was written, but we do believe that it renders a great service to stfandom.

Should anyone wish to discuss the subject further we will be happy to forward copies of your information to M. Georges Gallet or you may do so yourself at his current address of:

Georges H. Gallet 3, square du Thimerais, Paris 17, FRANCE

While this issue of MAG WITHOUT A NAME is mailed postmailed for the 52nd mailing of F.A.P.A. for the Summer of 1950. It is individually mailed to protect the copyright privileges of Georges H. Gallet, who, tho not a member of FAPA must and will receive copies of this issue to distribute as he sees fit. FAPA copyright does not allow for this.

The state of the s

The base of the state of the st The provided of the property o

a and the transfer of the same The state of the s

and the transmission were some sense of the contract

the second of the spectrum and also the second to

The second of th AND THE PROPERTY AND TH

ASI LE WINTER

The second of the second secon The A Vi of the Mark of the Arthresis and Arth

The state of the s

Toy be a Assessed D Attended to steel

Dunk Sez --- The chaff and chatter re: recording and records that has been running rife in FAPA of recent months has The chaff and chatter re: recording rife in FAPA of recent months has been most interesting and informative to

me. For myself I am now using a Philco chasis with RCA magnetic pickup (12v) on my 78 and standard Columbia LP with an Astatic Crystal. My 45 is the standard put out by RCA. I'm sorry that due to some financial trouble I had to dispose of my ULTRAPHONE THEATRE APPLIFIER (this is a Western Electric product). I had a small model VOICE OF THE THEATRE SPEAKER on it. I hope to replace it later.

I was fortunate in having a large record collection (between 5 & 6,000) and was able to use them in programing 2 to 3 hours of dejay shows a week over local stations during the past couple of years.

The experience of that period has caused me to forumlate a series of plans for a transcription service. One independent recording service exists locally but turns out very poor quality stuff. They are not equipt to turn out programs.

Original plans called for the building of a separate building containing studios, office, etc. with leased wires to radio stations but that plan has been temporarily abandoned in favor of using the small converted studio now in use to which a control room will be added this winter. Equipment will not be installed permanently though as it is hoped that the original plan can be pursued in the near future.

The equipment settled on is Western Electric turntables (the 78s are now ready for installation); Miesner disc recording equipment for both 78 & 33 1/3 with 2 Eicor tape recorders adapted for 2500 foot (64 minute rolls). These Eicor's will be revamped in their response circuits to fit the situation. As they come out from the factory they place the emphasis on the base end of the response curve to compensate for the microphone with which they are equipt. It has an exceptionally good response in the high frequencies (a desireable feature for "Candid Microphone" productions where the mike cannot be used out in the open and an extra sensitive mike is needed). Wire recordings were tested but discarded immediately as worthless in quality work, especially for musical reproduction. Some new equipment is now on the market (ABC uses it) which has a wonderful quality but basically it is the same as the Eicor only using a tape speed double that of the Eicor. At the moment its cost is prohibitive.

-00000-

It is suggested that stfans might be interested in Raymond Scott's original compositions as recorded in a limited edition by MASTER RECURDS, NYC. The surfaces, responses, etc. are exceptionally good and each record has own album and program notes. The first release (the series so far includes five releases) was Dedicatory Piece to the Crew and Passengers of the First Experimental Rocket to the Moon, a Raymond Scott original. The flip over is a new treatment of the oldie Sometimes I'm Happy. All are Scott arrangements and recorded by his Quintet (the only such group with six members). All of the originals should be of interest to fantasy addicts: Bird Life In The Bronx; A Street Corner In Paris; Snake Woman; and Ectoplasm. The flipovers are (respectively): Dinah; Singing In The Rain; Tiger Rag; Song of India.

If anyone would be interested I'll publisha list of Raymond Scott originals (I think its practically complete).

It might be well to publish a list of record dealers with which I have done business - some to my great joy and others to my sorrow. I hope that others will pass on names and addresses to me that I can use to

The obout and based that and based the company of t elseping and the state of the shoot of the state of the s et en blic i i i i i i man della an comple que sen national in antitre at a francest a fet and the terms of the . And Thomas of a man to the the state of the s a second second and rot bind plan been been took retile, otenin a second being states. I higher his are a second The equipment is the continuous of the continuou The state of the state of the rest of the Payors of the relation of the relation of the state of find aligned the transfer of the first it think its programmed the confidence The wight was well to be been a list of record dealers with which I lieve the business and the great for and others to my sortow. I hope the business will pase of names and oddresses to me blat I am use to

help keep my sponsor happy.

REVERE RECORD EXCHANGE 344 Mountain avenue kevere 51, Mass.

I have done business with the following:

Anthony Rizzo - owner manager - gives the collector a break both as to price and as to meaning what he says. When he lists a record as new or excellent he means it.

Altogether dependable and honest. Ne padding.

JAZZ NEST
Box 562
G.F.O.
New York 1, NY

Edward J. Novak - a good source of reissue Jazz I have found this source to be dependable, although a little slow (probably due to volume of business). Handles complaints promptly and with great understanding. If you supply an exact description of what you want he will endeavor to fill it exactly.

I unqualifiedly recommend both of the above dealers.

FALKENER BROS.
383 Columbus Ave.
Boston 16 Mas.

"Cuz" Falkener - a don't know what kind of a source this is. I have written several times, sending want lists, etc. but receive confused and confusing letters and cards in reply. Possibly, if I could figure out what this dealer expects I could do business with him, but to date nothing but confusion.

LEITHULD PLAND CO. 221-223 Main Street La Crosse, Wisc.

"Lindy" Leithold - Lindy has had some tough luck lately with his father being forced to retire because of ill health. One of the best dealers in the country. The added burden thrown on his shoulders has slowed him down, but Lindy still does his best to give very satisfactory service from his large collection. Send want list though. In my list I include him with Revere Record Exchg.

Amalgamated Record Group P.O.Box 341, Cooper Stn. New York City, NY

No personal touch to their service but satisfactory.

Paramount Serv.
313 East Market St.
Wilke-Barre, Pa.

Source of used juke box records at very low prices, but I'm still waiting for an order sent in 3 months ago. Receive periodic cards saying "Thanks for order. Will be sent in a few days."

LEWIN RECORD "Paradise" 5600 Hollywood Blvd. Los Angeles 28, Calif.

The less said about this one the better - I'm prejudice. I sent a want list of 23 records, received quotes on all, ordered 15, (all were quoted and listed as new or mint) received 5, 1 was new, 2 were good, the other two were so poor as to be unuseable. No reply to 3 complaints. Subsequently received additional quotes with prices on items jacked up 100%.

tarve done bus means with the following and sovin - regumen reces - gives bus or leaston, a presk toth as th offer and an to reaning what he says, whus he lists a galubra was account ban oldsbaegon value off. North of the second action of the second of of such rate saw (proc day due to of their transfer draws date without of wow distr to may the need deems as ylogue wex vistance of the contentue of the extention. sentition of the company of the order of the contract of To the Brillener - A don't specified and all THE NEW STATES little phile to have write a material A IT - Y THE LOTE ER al abuse on a start once antonse acht al abuse on a start once and acht a contract of a start once and acht a contract once and action of a start once and a st Well H. Teller exections will be a storage and on aid a dw with bim, but to dote not list nut confusion. nigros man. And and gint, - blodsted "gazi," the bears the last of the state of the last o with any of the ais to bid McInod 111 to sepress white cost dealers in the neuntry, as taked furthof the course of his shoulders the showed the even of that him billia vanid tod , more sample with tor't solves grade, teldre grav ent sotton. Send went they though. In my . sdox H include him with Hover Rocord Exche. THE PARTY OF THE P wase and portion as thought of depost indestrop of Lafactory prices of used twice box related to serve town to scarce prices, but I no did well we like at the order of the next in the first in the next in the called a the a mi inca " Thurs for order, with m court in a will a most one with and with sundr bire seed and presided quotes on all, broken 15, (all were . Maria de la tarte and next ten that a wan or batelf ban bedone 5. 1 was new, 2 were gowd, the other two leads are no poer as to be dominantle, no tropic to a companied and adjusted adjusted adjusted and adjusted quotes with prices on items dueked up 100%.

700 00 00 00

